

Mini Tracker Model:MT-800



Mini Tracker MT-800

USER MANUAL

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MADE IN TAIWAN



OUniTraQ

GPS & Mobile Technology

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1. Introduction

The MT-800 is a portable compact tracking device for personal safety and asset monitoring. It combines high sensitivity GPS and quad band GSM/GPRS to perform the powerful security application.

The MT-800 can, based on quad band GSM/GPRS network and GPS satellite positioning system, track far-way objects conveniently by Short Message or internet. It can be used for child protection, anti-kidnapping, vehicle tracking, pets go out tracking, panic assistant for the aged, and much more.

In this guide, it indicates each interface of the MT-800 PCBA. From these interface, the user will know how to install the tracker. The guide also introduces the configuration of the device and the installation and setup of the server. This will make the user easier to use the device.

If Customers need to build server by themselves, please refer to the UniTraQ's Communication API user manual.

2. Electrical Specifications

2.1 General Specification

| Parameter | specification |
|-----------------------|------------------------------|
| Operating Voltage | 3.7V |
| Operating Temperature | -20 ℃ ~ +55 ℃ |
| Storage Temperature | -40 °C ~ +85 °C |
| Power Consumption | Full power 150 mA |
| | Idle mode 30 mA |
| Battery | Li-ion, 1000 mAh |
| Battery Voltage | Min:3.6V, Typ:3.7V, Max:4.2V |
| SIM card type | 1.8V, 3V |
| LED Status Indicator | Power/ GPRS/GPS |
| Dimension | 65 x 46 x 11 mm |
| Weight | 27 g |



2.2 GSM/GPRS Specification

| Parameter | specification |
|-----------------------|-----------------------------------|
| Frequency | Quad band |
| | 850MHz/900MHz/1800MHz/1900MHz |
| Output power | Class 4(2W) for EGSM 850 and 900 |
| | Class 1(1W) for GSM 1800 and 1900 |
| Protocol support | TCP/UDP/PPP |
| GPRS Multi-slot | Class 10 / 8 |
| GPRS Mobile station | Class B |
| Coding scheme | CS1,CS2,CS3,CS4 |
| Downlink/ Uplink max. | 85.6Kbps/42.8 kbps |
| Operating temperature | -20 ℃~ +55 ℃ |
| Storage temperature | -40 ℃~+85 ℃ |
| Current consumption | Idle mode: 23 mA |
| | GPRS (1Tx,1Rx power level 10): |
| | 125 mA for 850/900 MHz, |
| | 83 mA for 1800/1900 MHz |

2.3 GPS Specification

| Parameter | specification |
|-------------------------|------------------------|
| Chipset | SiRF star III |
| Frequency | L1, 1575.42MHz |
| Channels | 20 channel all in view |
| Acquisition sensitivity | -142dBm |
| Tracking sensitivity | -159dBm |
| TTFF hot start | < 1 sec |
| warm start | < 35 sec |
| cold start | < 45 sec |
| Signal Reacquisition | <1s |
| Update Rate | 1Hz (standard) |



| Acquisition current | 22.7 mA |
|-----------------------|-----------------|
| Tracking current | 21.6 mA |
| Standby current | 1.5 mA |
| Operating temperature | -40°C ∼ +85°C |
| Datum | WGS-84(Default) |
| Protocol | NMEA-0183 V3.01 |
| Dynamics | 4G (39.2m/sec2) |

3. Device Overview



GPS antenna





SIM card



Mini Tracker MT-800

EXT. I/O3



| 1 3V OUTPUT | ②3V OUTPUT |
|------------------------|----------------------|
| 33V OUTPUT | (4) 3V OUTPUT |
| ⑤N/A | 6 IO1 (I2C data) |
| ⑦N/A | ⑧IO2 (I2C clock) |
| ⑨N/A | 10IO3 / SPI CS |
| (1)N/A | 12SPI MISO |
| (13)N/A | 14 SPI MOSI |
| (5) UART (NMEA OUTPUT) | 16SPI CLOCK |
| (†)GND | (18) GND |
| () GND | 20 GND |
| | |



3.2 Button Indication

1) Power Key:

Press and hold the Power key for 3 seconds to activate the device, the Power LED will light up and perform the initialization, after that the device will perform the general function. During normal state, if press and hold the **PWR** key for 3 seconds, it will go into the idle mode.

