MEITRACK® GPS Personal Tracker

User Guide V7.3

GT30i

Contents

1. Product Overview

The GT30i is a GPS/GPRS based personal tracking device, which is compact and easy to use.

GT30i has inbuilt GPS module to obtain accurate position data and utilizes its GSM capability to send the position data to a specified mobile phone or server base.   This allows users to monitor people or pets using the tracker.

GT30i supports two way voice communications.   This communication can be activated either by the guardian calling the tracker or the tracker holder activating the SOS button. The tracker can be configured to report its location at preset intervals to the server base or mobile phone.

With internal memory, GT30i can store GPS coordinates when there is no GPRS connection.   GPS coordinates can also be stored at specified intervals when requested by the user.

GT30i has the following functions and features:

- SMS and GPRS TCP/UDP Communication (Meiligao Protocol)
- AGPS (with GSM Base Station ID)
- Track on Demand
- Show Location Directly on Mobile Phone
- Track by Time Interval
- Track by Distance
- Two-way Audio
- Listen-in (Voice Monitoring)
- GSM Blind Area Memory
- Internal Memory for Logging
- Inbuilt Motion Sensor for Power Saving
- SOS Panic Button
- Movement Alarm
- Geo-fencing Control
- Low Battery Alarm
- Speeding Alarm
- GPS Blind Area Alarm (in/out)
- Three Buttons for Making Phone Call and/or Sending Message
- Built-in Super Magnet (optional)

2. For Your Safety

Read these simple guidelines. Not following them may be dangerous or illegal.

Switch on safely
Do not switch on GT30i when wireless phone use is prohibited or when it may cause interference or danger.

Switch off in hospitals
Follow any restrictions. Switch GT30i off near medical equipment.

Switch off in aircraft
Follow any restrictions. Wireless devices can cause interference in aircraft.

Switch off when refueling
Do not use GT30i when at a refueling point. Do not use near fuels or chemicals.

Switch off near blasting
Follow any restrictions. Do not use GT30i when blasting is in progress.

Qualified service
Only qualified personnel can repair GT30i.

Water resistance
GT30i is not fully water resistant. Keep it dry. Use a waterproof bag if necessary.

3. GT30i Characteristics

Items	Specifications
Charging Voltage	DC 4.2-5.5V/400mA (Mini USB port)
Internal Battery	Rechargeable and replaceable 1350 mAh battery (3.7V)
Dimension	77 mm × 51 mm × 25 mm
Weight	80g (with battery)
Operating temperature	-20° to 55° C
Humidity	5% to 95% Non-condensing
GSM module	Quad Band GSM 850/900/1800/1900Mhz
GPS Chipset	Latest GPS SIRF-Star III chipset
GPS Sensitivity	-159Db
GPS Frequency	L1, 1575.42 MHz
C/A Code	1.023 MHz chip rate
Channels	20 channel all-in-view tracking
Position Accuracy	10 meters, 2D RMS
Velocity Accuracy	0.1 m/s
Time Accuracy	1 us synchronized to GPS time
Default datum	WGS-84
Reacquisition	0.1 sec., average
Hot start	1 sec., average
Warm start	38 sec., average
Cold start	42 sec., average
Altitude Limit	18,000 meters (60,000 feet) max.
Velocity Limit	515 meters/second (1000 knots) max.
Acceleration Limit	Less than 4g
Jerk Limit	20 m/sec

Work time	55 hours in power-saving mode and 12 hours in normal mode
Memory	4MB flash memory
LED	3 LED lights to show power, GPS, GSM and other status
Button	3 buttons(SOS/B/C) for making phone calls and sending SMS

4. Getting Started

This section will describe how to set up your GT30i.

4.1 Hardware and Accessories

GT30i is supplied in a box which includes:

GT30i with Battery   Earphone with Mic   Wall Charger   Car Charger   USB Data Cable   CD

4.2 View

Front View   Side View   Back View

4.3 Functional Parts

Your GT30i has four buttons and three LED lights, with three different colors to indicate the status of the unit.

