

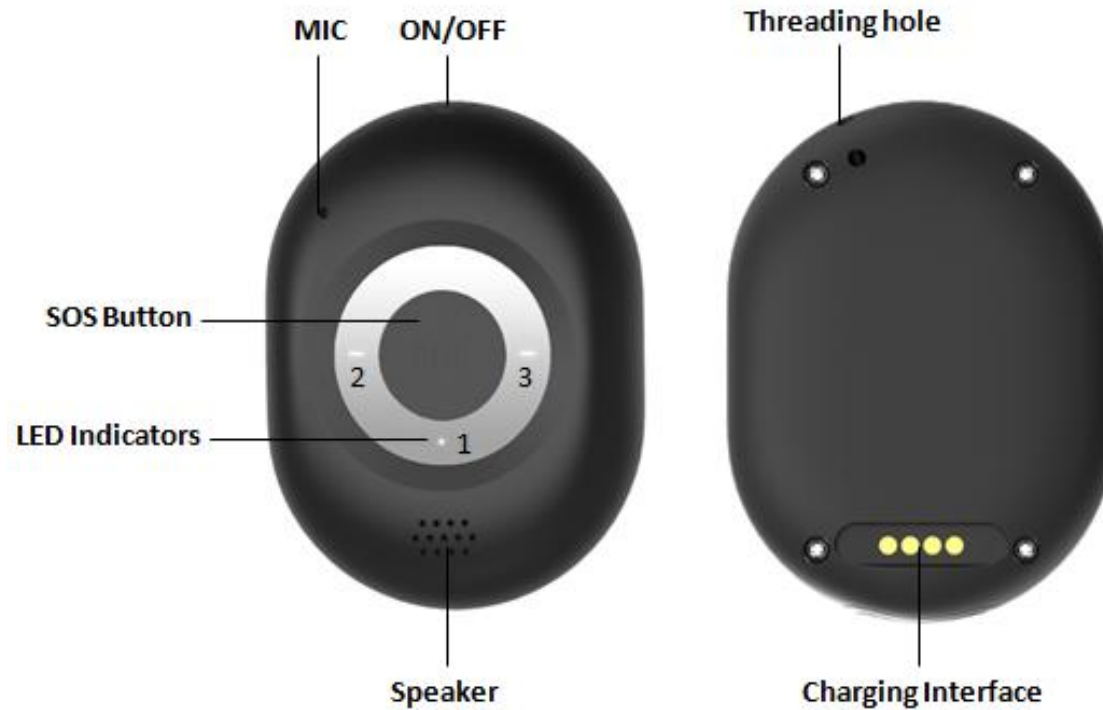
GPS TRACKER USER MANUAL



1, Overview

Thank you for purchasing MT018 This device is an advanced 2G /4G network ,if your device is 2g version pls use 2g sim card, 4g version pls use 4g sim card. This tracker is waterproof IPX6, innovative miniature size personal remote positioning device with GPS and GSM/GPRS technology. It's for monitoring and protecting people and property. It can be used in all walks of life from traveling lone workers and mobile nursing staff to children and the elderly, Dementia etc.

1) Structure :



2) Features :

1. Mini sized, can be hung on the neck or wear on your hands
2. Real time tracking by GPS, AGPS, LBS and WiFi
3. Dual alarm way: Shock alarm and Voice alarm
4. Fall down function very suitable for children, elderly and patient.
5. AGPS, TTFF in 30 seconds (10 seconds for GPRS included).
6. Magnetic suction charging way
7. Rechargeable 800mAh Lithium battery, standby time over 30days.
8. Voice monitoring and Two way Voice communication
9. SOS emergency button
10. Geo-fencing alarm
11. Movement alarm and Over speed alarm
12. GPRS blind area data re-upload function
13. GPS signal lost and recovery alert
14. Reply map link of current position
15. Real-time tracking platform and mobile APP
16. Use Nano SIM Card
17. Remote upgrade function
18. Certified with CE, RoHs and SAR Certications
19. Waterproof IPX6