2) SOS Key:

Press and hold the **SOS** key for 3 seconds to perform the emergency notification.

3.3 LED Indication

1) Power ON/OFF status:

When power ON, the GPS and GSM s' LED will light up. When power OFF, the LED will put out.

2) GPS Status:

For the GPS status indicator through GPS LED, detailed information is shown in the following table:

| LED mode | Operation status |
|-------------------------|---------------------|
| 1 sec On /1 sec Off | Searching satellite |
| 1.5 sec On /0.5 sec Off | Positioning |

3) GSM: Red Led flash indicates the following status.

For the GPRS/GSM status indicator through **GSM** LED, detailed information is shown in the following table:

| LED mode | Operation status |
|------------------------|--|
| Off | GSM/GPRS is not running |
| 64 ms On / 3000 ms Off | Logged to network (monitoring control channels |
| | and user interactions). No call in progress. |
| 64 ms On / 300 ms Off | Indicates GPRS data transfer: |
| | |

| 64 ms On / 800 ms Off | GPRS does not find the network |
|-----------------------|--------------------------------|
|-----------------------|--------------------------------|



3.4 USB Interface

1) Battery Charging

1. Charging by a computer USB port:

Connect the supplied USB cable between the computer USB port and the mini USB connector of the MT-800 device.

2) Parameters Setting

Connect the supplied USB cable between the computer USB port and the mini USB connector of the MT-800 device.

The USB interface is also a command and data interface which allows users to download the firmware and set configurations.

3.5 Extension interface

MT-800 includes SPI and I2C interface(the detail please refer to EXT. I/O3 in page 7)

4. Device Configuration

4.1 USB driver installation procedure

1) Connect MT-800 device to PC, choose "No, not this time" then click Next button

| Found New Hardware Wizard | | |
|---------------------------|--|--|
| | Welcome to the Found New Hardware Wizard | |
| | looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). Read our privacy policy | |
| | Can Windows connect to Windows Update to search for software? | |
| | Yes, this time only Yes, now and every time I connect a device No, not this time | |
| | Click Next to continue. | |
| | < Back Next > Cancel | |



3) Choose "install from a list or specific location(Advanced)", then click Next button

| Found New Hardware Wizard | |
|---------------------------|--|
| | This wizard helps you install software for: AT91USBSerial f your hardware came with an installation CD or floppy disk, insert it now. What do you want the wizard to do? Install the software automatically (Recommended) Install from a list or specific location (Advanced) Click Next to continue. |
| | < <u>B</u> ack <u>N</u> ext > Cancel |

4) Click the Browser button to search the installation file, then click Next button to install USB driver

| Found New Hardware Wizard | |
|--|--|
| Please choose your search and installation options. | |
| | |
| Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed. | |
| Search removable media (floppy, CD-ROM) | |
| ✓ Include this location in the search: | |
| J:\6119 Browse | |
| \bigcirc <u>D</u> on't search. I will choose the driver to install. | |
| Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware. | |
| | |
| | |
| < <u>B</u> ack <u>N</u> ext > Cancel | |





5) Click Finish button to complet

| Found New Hardware Wizard | | |
|---------------------------|--|--|
| | Completing the Found New Hardware Wizard | |
| | The wizard has finished installing the software for: | |
| | AT91 USB to Serial Converter | |
| | Click Finish to close the wizard. | |
| | < <u>B</u> ack Finish Cancel | |

4.2 Min Tracker Setting description

1) Set TCP IP & Port:

Run Mini Tracker Setting tool software, then it will show the setting environment. Choose TCP IP & Port Set in commands column. Follow the below picture setting, then click the "Send command" button, then you will see OK in Result Window.



| 🖗 Mini Tracker Setting | | |
|------------------------|---|----------|
| Com Port COM9 | Rate 115200 Open Port Close Port Load Save | |
| Basic Network | Phone & SMS Alarm Log Geofence Get Log Data Commands Messages | |
| Commands | TCP IP & Port Command Type C Inquire © Setup | |
| | Switch - 1 | |
| IP | 60.251.201.250 | - |
| Port | 4000 | - |
| Parameter - 3 | | - |
| | Send Command (Z) Clear Result | |
| Result Window | OK. | <u> </u> |
| | | |
| | - Setup TCP IP & Port - | |
| | settcp=60.251.201.250,4000 | |
| | ОК | |
| | | - |
| | | |
| Message F | Finish doing [Setup TCP IP & Port] operation. | i |