Red LED - indicating battery status	
Off	Power is off or charging is complete
Flashing (every 0.1 second)	Low battery
On	Charging
Flashing (1 second on and 2 seconds off)	Working
Blue LED - indicating GPS status	
On	One button is being pressed
Flashing (every 0.1 second)	The unit is being initialized
Flashing (0.1 second on and 2.9 seconds off)	GT30i has a GPS fix
Flashing (1 second on and 2 seconds off)	GT30i has no GPS fix
Green LED - indicating GSM status	
On	A call is coming in / A call is being made
Flashing (every 0.1 second)	The unit is being initialized
Flashing (0.1 second on and 2.9 seconds off)	GT30i is connected to the GSM network
Flashing (1 second on and 2 seconds off)	GT30i is not connected to the GSM network
Buttons	
Power On/Off Button	To turn on/off GT30i
SOS Button	To make a phone call and/or send an SMS to the preauthorized phone number Press it to receive an incoming call Press it to increase volume during conversation
Call B	To make a phone call and/or send an SMS to the preauthorized phone number Press it to reject a call, cancel calling or complete a conversation
Call C	To make a phone call and/or send an SMS to the preauthorized phone number Press it to decrease volume during conversation
Other Connectors	
Mini USB	Used for charging, firmware update, configuration on PC and exporting stored data. (USB Data Cable or USB-to-Serial Adaptor is required for firmware update, configuration and exporting stored data)
SIM Card	Insert SIM card here

Earphone Plug	For connecting earphone
Lanyard Loop	For connecting lanyard

4.4 First Use

Please read this manual before using your GT30i.

4.4.1 Ensure that your GT30i has a working SIM installed.
- Check that the SIM has not run out of credit (Test the SIM in a phone to make sure it can send and receive SMS).
- Check that the SIM Lock code is turned off.
- If you require the function of sending an SMS location report to the authorized phone number when it makes a call to the GT30i, please make sure the SIM installed supports displaying caller ID.

4.4.2 Charge the battery for at least 3 hours in power-off status using the wall or car charger. You can also connect the tracker directly to the computer by USB for charging. Red light is on during charging and off when charging is complete.

4.4.3 Push the Power On/Off button to the ON side and wait for about 20 seconds. The device will then enter standby mode. It is suggested that you turn on the device outside of all buildings to receive a better GPS signal.

Check that the Red LED (Battery) is flashing 1 second on and 2 seconds off.
Check that the Green LED (GSM) is flashing 0.1 second on and 2.9 seconds off.
Check that the Blue LED (GPS) is flashing 0.1 second on and for 2.9 seconds off.

5. Change Password

Command: W******,001,######
Description: Change user's password.
Note:
1. ****** is user's password and the default password is 000000. The tracker will only accept commands from a user with the correct password. Commands with wrong password will be ignored.
2. ###### is the new password. Password should be 6 digits.
Example:
W000000,001,123456
W123456,001,999999

6. Time Zone

Command: W******,032,T

Description: Correct time to your local time.

Note:

1. Default time of the tracker is GMT.

2. This correction is applied to location reports by SMS and SMS alarms.

T=0, to turn off this function;

T=_[-32768,32767] to set time difference in minutes to GMT.

For those ahead of GMT, input the time difference in minutes directly.

For example, for GMT+8, W000000,032,480. (8 Hours is 480 minutes)

'-'is required for those behind GMT.

For example, W000000,032,-120. (2 hours or 120 minutes behind GMT)

Example:

W000000,032,480

W000000,032,-120

7. Track

7.1 Track by SMS

- Track on Demand - Reply with longitude, latitude, speed and date

Command: W******,000

Description: To get the current location of the tracker, send this command as an SMS or make a telephone call directly to the tracker.

After doing so, the device will report its longitude and latitude by SMS with the format as follows:

Latitude = 22 32 36.63N Longitude = 114 04 57.37E, Speed = 2.6854Km/h, 2008-12-24,01:50

Example:

W000000,000

- Track on Demand - Reply with a link to Google Maps

Command: W******,100

Description: Send this command to the tracker and you will receive an SMS with a http link. Click on the link and the location will be shown directly on your mobile phone using Google maps. For example:
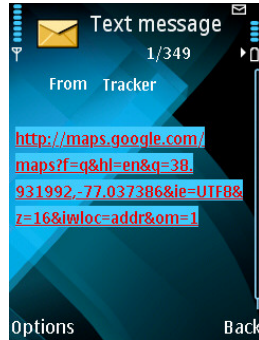
http://maps.google.com/maps?f=q&hl=en&q=22.540103,114.082329&ie=UTF8&z=16&iwloc=addr&om=1

Note: Only smart phones and PDAs support this function.

Example:

W000000,100

7.2 Track by Calling

Make a missed call to the tracker and it will report its longitude and latitude by SMS with the following format:

Latitude = 22 32 36.63N Longitude = 114 04 57.37E, Speed = 2.6854Km/h, 2008-12-24,01:50

7.3 Track by Preset Interval

Command: W******,002,XXX

Description: Set an interval for the tracker to continuously report its location by SMS.

Note:

1. XXX is the interval in minutes.

2. XXX=000 to turn off tracking by time.

Example:

W000000,002,030

In this example, the tracker will send location data back to your mobile phone every 30 minutes.

