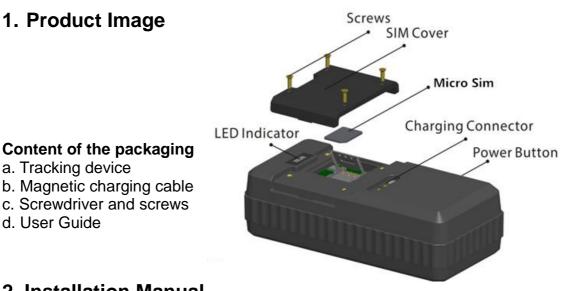
TK101 User Guide



2. Installation Manual

2.1 SIM Card Pre-installation, specification note.

- a. GSM Micro SIM Only.
- b. SIM card should have GPRS function enabled.
- c. SMS request will function only if Caller ID function is enabled.

2.2 SIM Card Installations and Removal

a. Open SIM cover at the front of the device with the provided screw driver.

b. Insert SIM card into the SIM slot, metal face down.

c. Press the power button (at the back of the device) once, and the blue light is on. It will be flashing when detecting signal, and then turns to steadily on for 10 seconds, and then turns off.

d. Call the device SIM number and it is supposed to get through without answer. (if you are using a data sim which is not supporting call function, ignore this step.)

e. Close the cover with screw driver.

3. Button Operation

3.1 Button Operation for GPS function

We strongly recommend you to charge the product before using it the first time. And please be sure SIM is inserted correctly before power on.

a. Power On: Press the power button (at the back of the device) once and

the blue light is on. It will keep flashing while detecting GSM signal, and turns to steadily on for 10 seconds and then turns off.

b. Power Off: Send command *poweroff* when the SIM is inserted.

If there is no SIM inserted, two press and one long press the power button at the back of the device until the blue light flashes 3 times.

c. **Panic Button:**Press and hold power button for 3 seconds to generate a SOS call alert to the preset emergency number. No indicating light will be on. d. **Charge:** The blue light is steadily on during charging and turns off when it is fully charged.

App User Guide

| 💄 Username | |
|------------|-------|
| Password | Ø |
| Register | Login |

1. Tracking via website and applications

Tracking Website: www.miitown.com QR Codes of IOS and Android app are at the bottom of the front page, please scan and download.

Username: Registered Master phone number. Password: Default as 123456.

2.1 Register an Account

2.1.1 Set APN

APN is Access Point Name. The correct APN must be set to enable the device to send data to the server. Different SIM has different APN, make sure you have confirmed the correct APN information with the SIM provider when you purchase the SIM.

| User has to set APN to enable device connect GRPS network for data transfer.Please confirm the correct APN information with the Sim provider | Back Regist | er | K Back APN Setting |
|--|--------------------|-------------------|--------------------------------|
| User has to set APN to enable device connect GRPS network for data transfer.Please confirm the correct APN information with the Sim provider Some APNs do not require user name and password. Register Account APN Register master number. Device will be activated when master registration is done. User name Please confirm APN correctly set. Password | G APN Setting | > | Set Phone number in the device |
| Connect GRPS network for data password. transfer.Please confirm the correct APN information with the Sim provider APN Register Account User name Register master number. Device will be activated when master registration is done. Password Please confirm APN correctly set. Image: Confirm APN correctly set. | j | | Country code is required |
| information with the Sim provider APN Register Account User name Register master number. Device will be activated when master registration is done. Please confirm APN correctly set. | connect GRPS netwo | ork for data | |
| Register master number. Device will be activated when master registration is done. Password Please confirm APN correctly set. | | | APN |
| activated when master registration is done. Please confirm APN correctly set. | Register Account | > | User name |
| | activated when mas | | Password |
| Submit | Please confirm AF | 'N correctly set. | |
| | | | Submit |
| | | | |

Table underneath is sample of the popular operator data. Please consult the website of your operator to find the APN settings of your sim.

