T12 USER GUIDE

1. T12 Features

- Maximum 180 days working time
- Police & Detector's Best Choice
- 2200mAh rechargeable Lithium-ion battery
- GSM+GPS positioning with Google map tracking
- Water-Proof design with strong magnets built-in
- Remote Bug Monitoring function with DSP within five meters of effective

Hardware Specifications:

- Size: 105mm x 60mm x 23mm, weight: 146g Storage Temp: -40 to 85 °C Operating Temp: -10 to 55 °C
- GPS: U-BLOX G7020-ST, 50 channel Antennae: Internal Frequency: L1 1575.42 MHz Position Accuracy: <5m
- Sensitivity:

Tracking: -161 dBm Cold starts: -148 dBm Hot starts: -156 dBm Cold start: <27s Warm Start: <5s Hot Start: 1s

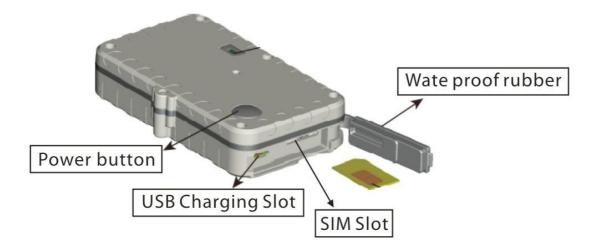
A-GPS: AssistNow Online and AssistNow Offline services,

OMA SUPL compliant

- GPRS: MTK 6260D Quad band; GSM 850/900/1800/1900 MHz GPRS Class 12 Antennae: Internal
- Power: Rechargeable, 2200 mAh, Lithium-Ion Battery

Built-in Vibration/motion sensing

2. Product Image



3. Button Operation

For the first time activating the device, once Sim is inserted, device will be on automatically. No any button operation is needed.

3.1 Button Operation for GPS function NOTE: Each "button" press must be at 1 second in all uses

This control button is at the middle top of the device

a. **On:** Press power button 5 times. Green indicating light will be on for 30 seconds.

b. **Off:** Press power button 10 times. Blue light will flash for 5 times.

c. **Reset:** Press power button 15 times to reset all settings, Blue indicating light will flash for 3 times.

d. Reboot: send SMS 88888888

4. Installation Manual

4.1 SIM Card Pre-installation, specification note

- a. GSM Sim Only
- b. SIM card should have its GPRS function enabled.
- c. SMS request will function only if Caller ID function is enabled.
- d. If SIM card is locked via PIN, please unlock SIM.

4.2 SIM Card Installations and Removal

- a. Open waterproof rubber
- b. Insert SIM card into the SIM slot, metal face up, clipped corner to the right.
- c. The green indicating light will be on for 30 seconds.

d. Call the device SIM number and it is supposed to get through without answer.

e. Ensure the waterproof rubber is closed after SIM installation

5. Operation Commands Guide

5.1 Set APN: (VERY IMPORTANT AND MUST BE DONE 1ST) For the device to send data to the server, this command MUST be enabled.

SMS: *apn*AXXX*BXXX*CXXX* This command sets the telecom **A**ccess **P**oint **N**ame. BXXX refers to user name, CXXX refers to password.

If there is no user name and password required, send as ***apn*AXXX***

If there is user name but no password required, send as ***apn*AXXX* BXXX***

APN information can be checked on local telecom website.

You will receive the following text: "Notice: APN is set to XXX. User name: XX. Password: XX"

5.2 Registering the "Master" Controller

SMS to the device: ***master*123456*+1XXXXXXXXXXXX***, (For instance, master controller phone number is +1XXXXXXXXXXXX. +1 refers to the country code. XXXXXXXXXXX is the cellphone number. Please make sure country code is included, and digit 0 is not needed before cell phone number)

Device Response: "Notice: Cell Phone # xxxxxxxx is set to master controller, the password is 123456." (The device has a default password of "123456" to initially program in your PDA/Phone.

NOTE: The device will ONLY listen and respond to instructions from this number unless you choose to turn on the multi controller function and open the device to any cell phone number (see NO.12 for details).

5.3 Changing the Password:

SMS: *password*654321* (654321 refers to new password) You will receive the following text: "Notice: The password change is successful for +1XXXXXXXXXX. The new password is 654321."

6. Motion Detected Alert

The Master Controller will receive an alert (call or SMS) once the device detects vibration indicating possible motion.

6.1 Vibration sensitivity:

The device you have purchased is equipped with a sensitive Vibration detection system. The motion sensor sensitivity rate can be set by SMS command.

SMS: *sensitive*1-5* (where X = 1-5, 1 being the most sensitive, 5 the least, default setting is 1)

1=3 seconds continued vibrating
2= 6 seconds continued vibrating
3= 9 seconds continued vibrating
4=12 seconds continued vibrating
5=15 seconds continued vibrating

Device Response: "Notice: Vibration sensitivity is set to 1-5."