7.4 Google Earth and Google Maps

Download Google Earth from http://earth.google.com/.

Start Google Earth (For more information about Google Earth please refer to http://earth.google.com/) or go to http://maps.google.com).

Input the latitude and longitude that you received from the tracker by SMS and click the search button. Google Earth or Google Maps will display the location for you.

Example:

When you receive: Latitude = 22 32 40.05N Longitude = 114 04 57.74E
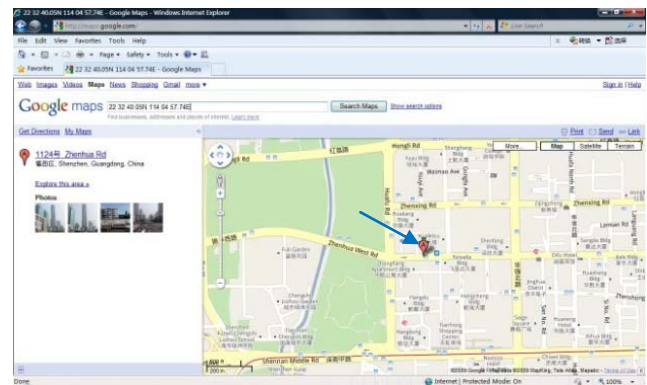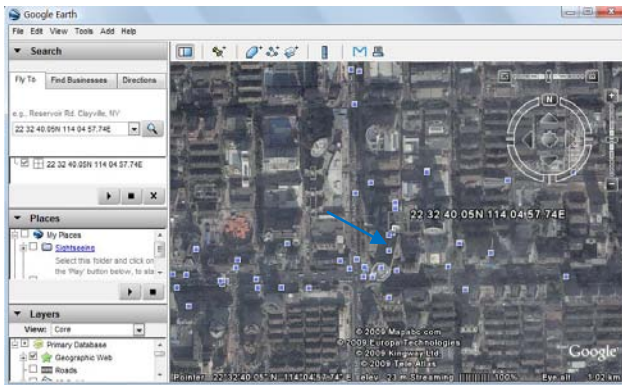
Type as the following picture shows:

(Note: you should input the latitude and longitude as: 22 32 40.05N 114 04 57.74E)

And then you can find the location of your tracker:

You can also use local map software on PDA or car navigation device to input the coordinates.

7.5 Track by MS01/MS02

You can also see a physical location on a map with our GPS Tracking Software MS01 or MS02.

This software is available for purchase and can be used for tracking after proper configuration.
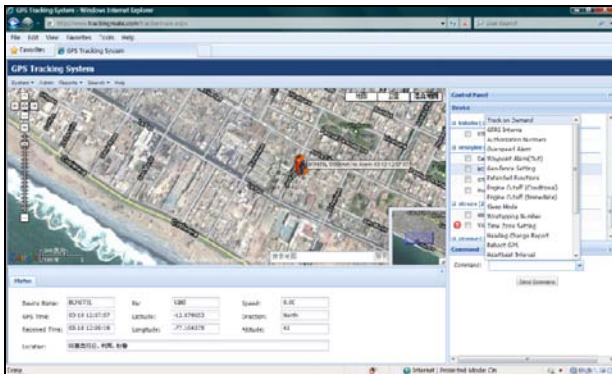
Please refer to MS01/MS02 User Guide for more information.

7.6 Track by GPRS (Meiligao Protocol) between Server and Tracker

7.6.1 Set Tracker's GPRS ID

Command: W******,010,ID

Description: Set a digital GPRS ID for the tracker.

Note: GPRS ID must not be over 14 digits.

Example:

W000000,010,00001

7.6.2 Set APN

Command: W******,011,APN,Username,Password

Description: Set APN details for the tracker.

Note:

1. APN username and password are optional. If no APN username and password are required, input APN only;

2. APN defaulted as 'CMNET';

3. APN + username + password should not over 39 characters.

Example:

W000000,011,CMNET,Meiligao,6688

W000000,011,CMNET

7.6.3 Set IP and Port

Command: W******,012,IP,Port

Description: Set the IP and Port of tracker for GPRS communication.

Note:

1. IP is your server's IP or the domain name.

2. Port: [1,65534].

Example:

W000000,012, 220.121.7.89,8500

W000000,012,www.meiligao.net,8500

7.6.4 Set DNS Server IP (optional)

Command: W******,009,DNS Server IP

Description: If the domain name you set by the last command (W******,012,IP, Port) doesn't work, your servers IP is not properly set. You can first use this command to set DNS Server IP (please check with your DNS server provider for the DNS Server IP) and then redo the command W******,012,IP, Port.