| Operator | APN | Username | Password |
|---------------|-------------------------------|----------|----------|
| KPN (NL) | internet | - | - |
| Orange (PL) | internet | internet | internet |
| T-Mobile (US) | internet2.vociestre am.com | - | - |
| Vodafone (NZ) | www.vodafone.net. nz | - | - |
| O2 (DE) | internet | - | - |
| TIM (IT) | inbox.tim.it | - | - |
| Mobister (BE) | web.pro.be | mobistar | mobistar |
| AirTel (IN) | airtelgprs.com | - | - |
| Orange (FR) | orange.fr | orange | orange |

2.1.2 Registering Account

A. Make sure you put the land code before your phone number and you let out the first 0 of your number.

e.g.: +31612345676 for NL an +32475123456 for Belgium

- B. 123456 is the default login password. And it can be change on the tracking website at
- C. www.miitown.com

< Back **Register Account**

Phone Number in the Device

+Country code Phone number

Master number is the only phone number controls the tracking device via SMS after registration. And it is also the login username of the tracking website and app.

Master Phone Number (Username) + nber

| Country | code | Phone | nun |
|---------|------|-------|-----|
| | | | |

Password

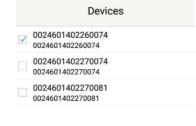
123456

Confirm Password

123456

Submit

| Control Room Master Number 008618451426904 | Ξ |
|--|--------------|
| Real-time Trac | ck |
| 3. Control Room History Review | w |
| Home Function list of the app | and |
| Devices Monit | tor |
| Setting | |
| Device Name: 58006716012 Device Number: 58006716012 | |
| Home Devices | E Message |



Devices

Show all number devices under the same account. Tap the device's serial number to select the one you need to control.



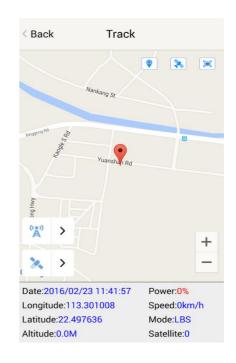
3.1 Real-time Tracking

To get latest location of the device.

((•)) Å

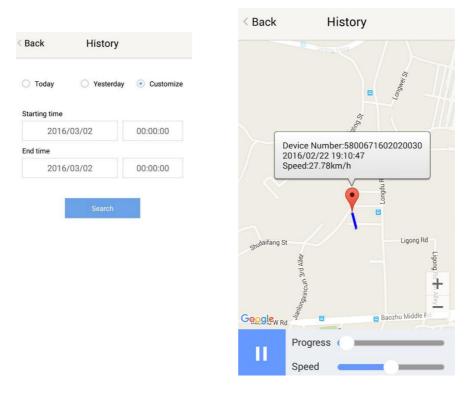
Tap to get GSM location

Tap to get GPS location



3.2 History Review

To view the previous location record of the selected device.



3.3 Online Command

Online Command can control device from APP via SMS, so SMS cost will be charged by the SIM provider of your smartphone, when you send these commands. And all replies from the device will be sent back to app via GPRS data, so replies will be shown as push notification, and all records can be checked in the message section.

| < Back Command | | Message |
|----------------------|---|--|
| Current Location | | Date:2016/02/22 15:40:10 Alarm Type:Device On SerialNumber:5800671602020030 |
| Current GPS Location | > | Senainumber.5800671602020030 |
| Current LBS Location | > | Date:2016/02/22 15:40:06 Alarm Type:Command Replies SerialNumber:5800671602020030 |
| Real-time Tracking | | Message: 1 .GPS is positioning 1 Satellite |
| Real-time Tracking | > | Check interval is set to 360 minute(s). Checkgsm interval is set to 30 minute(s). Routetrack data is uploading Period is set |
| Interval Tracking | | to 99 5 . Power: 58% |
| Check GPS Location | > | Date:2016/02/22 15:39:52 |
| Check LBS Location | > | Alarm Type:Command Replies SerialNumber:5800671602020030 Message: |
| Motion Sleep | | 1 .GPS is positioning 5 Satellite 2 .Check interval is set to 360 minute(s). |
| Motion Sleep | > | 3 .Checkgsm interval is set to 30 minute(s). 4 Poutotrack data is unleading Pariod is set |
| Others | | Home Devices Message |

3.3.1 Current GPS Location

To update the latest GPS location of the device. The latest location will be uploaded to website and app map.