3) Hardware specifications :

| No. | Items | Hardware Specifications |
|-----|----------------------|------------------------------------------------------------------------|
| 1 | Size | 60mm* 45m* 18mm |
| 2 | Weight | ≤35g |
| 3 | Frequency-2G | 850/900/1800/1900 MHz |
| | Frequency-4G | Type A: B1/B3/B7/B8/B20; Type B: B2/B4/B12; Type C: B1/B3/B5/B7/B8/B28 |
| 4 | GPS Chip-3G | U-Blox sara(Support AGPS) |
| | GPS Chip-2G/4G | MTK+SIMCOM(Support AGPS) |
| 5 | WIFI Frequency | 802.11 b/g/n, 2.4G |
| 6 | Sensor | Motion & vibration sensor |
| 7 | Connectors | 4 Pin-Magnet for charging |
| 8 | Microphone & speaker | Built-in |
| 9 | Antenna | Built-in ceramic and FPC antenna |
| 10 | SIM card slot | Nano SIM card |
| 11 | Charging Voltage | 5V DC |
| 12 | Battery | Rechargeable 3.7V 800mAh |
| 13 | Temperature | Operating Condition:-40°C to +85°C ; Storage Condition:-30°C to +60°C |
| 14 | Relative humidity | 5% -95% noncondensing |
| 15 | Charger | Magnetic USB cable; UK/AU/EU/US plug for option |

2, Operation :

1) Install the SIM card

The SIM card is not included in the package. A Nano SIM card is available from the user's local operator.

- A) Unscrew the back cover and remove the cover.
- B) Insert SIM card and make sure it's activated with credits
- C) Put the cover back and tighten the screws.



Note: Before installing the SIM card, check if the SIM card has PIN code or not, if yes, please use a cell-phone to unlock the card's PIN code.

2) Device Charging

Note: For the first time use, please fully charge the battery for around 2 hours.

- A) Using the USB connection terminal connect to the designated AC power source (USB/AC adaptor).
- B) Connect the Magnetic connection terminal to the charging interface of the device.

When charging, the RED LED will be lighting Solid. After fully charged, the RED LED will turn off.

3) Turning the device on/off

- A) Turn on: press the side button (ON/OFF) for 2 seconds, the device will turned on with vibrates and LEDs on
- B) Turn off: press and hold the side button (ON/CALL) and SOS button together for 1 second until the device vibrates and LEDs off.

Note: In order to get an initial location and locate on the satellites more easier, please use outdoors or near a window. Default working mode is MD2, for the first positioning, please ensure that the GPS chip working time is long enough, or you can change the working mode in MD1 to let the gps chip always on, and then back to MD2 working mode.

4) The meaning of LED indicators

| | | | |
|-----------------------|----------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------|
| LED1 (Red-mid) | Light Solid (not flashing) | Red blinking slowly | Red OFF |
| | The device is charging | Battery power is lower than 20% | Device has been fully charged or not charging |
| LED2 (Blue-left) | Light shows a flash rapidly every 3 seconds | Light shows a double flash rapidly every 3 seconds | Light shows a slow flash every 3 seconds |
| | The device is connected to the GSM network | The device is registered to the GPRS network | The device is connecting to the GSM network |
| LED3 (Green-right) | Light shows a flash rapidly every 3 seconds | Light shows a slow flash every 3 seconds | Green Off |
| | The device has a GPS positioning fix | The device has no GPS fix | The GPS chip is sleeping |

First of all need to **Set the Authorized Number**

✂ It is not mandatory for all Five of the authorized numbers to be set, however a minimum of one must always be set.

Command: N1/2/3/4/5,phone number

Note: With no spaces in the text, case-insensitive.

Example: N1,123456789; N2,123456789.

The device will reply: **Set mobile number 1 OK!**

✂ To delete this number, you can send N1/2/3/4/5,0 to the device, Example: N1,0. Device will reply: Del phone number N1 OK!

5) Trigger SOS alarm

Press and hold the SOS button for 3 seconds until the device vibrates, and then blue light will start to flash rapidly to confirm the request. After that, an SOS Alarm "Help me! SOS!" will be sent to all authorized phone numbers by text message and to the platform by GPRS. It will also dial the 5 authorized numbers in sequence. If the tracker fails to connect to the first number, it will call the second number after delay of 10 seconds. (In this time, user can prevent a possible false alarm by pressing SOS button). In case the second number fails to be connected as well, the system will connect to the third number etc. Between each call, it will have 10 seconds delay, user can press SOS button to stop to call next number. This will continue until one of the phones answer the call
To end the call and sequence, user can press SOS button or the receiver of the call can answer on their mobile phone to stop it.

6) Making a Phone Call

To make a call, press and hold the side button for 3 seconds and you will hear a beep. The green light will flash rapidly to confirm the request, and then it will dial the first SOS number (default setting),you can set the Second / Third. To end the call, press the SOS button.

7) Fall detection

A simple fall may cause a devastating consequence. The authorized numbers will be alerted without the user pushing SOS button when the fall sensor is activated.

Command: **FD1,1/2/3**

1 equals least sensitive, 3 equals most sensitive; After send FD1, device will send SMS alarm to all registered phone numbers once detect fall.