6.2 SMS or CALL Alert Settings:

With the vibration detection system. There will be a Call alert (call master number 2 times) or a SMS alert generated and send to master number, when any motion is detected after 3 minutes of non-movement. **The system default setting is call alert, and can be turned off by SMS command**

SMS: *alertoff*
Device Response: "Notice: System has ended alert function."
SMS: *smsalert*
Device Response: "Notice: System has entered SMS alert function."
SMS: *callalert*
Device Response: "Notice: System has entered call alert function."

7. SMS Location Query

The GPS module establishes location and creates an event, which is sent immediately. The data packet returned via SMS includes battery level and any applicable alert mode. User can track the device location via SMS whenever, wherever.

7.1 SMS: *locate*

This command "Pings" the unit from the master controller for a spot location report delivered via SMS back to the Master Controller.

Device Response: You will receive back a text include latest information of latitude, longitude, date, time and ranking. And you can find this location in details from the tracking website.

7.2 SMS: *locateaddress*

Device Response: You will receive back a text include rough address information of the device. Tracking website is not required.

7.3 SMS: *locatemap*

You will receive back a text message with a google map link, click the link in order to view the location through cellphone browser. It is suitable for smart phone user only.

8. Website Tracking

Tracking Website: www.miitown.com

Account Login ID: Registered Master phone number. It's the same number as 5.2.

Account Login Password: Default as 123456. It can be changed on the tracking website.

Recommended Web browser are Chrome, Firefox or cellphone default browser.

NOTE:

A. The default setting is OFF due to GPRS data and extra power is required for each tracking mode

8.1 Real-time Tracking

This function delivers a highly granular tracking record of a specific route. Once motion is detected, every 10 seconds locate records are uploaded every 1 minute to the server during motion.

This function is suitable for speed moving object tracking. And it works in motion only.

8.1 By SMS

SMS: *routetrack*1-99* (1-98 represents hours of accumulated data, 99 means always on)

Device Response: "Notice: System has entered routetrack function for *XX* hours." If you sent 99 the device responds: "Notice: Routetrack function is set to always on."

8.1.1 Real-time tracking location data collecting interval.

The smaller interval, the higher accuracy, but the higher power consumption. **SMS** *rsampling*1-999* (1-999 represents seconds of data collecting interval, default as 10 seconds)

8.1.2 Real-time tracking location data upload interval. The smaller interval, the higher accuracy, but the higher power consumption.
SMS *rupload*60-999* (60-999 represents seconds of data uploading interval, default as 60 seconds, minimum rate should not be less than 60)

SMS *routetrackoff*

Device Response: "Notice: System has ended routetrack function."

8.2 Check Function

This check function enables device to collect location data regularly and uploaded to server in appointed interval. This command can be used both in idle and in motion, and able to work with route track function at the same time.

SMS: *check*0-99*(0-99 represents hours of data upload interval, default as *check*0*)

SMS: *checkm*10-999*(10-999 represents minutes of data upload interval)

SMS: *checkoff*

Device Response: "Notice: System has ended check function."

Noted:

1. Check function is able to work with routetrack command at the same time.

2. System is default as *check*72*. One location will be uploaded to server every 72 hours.

3. Location will be uploaded to server no matter device is in motion or not.

8.3 Track Off

Track off will end all the tracking functions except check function.

SMS: *trackoff*

Device Response: "Notice: System has ended all tracking functions."

9. Deep Sleep

The Deep Sleep function enables the device to be available for long working periods as needed, tracking remotely when either the timer wakes the unit or motion is detected.

9.1 Sleep

Device will enter deep sleep in appointed time interval and will be awake for 12 minute to upload 1 GPS location. If no new command, call or new motion is received during the 12 minutes, device will enter sleep function again.

SMS: *sleep*1-99* (1-99 represents hours of deep sleep period.) **Device Response:** "Notice: System is going to enter deep sleep function, data will be uploaded every XXX hours."

9.2 Motion Sleep

Device will enter deep sleep and will be awaked by motion, meanwhile upload the current location, and will wait for 12 minutes for further command. If no new command, call or new motion is received during the 12 minutes, device will enter sleep function again. And the circle repeats.

9.2.1 SMS: *sleepv*

Device Response: "Notice: System has enabled deep sleep with motion call alert function."

9.3 Period Motion Sleep

Device will enter deep sleep for appointed time period and will be awaked by motion, meanwhile upload the current location, and will wait for 12 minutes for further command. If no new command, call or new motion is received during the 12 minutes, device will enter sleep function again, until appointed period ends. Please input time period.