Example: W000000,009,220.23.4.90

7.6.5 Enable GPRS Tracking

Command: W******,013,X

Description: Enable GPRS tracking function.

Note:

X=0, to turn off GPRS tracking (default);

X=1, to enable GPRS tracking via TCP;

X=2, to enable GPRS tracking via UDP.

Example: W000000,013,1

7.6.6 Set GPRS Interval

Command: W******,014,XXXXX

Description: Set time interval for sending GPRS packets.

Note:

XXXXX should be in five digits and in unit of 10 seconds.

XXXXX=00000, to turn off this function;

XXXXX=00001~65535, time interval for sending GPRS packet and in unit of 10 seconds.

Example: W000000,014,00060

In this example, the tracker will send every 600 seconds (10 minutes).

For more information regarding GPRS tracking please refer to GPRS Communication Protocol

7.7 Track by GpsGate

The GT30i supports GpsGate Software.

Please contact our company or GpsGate for more information for settings.

8. Authorization

Command: W******,003,F,P,T1 or W******,003,F,P,T1,T2 (optional)

Description: Authorize phone numbers for the buttons/inputs, receiving location reports, SMS alarms or phone calls.

Note:

F=0, to turn off this function; (default)

F=1, only send SMS to the authorized phone number;

F=2, only call the authorized phone number;

F=3, both SMS and calling.

P=1, set an authorized number for SOS button (Input 1);

P=2, set an authorized number for B button (Input 2);

P=3, set an authorized number for C button (Input 3).

T1: Preset phone number. Max.16 digits.

If you need to set different numbers for receiving SMS and phone call, you can use W******,003,F,P,T1,T2, In this case T1 is the phone number for receiving SMS and T2 for receiving phone calls.

Example:

W000000,003,3,1,88888888

W000000,003,3,1,88888888,99999999

9. Call Function

You can use the earphone for conversation purpose.

9.1 Receiving Phone Call

Use your phone or mobile phone to call the tracker. When the tracker is receiving a call, the green LED light will be on. Press SOS button to receive the incoming call or press Call B button to reject the call.

9.2 Making Phone Call

After you have authorized phone numbers for SOS/Call B/Call C button, you can press any of these buttons to make a call to the preset phone number.

Press Call B button to cancel a calling or to end a conversation.

9.3 Volume Adjustment

During a conversation, press SOS button to increase the volume or press Call C button to decrease the volume.

10. Speeding Alarm

Command: W******,005,XX

Description: Turn on speeding alarm. When the tracker speeds higher than the preset value, it will send an SMS to the authorized phone number for SOS.

Note: XX is the preset value of speed and in 2 digits.

=00 , to turn off this function;

=[01, 20] (unit: 10Km/h).

Example: W000000,005,08

When the tracker's speed is over 80km/h, an SMS alarm will be sent out.

11. Movement/Geo-fence

11.1 Movement Alarm

Command: W******,006,X

Description: When the tracker moves out of a preset circle scope, it will send an SMS alarm to the authorized phone number for SOS.

Note:

1. X is the preset radii to the tracker's original place

=0, to turn off this function ;

=1, 30m	=2, 50m	=3, 100m	=4, 200m
=5, 300m	=6, 500m	=7, 1000m	=8, 2000m

2. Radii: [1, 4294967295] meter(s), suggest to be set above 100 meters;

3. GPRS command is 0x12.

Example: W000000,006,1
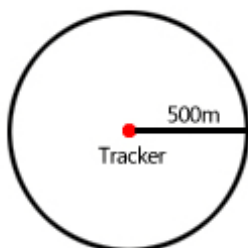
When tracker moves out of this circle scope, it will send out an SMS alarm.

11.2 Geo-fence Alarm

Command: W******,302,X

Description: Turns on Geo-fencing alarm. When the tracker moves in/out the preset scope, it will send an SMS alarm to the authorized phone number for SOS.

Note:

1. X is the parameters which includes: latitude, longitude, radii, in, out.

2. Latitude and longitudes should be in ASCII format as follows:

Latitude is ddd.dddddd, '0' is needed to be stuffed if no value available. '-' should be added for south.

Longitude is dd.dddddd, '0' is needed to be stuffed if no value available. '-' should be added for west.

3. Radii: [1, 4294967295] meter(s), suggested to be set above 100 meters, if set above 8, it is corresponding radii.

4. If In and Out are 0, corresponding function is invalid. If In and Out are 1, valid.

5. Reply as Geo-Fence Alarm.

6. GPRS exiting command is 0x12, entering command is 0x13.

7. Send W******, 302 to turn off Geo-fence function.

Example:

W000000,302,22.000000,-114.123456,3000,1,1

Remarks:

1. Only one alarm can be set in either In or Out;

2. Only one alarm can be set in either Movement Alarm or Geo-fence Alarm.

12. Track by Distance

Command: W******,303,X

Description: Send this command to set distance interval.