The device must sense height, impact and angle. The height must at least above 1 meter.

After send FL1, device will send SMS alarm to all registered phone numbers once detect fall alarm.

Command: **FD2**

After send FL2, device will send SMS alarm to all registered phone numbers once detect fall alarm. It will also the dial the 5 authorized numbers in sequence.

To turn off this function, please send **FD0**

8) Location request: Reply with coordinates and web link

Command: **locate**

The device will reply "GPS Info! Time: xxxxx; Lat: xxxx; Lon: xxxx; Spd: xxxxx, Altitude:xxxx Bt: xxx

maps.google.com/maps?q=loc:22.647379,114.030998

※Put coordinates to Google earth or Google maps. Click on search button, then you will find the position fixed.

※Click on the link then the location can be shown directly on Google Map on your mobile phone.

3, Commands lists:

Note: 1) All commands text no spaces and case-insensitive

2) The device has some default setting, if you want to modify them, please read the contents carefully as below.

1) Working mode:

| No. | Mode type | Command | Example | Instruction |
|-----|-------------------------------------------------------|---------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Live Tracking Mode | MD1 | MD1 | In this mode, Both GSM and GPS chip are always working, Battery can last 12~36 hours |
| 2 | Smart Power Saving Mode (Default working mode) | MD2 | MD2 | In this mode, GSM/GPRS chip is always working to receives calls, SMS and transmits location. GPS chip is off when there is no movement or no phone usage/alarm/SMS. The GPS chip is activated by motion, incoming calls and SMS. Battery life is not wasted when the device isn't moving. Under normal use, battery can last 3 ~ 5 days. |

| | | | | |
|---|-----------------------------------|-----------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 | Deep Sleeping Mode | MD3,xxm/H | MD3,05M | xx = 00 ~ 99 , m =Minute , H =Hour ; Both GSM and GPS chip will be off to save power, the device is unable to receive calls or SMS. It can be only activated by movement. Once movement is detected, it will run for the set time and sleep again if no movement is detected. Battery can last 40 days if no movement at all. |
| 4 | Working Mode | MD4 | MD4 | In this working mode, device can always receive SMS/calls. But GPS chip only wakes up and updates location to the tracking platform if user press button or receive phone call/text message. Without press button or phone call/message, GPS chip will always sleep |
| 5 | Time Interval Working Mode | MD5,XXM/H | MD5,30M | xxx = 00 ~ 99, m =minute, H =hour; In this working mode, device can always receive SMS, calls. And it updates location to the tracking platform according to the time you set. Device will update location to the tracking platform every 30 minutes. |

2) GPS and WiFi position mode switch setting

| No. | Mode type | Command | Example | Instruction |
|-----|---------------------|---------|--------------|------------------------------------------------------------------------------------|
| 1 | WiFi and GPS | WIFI1 | WIFI1 | WiFi and GPS both working on, gps first, if no gps signal, change to wifi tracking |
| 2 | WiFi OFF | WIFI0 | WIFI0 | WiFi off, the device only tracking with GPS |

3) Configuration and Operation by SMS

| No. | Function | Command | Example | Instruction |
|-----|-------------------------------------|-------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------|
| 1 | To Set the Authorized Number | N1/2/3/4/5,phone number | N1,12345678900 | It is not mandatory for all three of the authorized numbers to be set, however a minimum of one must always be set |
| | To delete this number | N1/2/3/4/5,0 | N1,0 | Feedback: Del phone number N1 OK! |

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|---|-----------------------------------------|--------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 | Incoming call control | IN1 | IN1 | After send IN1, device only answer the call automatically from authorized numbers. (authorized numbers mean number N1~N5) |
| | | IN0 | IN0 | After send IN0, device can answer the call automatically from all numbers. Default setting is off: IN0 |
| 3 | Modify the time zone | TZ+00/-00 | TZ+02 | UTC time has been set as default time. TZ+02 means the system will add 2 hours based on the UTC time. Note: the time must amounts be in 2 digits and at maximum 23 hours in value. "+" in the "time zone" portion of the text indicates east. The symbol "-" in the "time zone" indicates west. |
| 4 | User defined name in SMS content | name1,user name | name1,AAA | The default name is empty |
| | Delete name | name0 | name0 | Feedback: Delete name OK! |
| 5 | Get location information | locate | locate | Reply with coordinates and web link. Put coordinates to Google earth or Google maps. Click on search button, then you will find the position fixed. Click on the link then the location can be shown directly on Google Map on your mobile phone. |
| 6 | Low battery alarm | low1 | low1 | When the unit's battery is less than 5%, it will send an SMS alarm "Battery: LOW!" to all authorized numbers. (Default: on) |
| | | low0 | low0 | Feedback: low battery alarm off! |
| 7 | Command password protection | 123456Lock | 123456lock | After send this command, then it will require a password in front of all commands (except reboot). For example 123456N1. |
| | | 123456UNLock | 123456unlock | Feedback: UNLOCK OK! (Default:off) |
| 8 | Change password | old password+ to +new password | 123456to666666 | The password is changed to 666666. Make sure new password is in 6 digits, or else the tracker cannot recognize the password |