SMS: *sleepv*1-99* (1-99 represents hours of deep sleep period, system will be activated with motion during this period.)

Device Response: "Notice: System has enabled deep sleep with motion call alert function for XXX hours."

9.4 Sleep Off

SMS: * sleepoff*

Device Response: "Notice: System has ended all sleep functions."

10. SOS Alert

The Master controller number is the default number to receive the SOS message, other mobile phone numbers can be bounded together to receive the SOS message by below operation 10.1

10.1 Registering the panic button bounded number SMS to the device:

*master*123456*+1XXXXXXXXXXX*+AXXXXXXXXXXXXXX*+BXXXX XXXXXXXX*+CXXXXXXXXXXXXX*,

NOTE: Please make sure country code is included, and digit 0 is not needed before cell phone number

Device Response: "Notice: Cell Phone # xxxxxxxx is set to master controller, the password is 123456." (The device has a default password of "123456" to initially program in your PDA/Phone.

NOTE: All bounded number will receive the above response when command is received.

10.2 Panic Button

1. Press and hold front button for 5 seconds, system will send 2 SOS SMS to bounded phone numbers.

Bounded phone numbers will receive SMS "SOS! HELP! SOS!! HELP!! SOS!!! HELP!!!"

SMS: *soson*

Device Response: "Notice: SOS alert function enabled."

SMS: *sosoff*

Device Response: "Notice: SOS alert function disabled."

NOTE: The default setting is OFF. Please send SMS *soson* to enable this function. And all bounded numbers are capable to control device as master controller does.

11. Status query

SMS: *status*

System Health and status check. Returns text message indicating various system diagnostics

12. Multi Controller

This allows any SMS enabled cell device to query the unit for location, status, etc.

SMS: *multiquery*

"Notice: Multi query feature enabled."

SMS: *multiqueryoff*

The unit will now only respond to the Master controller.

Device Response: to the Master Controller: "Notice: Multi query feature disabled."

13.Device Information

SMS: *about*

You will receive a text message include software edition information and device's serial number.

14. Low battery Alert:

The device is equipped with an automatic "Low Battery" detection and alert when the battery drops to 20% of it's capacity. An alert SMS will be sent to appointed phone number and the real-time tracking function will be turned off for power saving.

Appointed alert number settings

Default alert phone number is registered master number, and it can be changed as needed.

Command Setting List

Function	Command	Description
APN Setting	*apn*AXXX*BXXX*CXXX*	This command sets the telecom A ccess P oint N ame. BXXX refers to user name, CXXX refers to password.
Master Setting	*master*123456*+1XXXXX XXXXXXX*	+1 refers to the country code. XXXXXXXXXX is the cellphone number. Please make sure country code is included, and 0 is not needed before cell phone number
Password Changing	*password*654321*	Original password is default as 123456. 654321 refers to new password.
Vibration Sensitivity Setting	*sensitive*1-5*	1 being the most sensitive, 5 the least. Default setting is 1.
Alert Setting	*callalert*	Call alert will call master number 2 times when motion is detected after 3 minutes non-movement.
	smsalert	SMS notification will sent to master number when motion is detected after 2 minutes non-movement.
	alertoff	End Call/SMS alert
LLC Query	*locate*	Latest information of latitude, longitude, date, time and ranking.
Address Query	*locateaddress*	Address information of current location.
Google Map Search	*locatemap*	Google Map link with current location.

Function	Command	Description
Routetrack Setting	*routetrack*1-99*	1-98 represents hours of accumulated data, 99 means always on.
Routetrack Sampling	*rsampling*1-999*	1-999 represents seconds of data collecting interval, default as 10 seconds.
Routrack Upload	*rupload*60-999*	60-999 represents seconds of data uploading interval, default as 60 seconds, minimum rate should not be less than 60.
Routetrack Off	*routetrackoff*	End routetrack function.
	*check*0-99*	0-99 represents hours of data upload interval, default as *check*0*
Check Function Setting	*checkm*10-99*	10-99 represents minutes of data upload interval
	checkoff / *check*0*	End check function
Track Off	*trackoff*	End all the tracking functions except check function
Deep Sleep Setting	*sleep*1-99*	1-99 represents hours of deep sleep period.
Period Motion Sleep	* sleepv*1-99*	Period Motion Sleep. 1- 99 represents hours of deep sleep period.
Motion Sleep	* sleepv*	Motion Sleep function with motion alert.
Sleep Off	*sleepoff*	End Deep Sleep function.

Function	Command	Description
Status query	*status*	Check system status
Multi Controller	*multiquery*	Enable multi controller function
	multiqueryoff	End multi controller function
SOS Alert	*soson*	Enable SOS alert function
	sosoff	Disable SOS alert function
Device Information	*about*	Software edition information and device's serial number.