Note:

1.   X= [1, 4294967295], suggested to be set above 300 meters;

2.   X=0, turn off.

Example: W000000,303,1000

13. Set Sensitivity of Tremble Sensor

Command: W******,035,XX

Description: Send this command to set sensitivity of tremble sensor.

Note:

1.   XX=[1,255], it will be more sensitive if XX is smaller;

2.   Default value is 30.

Example: W000000,035,30

14. Listen-in (Voice Monitoring)

Command: W******,030,T

Description: Authorize a phone number to make a silent call to the tracker. The tracker answers the call automatically and allows the caller to listen to what is happening around the tracker. With this feature, there is no voice indication that the call is in progress.

Note:

1. T is the telephone number for wiretapping with a max. of 16 digits.

2. Calls from unauthorized number are treated as normal incoming calls and indicated by beeps.

Example:

W000000,030,88888888

15. Heartbeat

Command: W******,015,data

Description: Set an interval for heartbeat.

Note:

data is the interval in unit of minutes.

data=0, to turn off this function;

data=1~65535, set interval for heartbeat.

Example:

W000000,015,10

In this example, the tracker will send heartbeat every 10 minutes.

16. Track Log

16.1 Log by Interval

Command: W******,031,X

Description: Set time interval for logging GPS information. Log information is stored within the device memory. When the memory gets full, the newest record will be overwritten on top of the oldest (FIFO - First In, First Out). In this case, only the newest information is stored.

Note:

1. X=0, to turn off this function. X=[1, 65535] to set interval in the unit of second.

2. The logged message is in GPRMC format and includes:

> *Date and time*
>
> *Longitude*
>
> *Latitude*
>
> *Speed*
>
> *Direction*

3. All data, stored within the memory, may be exported to the PC using the USB connector. To do this, the "GPSLog" program has to be used *(please refer to **GPSLog User Guide** and **GPRS Communication Protocol** for more information).*

4. The device has 4MB of internal memory space for storing the track log. The Device is able to store up to 180,000 records within the memory.

Example:

W000000,031,60

The tracker will store GPS data every 60 seconds.

16.2 Auto Log when no GPRS

When there is no GPRS connection, the tracker can store all GPS information triggered by preset tracking interval, alarms, request, or button activation in its internal memory. The tracker will send this information (FILO - First In, Last Out) to server by GPRS or preauthorized mobile phone by SMS when GPRS connection recovers.

The interval memory can store up to 1500 SMS and 4600 GPRS message.

16.3 Format Buffer

Command: W******, 503

Description:-This command clears the data stored in the buffer.

Note: Deleted data can no longer be recovered.

Example: W000000,503

17. Power Down

Command: W******,026,XX

Description: This command puts the tracker in power down mode when it is inactive or immobile for a period of time. In Power Down mode, GPS stops working while GSM enters sleep mode and stops sending out messages. The device remains in this mode until it is activated by message, incoming calls, movement, or triggered by three buttons.

Note:

XX=00, to turn off this function;

XX=01~99, to turn on Power Down after a specified period of being inactive (or stationary). It is in unit of minute.

Example: W000000,026,10

The tracker will enter power down mode after it is inactive (or stationary) for 10 minutes.

18. Get IMEI

Command: W******,601

Description: Get IMEI of the tracker. IMEI is 15 digits.

Example: W000000,601

19. Initialization

Command: W******,990,099###

Description: This sets all settings (except for the password) back to factory default.

Note: Send SMS "Default?" to the device. Within 120 seconds, send this SMS command to the tracker.

is the ending character and is required in the text message.

Example: W000000,990,099###

20. Password Initialization

Command: W888888,999,666

Description: This resets the password back to factory default and can be used in case you forget your password.

Note: Send SMS "Default?" to the device, and then, within 120 seconds, send this SMS command to the tracker to set the password back to factory default (000000).

If you have set an authorized telephone number, when the password has been successfully preset the telephone will receive W888888,999,666

Example: W888888,999,666

For more details regarding SMS commands, please go to Annex 1 Command List.

21. Parameter Editor

The tracker can also be configured by computer using the Parameter Editor. This method is much easier and user friendly.

Please refer to **MEITRACK Parameter Editor** for more information.

22. Copyright and Disclaimer

Annex 1. SMS Command List

Note: ****** is user's password and the default password is 000000. The tracker will only accept commands from a user with the correct password. Commands with wrong password will be ignored.