3) Set Device ID:

Choose Device ID in Commands column. Follow the below picture setting, then click the "Send command" button, then you will see OK in Result Window

| 🐺 Mini Tracker Setting 🔲 🗖 🔀 | | | |
|------------------------------|---|--|--|
| Com Port COM9 | Rate 115200 Open Port Close Port Load Save | | |
| Basic Net <u>w</u> ork | Phone & SMS Alarm Log Geofence Get Log Data Commands Messages | | |
| Commands | Device ID Command Type C Inquire © Setup | | |
| | Switch - 1 Switch - 2 | | |
| ID | Min_tracker | | |
| Parameter - 2 | × | | |
| Parameter - 3 | v | | |
| | Send Command (Z) Clear Result | | |
| Result Window | OK | | |
| | | | |
| | — Setup Device ID — | | |
| | setid=Min_tracker | | |
| | OK | | |
| | | | |
| | | | |
| Message F | Finish doing [Setup Device ID] operation. | | |



4.3 Parameters Setting

Currently the device embedded with the following parameters:

| Item | Default |
|----------------------|--------------------|
| Device ID | MINI_T01 |
| Password | 123456 |
| APN | internet.access.nl |
| APN name | username |
| APN password | password |
| TCP IP | 212.187.40.146 |
| Port | 7002 |
| GPS interval | 20 seconds |
| Geofence radius | 300 feet |
| Battery low voltage | 3.500 v |
| Speed | 60 kilometers |
| Phone RX SMS warning | +31633576457 |

4.4 Upgrade Firmware

- 1) Power on the device. Using USB cable connects the device with PC.
- Check if the device access to the PC's COM port. My Computer>Properties>Hardware>Device >Manager>Ports (COM&LPT)
- 3) Open the Hyper Terminal, and select the corresponding COM. The baud rate is 115200, 8 data bits, none parity check, 1 stop bit, none flow control.



| Connect To | COM4 Properties | ? 🛛 |
|--|-------------------------|--------------|
| 115200com1 | Port Settings | |
| Enter details for the phone number that you want to dial: | | |
| Country/region: 中華民國 (886) | Bits per second: 115200 | ~ |
| Enter the area code without the long-distance prefix. | Data bits: 8 | ~ |
| Ar <u>e</u> a code: 3 | | |
| Ehone number: | Parity: None | ~ |
| Connect using: COM1 | Stop bits: 1 | ~ |
| Configure | Elow control: None | ~ |
| □ Detect Carrier Loss ☑ Use country/region code and area code □ Bedial on busy | Rest | ore Defaults |
| OK Cancel | OK Cancel | |

- 4) Input "updmtfm" and Enter in HyperTerminal.
- Select the file which to be downloaded via "Transfer" -> "Send File" of the HyperTerminal as the figure.

| ? × |
|--------|
| |
| |
| Browse |
| |
| |
| Cancel |
| 1 |

After all, press the "**Send**" button to download file from PC. And then you will see the download progress.

- 6) After the firmware is downloaded, input "iqufmver" and Enter to check the latest version.
- Preliminary configuration: Set APN, User, Password:"setapn=apn,user,password" Ex.:setapn=internet,,



Set IP and Port:"settcp=xxx.xxx.xxx.port" Ex.:settcp=192.168.1.1,2003

5. Getting Started

- 1) Charging the battery by using the USB cable connects to a PC or power adapter if you would like to use it by battery embedded.
- 2) Please prepare a valid GSM/GPRS SIM card.
- 3) Insert the SIM card properly as the above description.
- 4) Place the device upward and been with a clear sky vision.
- 5) Switch the power on. (connect the battery)
- 6) The green led blinks, and latter the blue led blinks.
- 7) The device can link to the preset server.

6. Service Center Introduction

6.1 Server Setup and device Connecting

1) Run the Tracker Server application software to login the server





2) Set up the server: **[Server Setting]**



Server IP: key in the server IP **Server Port**: key in the port number

Double click on the **[Start Server]** to active the server.



3) The device connecting with the server.