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|----|----------------------------------------------------------|------------------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9 | Geo-fence alarm (Default: off and only message alarm) | GeoN,A,B,xxxM/KM | Geo1,1,1,200M | N = Geo-fence number (1 ~ 3) , user can set three Geo fences; A = 0 means to turn off the function; A = 1 means to turn on the function; B = 1 means to set alarm when th tracker enters the preset area B = 0 means to set alarm when the tracker breaches the district. xxx is the preset distance to the tracker original place, must be 3 digitals and above 100m. M means meters, KM means kilometers. The device will send the message to the authorized numbers as 'Geo fence alarm!+GPS info'when it enter the area you set. (User must set this function when the device has a GPS positioning fix.) |
| | Delete Geo-fence | Geo1 or 2 or 3,0 | Geo1,0 | Feedback: Geo fence alarm 1 off! |
| 10 | Over speed alarm | speed1,Speed | speed1,100 | The speed must be in km/h in 3 digitals. (001~255km/h); Suppose the over-speed alert that we want to set is 100km/h, when the device exceeds 100km/h, it will send the message "Over-speed! +GPS Info" to all registered phone numbers. (Default: off) |
| | Turn off over speed alarm | speed0 | speed0 | Feedback: Cancel over speed alarm OK! |
| 11 | Movement alarm | MV1,xxxM/KM | MV1,200m | xxx must be 3 digitals and above 100m. M=meters, KM= kilometers. The tracker must be stationary when setting this function; When the tracker moves beyond 200 meters, it will send an SMS alarm to all registered phone numbers. (Default: off) |
| | Turn off movement alarm | MV0 | MV0 | Feedback: Movement alarm off! |
| 12 | No motion alarm | NA1,XXM/H | NA1,05M | M means minutes, H means hours, xx means the time you set and must be two digitals. If device detect no motion more than 5 minutes and it will send SMS alarm to the authorized numbers. (Default: off) |

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|----|--------------------------------------------|-------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Turn off no motion alarm | NA0 | NA0 | To turn off this function |
| 13 | Listen-in function (Voice wiretapping) | Listen1 | Listen1 | N1-N5 can make a silence call to the tracker. The tracker answers the call automatically and allows the caller to hear what is happening around the tracker. There is no voice indication that the call is in progress. (Default setting is off) |
| | Turn off listen-in function | Listen0 | Listen0 | Feedback: Listen-in off! |
| 14 | Sound function | sound1 | sound1 | After send this command, when device accept incoming calls, device will make a ring sound and also vibrate. (default:on) |
| | Turn off Sound function | sound0 | sound0 | After send this command, when device accept incoming calls, device will not make a ring sound, only vibrate. |
| 15 | SOS button DING sound | ding1 | ding1 | After send ding1, after user press SOS button, device will make a sound and also vibrate (default:on) |
| | Turn off DING sound | ding0 | ding0 | After send this command, after user press SOS button, device will not make a sound, only vibrate. |
| 16 | LEDS function | LED1 | LED1 | Feedback: LEDs on! (default:on) |
| | Turn off LEDS | LED0 | LED0 | Feedback: LEDs off! The device LEDs will stop flashing, but the device is actually on. |
| 17 | To set number for the side(on/call) button | C,123456789 | C,123456789 | Side button can be configured to call anyone number, after set this command. Press and hold the call button for 2 seconds until the device vibrates, it will call the setting number. If you have not set it will call number N1 default. (Default:off) |
| 18 | Fall down alarm (message alarm) | FD1,1-3 | FD1,3 | 1 equals least sensitive, 3 equals most sensitive; After send FD1, device will send SMS alarm to all registered phone numbers once detect fall. |
| | Fall down alarm (message and call alarm) | FD2 | FD2 | After send FD2, device will send SMS alarm to all registered phone numbers once detect fall, It will also dial the authorized numbers in sequence. The authorized numbers will be alerted without the user pushing SOS button when the fall sensor is activated. If this situation may cause false alarm, |