Description	SMS Command	Example
Track on Demand	W******,000	W000000,000
Remarks: To get the current location of the tracker, send this command as an SMS or make a telephone call directly to the tracker. After doing so, the device will report its longitude and latitude by SMS with the format as follows:- Latitude = 22 32 36.63N Longitude = 114 04 57.37E, Speed = 2.6854Km/h, 2008-12-24,01:50		
Track on Demand **-Google Link**	W******,100	W000000,100
Remarks: Send this command to the tracker and you will receive an SMS with a http link. Click on the link and the location will be shown directly on your mobile phone using Google maps. For example: http://maps.google.com/maps?f=q&hl=en&q=22.540103,114.082329&ie=UTF8&z=16&iwloc=addr&om=1 (Note: Only smart phones and PDAs support this function.)		
Change Password	W******,001,######	W000000,001,123456
Remarks: To change user's password. ###### is the new password. Password should be 6 digits.		
Track by Interval	W******,002,XXX	W000000,002,030
Remarks: To set interval for automatic timed report. XXX is the interval in minutes. If XXX=000 to turn off tracking by time. In this example, the tracker will send location data back to your mobile phone every 30 minutes.		
Authorization	W******,003,F,P,T1 (W******,003,F,P,T1,T2)	W000000,003,3,1,88888888 W000000,003,3,1,88888888,99999999
Remarks: Authorize phone numbers for the buttons/inputs, receiving location reports, SMS alarms or phone calls. Note: F=0, to turn off this function; (default) F=1, only send SMS to the authorized phone number; F=2, only call the authorized phone number; F=3, both SMS and calling. P=1, set an authorized number for SOS button (Input 1); P=2, set an authorized number for B button (Input 2); P=3, set an authorized number for C button (Input 3). T1: Preset phone number. Max.16 digits. If you need to set different numbers for receiving SMS and phone call, you can use W******,003,F,P,T1,T2, In this case T1 is the phone number for receiving SMS and T2 for receiving phone calls. Note: VT310 doesn't support two-way conversation. Calling only gives ring and reminder to the authorized phone.		
Speeding Alarm	W******,005,XX	W000000,005,08
Remarks: When the tracker speeds higher than the pre-set value, it will send an SMS to the authorized phone number for SOS. XX is the preset value of speed and in 2 digits. =00 , to turn off this function;		

=[01, 20] (unit: 10Km/h).

In this example, when the tracker's speed is over 80km/h, an SMS alarm will be sent out.

Movement Alarm	W******,006,X	W000000,006,6

Remarks: When the tracker moves out of a preset circle scope, it will send an SMS alarm to the authorized phone number for SOS.

X is the preset radii to the tracker's original place

=0, to turn off this function

=1, 30m	=2, 50m	=3, 100m	=4, 200m
=5, 300m	=6, 500m	=7, 1000m	=8, 2000m

Geo-fence Alarm	W******,302,X	W000000,302,22.000000,-114.123456,3000,1,1

Remarks: Turn on Geo-fencing alarm. When the tracker moves in/out the preset scope, it will send an SMS alarm to the authorized phone number for SOS.

Note:

1. X is the parameters which includes: latitude, longitude, radii, in, out.

2. Latitude and longitude should be in ASCII format as follows:

Latitude is ddd.dddddd, '0' is needed to be stuffed if no value available. '-' should be added for south.

Longitude is dd.dddddd, '0' is needed to be stuffed if no value available. '-' should be added for west.

3. Radii: [1, 4294967295] meter(s), suggested to be set above 100 meters, if set above 8, it is corresponding radii;

4. If In and Out are 0, corresponding function is invalid, if In and Out are 1, valid;

5. Reply as Geo-Fence Alarm;

6. GPRS exiting command is 0x12, entering command is 0x13;

7. Send W******, 302 to turn off Geo-fence function.

Track by Distance	W******,303,X	W000000,303,1000

Remarks: Send this command to set distance.

Note:

1. X= [1, 4294967295], suggested to be set above 300 meters;

2. X=0, turn off.

Extended Functions	W******,008,ABCDEFGHIJ###	W000000,008,1011100011###

Remarks:

A=0, turn off the function of sending SMS location report after a phone call is made to the tracker;

A=1, turn on the function of sending SMS location report after a phone call is made to the tracker.

B=0, location data of NMEA 0183 GPRMC will be interpreted into normal text for easy reading;

For example, Latitude = 22 32 36.63N Longitude = 114 04 57.37E, Speed = 2.6854Km/h, 2008-12-24,01:50

B=1, location data complies with NMEA 0183 GPRMC protocol.

For example, $GPRMC,161509.000,A,2232.5485,N,11404.6887,E,0.3,153.7,290709,,*03

C=0, turn off the function to automatically hang up an incoming call;

C=1, turn on the function to automatically hang up an incoming call after 4 - 5 rings.