After the GPS is tracked, the server shows as the following:

6.2 Warning Indicators

There are 4 warning states which the device will send notification to the server to indicate which event happened. While the Warning Light turns to be **red**, it indicates some warning event happened. The event of each state is:

State-1: Geofence alert.State-2: Over Speed alert.State-3: Battery Low alert.

6.3 Functions Introduction

Click to the [MT800 Command] and select the command in the

Command window:

| | Server Setting | Tracker Command Google Map |
|---|----------------|---|
| | Module | MT800 |
| Command Firmware Version Information Current Position Return Position Frequency Server IP and Port Tracker Password Phone Number Alarm Switch | | Firmware Version Information Current Position Return Position Frequency Server IP and Port Tracker Password Phone Number Alarm Switch Geofence |



1) Firmware Version Information: Check current firmware version.

| Ę | Tracker Comman | d - Firmware Version Informati | _ 🗆 X |
|---|----------------|--------------------------------|-------|
| [| Parameter | | |
| | Tracker PW. | sololololok | |
| | | | |
| | | | |
| | | <u> </u> | cel |

Key in the device's password and click OK. The default password is 123456. In the Result window can find the following message.

[MINI_T01] Inquire "Firmware Version Information". (2009/06/22 15:54:24) [MINI_T01] Inquire "Firmware Version Information" success. [MT800] - [0.3.8]. (2009/06/22 15:54:28)

2) Current Position: get the current GPS information.

| 👜 Tracker Comm | and - Current Position - MI | NI_TO1 💶 🗙 |
|----------------|-----------------------------|----------------|
| Parameter | | |
| Tracker PW. | Accessor | _ |
| | | |
| | | |
| | <u> </u> | <u>C</u> ancel |

Key in the device's password and click OK. The default password is 123456. In the Result window can find the

following message.

[MINI_T01] Inquire "Current Position" success. (2009/06/22 16:14:18)

Please go to the 【Google】 Map and the latest GPS information

is updated.

3) Return Position Frequency: inquire or change the device's GPS position information response time.



| Tracker Command - Return Position Frequency 🔳 🗖 | 🎯 Tracker Command - Return Position Frequency 💶 🔲 |
|---|---|
| Command Type | Command Type |
| O Setup O Inquire | ● Setup |
| Parameter | Parameter |
| Pos Time 10 Second | Pos Time 10 Second |
| Tracker PW. | Tracker PW. |
| | |
| <u>O</u> K <u>Cancel</u> | <u>OK</u> <u>Cancel</u> |
| | |

✤ Inquire:

Enter the device's password and click OK.

Setup:

To change the position response time, the Pos Time should be entered. After that, enter the device's password and click OK.

✤ The display message:

[MINI_T01] Inquire "Return Position Frequency". (2009/06/22 16:37:33) [MINI_T01] Inquire "Return Position Frequency" success. [10]. (2009/06/22 16:37:35)

[MINI_T01] Set "Return Position Frequency" as [10]. (2009/06/22 16:38:13)

4) Phone Number: inquire or set up the mobile phone number. The SMS warning message will be sent to the number while the predefined warning event happened.



| C Setup C Inquire | Command - Phone Number - MINI_T01 Command Type Setup C Inquire |
|----------------------------|---|
| Parameter | Parameter |
| C Phone - 2 | Phone - 2 |
| C Phone - 4 | Phone - 3 Phone - 4 |
| C Phone - 5 Tracker PW. | Tracker PW. |
| <u>OK</u> <u>Cancel</u> | <u>QK</u> <u>Cancel</u> |

There are at most **3** mobile phone numbers can be set into the device. And the execution of Inquire or Setup should be done with **one phone number** by each time.

✤ Inquire:

Select the proper phone group and enter the device's password then click on OK.

Setup:

Check the proper phone group and enter the phone number and the device's password then click on OK.

✤ The display message:

[MINI_T01] Inquire "Phone Number": [1]. (2009/06/22 17:20:23) [MINI_T01] Inquire "Phone Number" success. [1] - [0]. (2009/06/22 17:20:26)

[MINI_T01] Set "Phone Number": [1:0932931252]. (2009/06/22 17:22:10) [MINI_T01] Set "Phone Number" [1] - [0932931252] success. (2009/06/22 17:22:12)



5) Server IP and Port: inquire or setup the connected device's TCP IP and port number parameters.

| Tracker Command - Server IP and Port - MINI Command Type | Tracker Command - Server IP and Port - MINI |
|--|---|
| O Setup Inquire | C Setup C Inquire |
| Parameter | Parameter |
| IP | IP |
| Port | Port |
| Tracker PW. | Tracker PW. |
| <u>QK</u> <u>C</u> ancel | <u>Q</u> K <u>Cancel</u> |

✤ Inquire:

Inquire the connecting server's TCP IP and port number.