| | | | | |
|----|-----------------------------------|---------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | users can manually cancel the fall alert by pressing SOS button during its beeping. If the fall down alarm triggered, you should answer on your mobile phone to stop it. |
| | Turn off fall down Alarm function | FDO | FDO | Feedback: Falling detection off! Default off |
| 19 | Turn on dial function | DIAL1 | DIAL1 | With this command, all registered numbers can receive the call from device if has SOS alarm or fall alarm (Default: on) |
| | Turn off dial function | DIAL0 | DIAL0 | With this command, all registered numbers can't receive the call from device if has SOS alarm or fall alarm. |
| 20 | Turn on SMS alarm | SMS1 | SMS1 | Enable SMS and GPRS alarms. (Default: on) |
| | Turn off SMS alarm | SMS0 | SMS0 | It only sends alarms via GPRS to the platform and without text message to the authorized numbers. |
| 21 | Check device status | status | Status | Feedback the settings of the device. Note: '1' means that the function is turned on, '0' means that the function is turn off. |
| 22 | Reboot device | reboot | reboot | The device will restart itself without changing any settings. |
| 23 | Default device | default | default | The device will turn off when reset is complete. This is to make all settings back to the factory default. |
| 24 | Get IMEI | IMEI | IMEI | Feedback the IMEI information of the device |

4) GPRS Settings by SMS

| No. | Function | Command | Example | Instruction |
|-----|------------|-----------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | APN | APN1,APN,user name,password | APN1,cnnet | Note: Some access point name without user name and password, so please leave it blank. ('cnnet' is the APN from the SIM card provider; therefore, the user must set their particular APN for their own country which the unit resides.) |

| | | | | |
|----|---------------------------------------------------------|---------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | Make sure that the SIM card in the tracker supports the GPRS function. The APN can be acquired from your local GSM operators. |
| 2 | GPRS Time interval | TxxS/M | T08M | 'xx' must be 2 digitals can be set with 01-99; S means second, M means minute. The unit must be second or minute. |
| 3 | Turn off GPRS | GPRS0 | GPRS0 | Feedback: GPRS off! |
| 4 | Reconnect GPRS | GPRS2 | GPRS2 | Reconnect the website via GPRS for real time tracking |
| 5 | Change IP and Port | IP1,IP/website,port | IP1,58.61.154.232,2018 | Feedback: Set IP and port OK! |
| 6 | Check APN, IP and Port | CHECK1 | CHECK1 | Feedback the APN and IP information of the device |
| 7 | Delete tracking history data | DEL | DEL | The device will stop sending the stored tracking history data to tracking platform. |
| 8 | Setting reporting time interval when no movement | NMxxM/H | NM30M | xx=00~99, M=Minute, H=Hour ; After send the above command,device will transmit data every 30 minutes to the platformwhen device no motion. Suitable for MD2 |
| 9 | Setting a Heartbeat Packet Reporting Interval | HBxxS/M | HB30M | After send the above command, the tracker will send the GPRS heartbeat packet to the platform every 30 minutes in MD1 and MD2 mode. The heartbeat function is used to keep the platform connection smooth, but GPS positioning data is invalid The heartbeat packet function is used to keep the Transmission Control Protocol (TCP) connection open when the interval of scheduled GPRS reporting is long. The heartbeat packet function is only available for the MD1 and MD2 working mode Note: 'xx' can be set with 00-99; S means second, M means minute. |
| 10 | Turn off Heartbeat Packet function | HB00M | HB00M | When the interval is 0, the heartbeat packet function is disabled |

5):Real time tracking on platform

www.18gps.net. For more information please contact the seller.

4, Notices:

GPS does not work well indoors

Because The signals from the satellites are attenuated and scattered by roofs, walls and other objects.

GPS satellites transmit at least 2 low-power radio **signals**. The **signals** travel by line of sight, meaning they will **pass through** clouds, glass and plastic but will not go **through** most solid objects, such as buildings and mountains.

So we suggest put it outside for first time use.

1. Please make sure GSM SIM card supports making calls, sending messages, GPRS network.
2. If you want to get high quality of GPS signals, please set APN to active the AGPS function and put it outside.
3. Please make sure the GSM card has opened the call shows and turned off the call transfer.
4. When you send message to the device success, the blue LED will flash quickly.
5. Clear the unit with a piece of dry cloth. Do not clean in chemicals or detergent.

Please comply with the instructions to extend the unit life. Changes or modifications not expressly approved by the party responsible for compliance might cause harmful or damaged.

Contents of this manual are subject to changes without prior notice.

All information contained in this manual is believed to be correct. We shall not be liable for errors contained herein nor for incidental or consequential damages in connection with the furnishing, performance, or use of this manual.