D=0, turn off the function of sending an SMS when the tracker is turned on;

D=1, turn on the function of sending an SMS to the authorized phone number for SOS when the tracker is turned on.

E, defaulted as 1 (the tracker shuts down automatically when the power voltage is lower than 3V).

F=0, turn off the SMS alarm when the tracker enters GPS blind area;

F=1, turn on the SMS alarm when the tracker enters GPS blind area. SMS is to be sent to the authorized phone number for SOS.

G=0, all LEDs work normally;

G=1, all LEDs stop flashing when the tracker is working.

H, reserved and defaulted as '0'.

I=0, turn off the function of sending SMS alarm when the extra power of the vehicle tracker is cut;

I=1, turn on the function of sending an SMS alarm to the authorized phone number for SOS when the extra power of the vehicle tracker is cut.

J, defaulted as 1.

is the ending character.

(ABCDEFGHIJ defaulted as 1000100001)

Presetting by SMS for GPRS tracking (*Ensure that your SIM card supports GPRS connection prior to setting)*

Set Tracker's GPRS ID	W******,010,ID	W000000,010,00001

Remarks: to set a digital GPRS ID for the tracker.

GPRS ID must not be over 14 digits.

Set APN	W******,011,APN,Username,Password	W000000,011,CMNET,Meiligao,6688 W000000,011,CMNET

Remarks: If no APN username and password are required, just input APN only.

APN defaulted as 'CMNET'.

APN + username + password should not over 39 characters.

Set IP and Port	W******,012,IP,Port	W000000,012, 220.121.7.89,8500 W000000,012,www.meiligao.net,8500

Remarks: IP is your server's IP or the domain name. Port: [1,65534]

Set DNS Server IP	W******,009,DNS Server IP	W000000,009,220.23.4.90

Remarks: If the domain name you set by the last command (W******,012,IP, Port) doesn't work, your server IP is not properly set. You can first use this command to set DNS Server IP (please check with your DNS server provider for the DNS Server IP) and then redo the command W******,012,IP,Port.

Enable GPRS Tracking	W******,013,X	W000000,013,1

Remarks:
X=0, to turn off GPRS tracking (default);
X=1, to enable GPRS tracking via TCP;
X=2, to enable GPRS tracking via UDP.

Set GPRS Interval	W******,014,XXXXX	W000000,014,00060

Remarks: to set time interval for sending GPRS packets.

XXXXX should be in five digits and in unit of 10 seconds.

XXXXX=00000, to turn off this function;

XXXXX=00001~65535, time interval for sending GPRS packet and in unit of 10 seconds.

In this example, the tracker will send every 600 seconds (10 minutes).

Set Heartbeat Interval	W******,015,data	W000000,015,10

Remarks: to set interval for heartbeat.

Data: in unit of minutes

data=0, to turn off this function;

data=1~65535, set interval for heartbeat.

In this example, the tracker will send heartbeat every 10 minutes.

Set Sensitivity of Tremble Sensor	W******,035,XX	W000000,035,30

Remarks: Send this command to set sensitivity of tremble sensor

Note:

1.   XX=[1,255], it will be more sensitive if XX is smaller.

2.   Default value is 30.

Example: W000000,035,30

Heading Change Report	W******,036,degree	W000000,036,90

Remarks: when the heading direction of the tracker changes over the preset degree, a message with location data will be sent back to the server by GPRS.

Degree=0, to turn off this function;

Degree=[1,360], to set degree of direction change.

For more information regarding GPRS tracking please refer to   GPRS Communication Protocol

Sleep Mode	W******,021,X	W000000,021,2

Remarks: this setting is for power saving.

X=0 turn off sleep mode	X=1 Level I	X=2 Level II	X=3 Level III

Here is some explanation for the sleep mode.

GPS module will be closed for 64 seconds * X (X=1, 2, 3), if it gets continuous GPS fixed for 32 times or Non-GPS fixed for 128 times. After that, GPS module will periodically work and close.

Power Down	W******,026,XX	W000000,026,10

Remarks: Put the tracker in power down mode when it is inactive (stationary) or immobile for a period of time.

In Power Down mode, GPS stops working, GSM enters sleep mode and stops sending out messages. The device remains in this mode until it is activated by message, incoming calls, movement or input changes.

XX=00, to turn off this function;

XX=01~99, to turn on Power Down after a specified period of being inactive. It is in unit of minutes.

In this example, the tracker will enter power down mode after it is inactive for 10 minutes.

Listen-in (Voice Monitoring)	W******,030,T	W000000,030,88888888

Remarks: T is the telephone number for wiretapping and max. 16 digits.