Setup:

Setup the new IP address and port number for the new connection with other server.

The display message:

[MINI_T01] Inquire "Server IP and Port". (2009/06/22 17:15:31) [MINI_T01] Inquire "Server IP and Port" success. [60.251.201.250] - [4000]. (2009/06/22 17:15:33)

[MINI_T01] Set "Server IP and Port" as [60.251.201.250] - [4000]. (2009/06/22 17:16:58) [MINI_T01] Set "Server IP and Port" as [60.251.201.250] - [4000] success. (2009/06/22 17:17:00)



6) Alarm Switch: inquire or setup the warning event's status in active or not.

| Tracker Command - Alarm Switch - MINI_TO1 | Tracker Command - Alarm Switch - MINI_TO1 |
|---|---|
| Command Type | Command Type |
| C Setup C Inquire | |
| Parameter | Parameter |
| O ON OFF | • ON C OFF |
| Geofence Over Speed | Geofence IV Over Speed |
| C Bat Low C Disable WD | ☑ Bat Low |
| C Move Det C - | 🗖 Move Det 🗖 — |
| o – • – | Γ- Γ- |
| o – – – – | — — — |
| Tracker PW. | Tracker PW. |
| | |
| <u>OK</u> <u>Cancel</u> | <u></u> Cancel |

✤ Inquire:

Inquire the active status of the selected event each at a time.

Setup:

Check the box to setup the corresponding event with active, uncheck the box to setup the event with inactive.

✤ The display message:

[MINI_T01] Inquire "Alarm Switch": [1]. (2009/06/22 17:23:45) [MINI_T01] Inquire "Alarm Switch" success. [ON] - [1]. (2009/06/22 17:23:48)

 [MINI_T01] Set "Alarm Switch": [ON] [1] [2] [3].
 (2009/06/22 17:25:38)

 [MINI_T01] Set "Alarm Switch" [ON] - [1] success.
 (2009/06/22 17:25:40)

 [MINI_T01] Set "Alarm Switch" [ON] - [2] success.
 (2009/06/22 17:25:41)

 [MINI_T01] Set "Alarm Switch" [ON] - [3] success.
 (2009/06/22 17:25:42)

 [MINI_T01] Set "Alarm Switch" [ON] - [3] success.
 (2009/06/22 17:25:42)

 [MINI_T01] Set "Alarm Switch": [ON] [1] [2] [3] [4].
 (2009/06/22 17:27:02)

 [MINI_T01] Set "Alarm Switch" [ON] - [1] success.
 (2009/06/22 17:27:05)

 [MINI_T01] Set "Alarm Switch" [ON] - [2] success.
 (2009/06/22 17:27:06)

 [MINI_T01] Set "Alarm Switch" [ON] - [3] success.
 (2009/06/22 17:27:08)

 [MINI_T01] Set "Alarm Switch" [ON] - [4] success.
 (2009/06/22 17:27:08)

 [MINI_T01] Set "Alarm Switch" [ON] - [4] success.
 (2009/06/22 17:27:09)



7) Tracker Password: setup the device's password. The length should be 4 to 10 alphanumeric characters.

| Ę | 🐌 Tracker Command - Tracker Password - MINI_T01 💶 🗙 | | | | | | |
|---|---|---------------------------|--|--|--|--|--|
| | Parameter | | | | | | |
| | New Password | 234567 | | | | | |
| | Tracker PW. | | | | | | |
| | Data no change. | | | | | | |
| | | <u>O</u> K <u>C</u> ancel | | | | | |

- Enter the new password and confirm the password again, then enter the original password and OK.
- ✤ The display message:

| [MINI_T01] Set "Tracker Password" | ' as [*****] | . (2009/06/ | 22 17:18:38) | |
|-----------------------------------|--------------|-------------|---------------|----------|
| [MINI_T01] Set "Tracker Password" | ' as [*****] | success. | (2009/06/22 1 | 7:18:40) |

8) Geofence: inquire or setup the event status.

| 🐽 Tracker Commar | nd - Geofence - MINI_TO1 | | Tracker Comman | nd - Geofence - MINI_TO1 | _ 🗆 🗙 |
|------------------|--------------------------|-------|------------------------|--------------------------|-------|
| Command Type | | | Command Type Setup | Clinquire | |
| O Setup | | | 1.0 Detup | | |
| Parameter | | | Parameter — | | |
| © ON | C OFF | | • ON | C OFF | |
| Detect Way | radius | | Detect Way | radius 💌 | |
| Distance | 0 | Feet | Distance | 30 | Feet |
| Tracker PW. | skolokok | | Tracker PW. | łokolokok | |
| | | | | | |
| | <u> </u> | ancel | | <u> </u> | ancel |

✤ Inquire:

Enter the device's password and OK.

Setup:

Select ON to enable this function, OFF to disable it. Detect way should select the **radius**.

The Distance is the range of the Geofence, the unit is feet.



✤ The display message:

[MINI_T01] Inquire "Geofence". (2009/06/22 17:28:27) [MINI_T01] Inquire "Geofence" success. [OFF] - [radius] - [300]. (2009/06/22 17:28:29)

[MINI_T01] Set "Geofence" as [ON] - [radius] - [50(Feet)]. (2009/06/22 17:29:20) [MINI_T01] Set "Geofence" as [ON] - [radius] - [50] success. (2009/06/22 17:29:22)

9) Battery Status: inquire the current voltage level of the battery.

| 📻 Tracker Comm | and - Battery Status - MINI_TO1 📃 🗖 🛛 | × |
|----------------|---------------------------------------|---|
| Parameter — | | 7 |
| Tracker PW. | Jobeleler | |
| | | |
| | | |
| | <u> </u> | |

Inquire:

Inquire the current battery voltage of the device.

✤ The display message:

[MINI_T01] Inquire "Battery Status". (2009/06/22 17:35:57) [MINI_T01] Inquire "Battery Status" success. [4096]. (2009/06/22 17:36:00)

PS: 4096 indicates 4.096 volt.

7. Short Message Service Control

7.1 Introduction

The tracker also provides another way for control access or configuration. From the Short Message Service, the user can use the defined number mobile phone to control the tracker. After received the SMS, the tracker will perform as the request command and will response to the mobile phone with SMS.

7.2 General Rule

- 1) Password: pppppp, 6 ~12 alphanumeric characters.
- 2) *: Start symbol.
- 3) #: End symbol.
- 4) ID: Tracker Identification number, 4 ~ 16 alphanumeric

characters.



- 5) No Space character is allowed, only "," between the * and #.
- 6) RX: receive from mobile phone.
- 7) TX: response to mobile phone.
- 8) GPS location information: the format will be yy/mm/dd,hh:mm:ss,Elongitude,Nlatitude,Sxxx.x,Cxxx.x
- 9) x: 0~9 digital number.

7.3 Command Description

1) Set Tracker ID

| Function | Set up | Set up the ID into the tracker. | |
|----------|--------|------------------------------------|--|
| Format | RX | RX *ID,PPPPPP,setid,new ID,new ID# | |
| Response | TX | New ID Setup OK | |
| or | TX | Old ID Setup fail | |

2) Set Cellular Number

| Function | Set up | Set up the phone number(s) into the tracker. | | |
|----------|--------|---|--|--|
| Format | RX | RX *ID ,PPPPPP,fonsetup,phone - 1(, phone - 2, phone - | | |
| | | 3)# | | |
| Response | TX | ID fonsetup OK | | |
| or | TX | ID fonsetup fail | | |

3) Set Time Interval

| Function | Set u | Set up the location response time interval into the | | |
|----------|--------------------|---|--|--|
| | tracke | tracker, the unit is seconds. | | |
| Format | RX | RX *ID,PPPPPP,tintsetup,xxxx# | | |
| Response | TX ID tintsetup OK | | | |
| or | ΤX | ID tintsetup fail | | |

4) Enable and Set up Geofence

| Function | Set up the radius of the Geofence into the tracker, | | |
|----------|---|---|--|
| | the ur | the unit is meters. | |
| Format | RX | RX *ID,PPPPPP,geofenceon,xxxx# | |
| Response | ΤX | ID geofence ON,xxxxx,GPS location information | |
| or | TX | ID geofence on fail | |