Set Log Interval	W******,031,X	W000000,031,60

Remarks: to set the interval for storing GPS data into tracker's flash memory.

(Note: this interval is not relevant to the interval of SMS/GPRS tracking)

X=0, to turn off this function;

X=[1, 65535] to set interval in second.

In this example of W000000,031,60, the tracker will store location data every 60 seconds.

Format Buffer	W******,503	W000000,503

Remarks: This command clears the data stored in the buffer.

Note: Deleted data can no longer be recovered.

Time Zone	W******,032,T	W000000,032,480 W000000,032,-120

Remarks: Default time of the tracker is GMT, you can use this command to correct it to your local time. This command is for SMS tracking only.

T=0, to turn off this function;

T=[-32768,32767] to set time difference in minutes to GMT.

For those ahead of GMT, input the time difference in minutes directly. For example, for GMT+8, W000000,032,480 (8 hours is 480 minutes).

'-'is required for those behind GMT. For example, W000000,032,-120.

Set SMS Header	W******,033,P,Char	W000000,033,1,help

Remarks: this command is to set initial characters for SOS message when SOS/IN1, Button B/IN2, Button C/IN3 is pressed.

P=1, SOS button/Input1	P=2, B button/Input2	P=3, C button/Input3

Char is the character in SOS message and max 32 characters and defaulted as:

1 SOS Alarm!	2 Cry For Help!	3 Call The Police!

Get Version No. and Serial No.	W******,600	W000000,600

Remarks: to get the version and serial number of tracker's firmware.

Get IMEI	W******,601	W000000,601

Remarks: to get IMEI of the tracker.

Reboot GSM	W******,901###	W000000,901###

Remarks: to reboot the GSM module of the tracker.

Reboot GPS	W******,902###	W000000,902###

Remarks: to reboot the GPS module of the tracker.

Initialization	W******,990,099###	W000000,990,099###

Remarks: Send SMS "Default?" to the device, within 120 seconds, send this SMS command to the tracker to make all settings (except for the password) back to factory default.

is the ending character.

Password Initialization	W888888,999,666	W888888,999,666

Remarks: In case you forget your password, Send SMS "Default?" to the device, within 120 seconds, send this SMS command to the tracker to make the password back to factory default (000000).

Annex 2. Troubleshooting

Problem: Unit will not turn on when pushing the power switch to On side	
Possible Cause:	**Resolution:**
Power switch was not pushed properly	Make sure the power button is pushed to On side
Battery needs charging	Recharge battery for 3 hours
Problem: Unit will not reply with SMS	
Possible Cause:	**Resolution:**
Green LED is flashing (1 second on and 2 seconds off)	Make sure GT30i is connected to GSM network
GSM Network is slow	Some GSM networks slow down during peak time or when they have equipment problems
Unit is sleeping or in power down mode	Cancel sleeping mode or power down
Wrong password in your SMS or wrong SMS format	Write correct password or SMS format
The SIM in GT30i has run out of credit	Replace or top up the SIM card
Problem: Green LED is Flashing (1 second on and 2 seconds off)	
Possible Cause:	**Resolution:**
No GSM signal	Check with a mobile phone to see if there is a signal in the area or try to call the unit to see if you hear a ring tone
No SIM card	Insert a working SIM card. Check in phone that the SIM can send SMS message
SIM card has expired	Check in phone that the SIM can send SMS message. Replace SIM card if needed
SIM has PIN code set	Remove PIN code by inserting SIM in your phone and deleting the code
SIM is warped or damaged	Inspect SIM, clean the contacts. If re-inserting does not help try another to see if it will work
Roaming not enabled	If you are in a different country your SIM account must have roaming enabled
Battery is low	Recharge the unit and the GSM will start working
Problem: Blue LED is Flashing (1 second on and 2 seconds off) or the SMS received starts with 'Last…'	
Possible Cause:	**Resolution:**
Unit does not have clear view of the sky	Move the unit to a location where the sky is visible. Tall buildings, trees, and heavy rain can cause problems with the GPS reception.
Bad GPS reception	Place the front side of GT30i towards sky
Battery is low	Recharge the unit and the GPS will start working
Problem: Unit Fails to Connect to Server via GPRS	
Possible Cause:	**Resolution:**
SIM card in GT30i does not support GPRS function	Enable SIM card GPRS function

GPRS function of GT30i is turned off	Turn on GPRS function of GT30i
Incorrect IP address or PORT	Get the right IP address and PORT and reset to GT30i
GSM signal is weak	Move the unit to a location with good GSM reception

Contacts

Please do not hesitate to email us at info@meitrack.com if you have any questions.