5) Disable Geofence

| Function | Disab | Disable the Geofence function of the tracker. | |
|----------|-------|---|--|
| Format | RX | *ID,PPPPPP,geofenceoff# | |
| Response | TX | ID geofence OFF | |
| or | TX | ID geofence off fail | |

6) Set Tracker Password

| Function | Set up | Set up the password into the tracker. | |
|----------|--------|--|--|
| Format | RX | RX *ID,PPPPPP,setpass,new password,new password# | |
| Response | TX | ID setpass OK | |
| or | ΤX | ID setpass fail | |

7) Inquire Current Location

| Function | Inqui | Inquire the location information from the tracker. | |
|----------|--------------------------------|--|--|
| Format | RX | RX *ID,PPPPPP,gpsinq# | |
| Response | TX ID,GPS location information | | |
| or | TX | ID gpsinq fail | |

8) Inquire IMEI code

| Function | Inqui | Inquire the GSM IMEI code from the tracker. | |
|----------|-------|---|--|
| Format | RX | *ID,PPPPPP,getimei# | |
| Response | TX | ID 15 decimal of IMEI | |
| or | TX | ID getimei fail | |

9) Set IP and Port

| Function | Set up | Set up the IP and Port of the server into the tracker. | |
|----------|--------|--|--|
| Format | RX | *ID,PPPPPP,ippsetup,xxx.xxx.xxx.xxx,xxxx# | |
| Response | TX | ID IPxxx.xxx.xxx Portxxxxx | |
| or | TX | ID ippsetup fail | |

10) Inquire Battery Voltage

| Function | Inquire the battery voltage from the tracker. | | |
|----------|---|---------------------------|--|
| Format | RX | RX *ID,PPPPPP,batterying# | |
| Response | ΤX | ID battery x.xx | |
| or | TX | ID battery fail | |



11) Set Notification Way

| Function | Selec | Select notification from the GPRS or GSM SMS. | |
|----------|-------|---|--|
| Format | RX | *ID,PPPPPP,notify,GPRS on/ff,SMS on/off# | |
| Response | TX | ID notify GPRS on/ff,SMS on/off | |
| or | TX | ID notify fail | |

12) Enable and Set up Over Speed Detection

| Function | Set up the speed threshold for alarm detection into | |
|----------|---|------------------------------|
| | the tracker, the unit is kilometer. | |
| Format | RX | *ID,PPPPPP,overspeedon,xxx # |
| Response | ΤX | ID overspeed ON xxx |
| or | TX | ID overspeed fail |

13) Disable Over Speed Detection

| Function | Disab | Disable the over speed detection function. | |
|----------|-------|--|--|
| Format | RX | *ID,PPPPPP,overspeedoff# | |
| Response | TX | ID overspeed OFF | |
| or | TX | ID overspeed fail | |

14) Enable Unauthorized Movement Detection

| Function | Activ | Activate the movement detection function. | |
|----------|-------|---|--|
| Format | RX | RX *ID,PPPPPP,movedeton# | |
| Response | TX | ID move detection ON | |
| or | TX | ID move detection fail | |

15) Disable Unauthorized Movement Detection

| Function | Disab | Disable the movement detection function. | |
|----------|-------|--|--|
| Format | RX | *ID,PPPPPP,movedetoff# | |
| Response | TX | ID move detection OFF | |
| or | TX | ID move detection fail | |



16) Set Idle Time Period

| Function | Set up the system idle time interval for the tracker | |
|----------|--|-------------------------------|
| | to get into the sleep mode, the unit is seconds. | |
| Format | RX | *ID,PPPPPP,tidlesetup,xxxxx # |
| Response | ΤX | ID tidlesetup OK |
| or | TX | ID tidlesetup fail |

17) Enable Audio Monitoring

| Function | Activ | Activate the audio monitoring function. | |
|----------|-------|---|--|
| Format | RX | *ID,PPPPPP,moniteron# | |
| Response | TX | ID audio monitor ON | |
| or | ΤX | ID audio monitor fail | |

18) Disable Audio Monitoring

| Function | Disab | Disable the audio monitoring function. | |
|----------|-------|--|--|
| Format | RX | *ID,PPPPPP,moniteroff# | |
| Response | TX | ID audio monitor OFF | |
| or | TX | ID audio monitor fail | |



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