3.3.2 Current LBS Location

To update the latest GSM location of the device. The latest location will be uploaded to website and app map.

3.3.3 Real-time Tracking

Enables device to upload 6 locations to server every minute when device is **in motion**.

3.3.4 Check GPS Location

Device will upload GPS location in appointed interval, **No matter device is in motion or not**. Default as 1GPS location uploads every 6 hours.

3.3.5 Check LBS Location

Device will upload GSM location in appointed interval. **No matter device is in motion or not.** Default as 1GSM location every 30 minutes.

Check LBS function is the best power saving tracking function, but distance inaccuracy could up to 1KM

3.3.6 Deep Sleep

Device will go to deep sleep mode and wake up after appointed interval, and will be stay awake for 12 minutes. If there is no new commands received in 12 minutes, device will go back to deep sleep mode for the next set interval.

The phone function will be off during deep sleep, and no call or SMS can be replied until device wakes up.

3.3.7 Motion Sleep

Device will go to deep sleep mode and wake up when motion is detected, and will be stay awake for 12 minutes. If there is no new commands received in 12 minutes, device will go back to deep sleep mode until the next motion is detected.

The phone function will be off during deep sleep, and no call or SMS can be replied until device wakes up.

3.3.8 Others

3.3.8.1 Status Query

Check system status, replies will be shown in the message section

3.3.8.2 Device Information

Check software edition information and device's serial number. Replies will be shown in the message section.

3.4 Device Monitor

All devices will be shown in the latest location.

4. Panic Button

Power button is the panic button. If there is a SIM card inserted, press and

hold to trigger SOS alert. The SOS alert will be uploaded to website as "SOS! HELP! SOS!! HELP!! SOS!!! HELP!!!", and will be shown in the message section.

Note:

- 1. Interface of the App you download could be different from the screenshot in the user manual since it kept updated.
- 2. Certain functions in APP might not support the model you purchase. Please check the following SMS Command Operation Guide to confirm detail functions list of your tracker.

SMS Commands Operating Guide

SMS commands are for non-smartphone user or who would like to control the device through SMS commands only, without using the App.

1. Registration

1.1 Set APN

APN is Access Point Name. The correct APN must be set to enable the device to send data to the server. Different SIMS have different APN, make sure you have confirmed the correct APN information with the Sim provider when you purchase the Sim.

Command

apn <u>APN's name*username* password*</u> Some APN goes without username and password, you can just leave them blank.

Example: Orange France APN: <u>orange.fr</u> Username: <u>orange</u> Password: <u>orange</u> **Correct command format *apn*orange.fr* orange*orange*** Example: China Union

Text Message Fri, Nov 15, 1:06 PM

*apn*uninet*

Apn is set to uninet. Username: null. Password: null. APN : uninet Username: n<u>ull</u> Password: n<u>ull</u> **Correct command format *apn*uninet***

Your cell phone will receive confirmation saying that the appointed APN is set (See screenshot).

1.2 Registering the "Master" Controller

A. Use cellphone to send SMS *master*123456*+country code plus your cellphone number* to the device Sim number. 123456 is the default password, it can be changed by changing password command as showed on 1.3.

Example

*master*123456*+319876543210* (+31 refers to Netherlands country code, 9876543210 refers to the cell phone number)

B. Once your cellphone receives the confirmation sms, it will become the only master phone to the tracker (See screenshot).

NOTE: The device will ONLY listen and respond commands from this number unless you choose to turn on the multi controller function and open the device to any cell phone number. Notice: Cell Phone +8615382706688 is set to master controller, the password is <u>123456</u>

*master*123456*

+8615382706688*

1.3 Changing the Password: SMS: *password*654321* (654321 refers to new password)

Changing password command has to be sent only from the master number. And new password has to be applied to when you need to register the device with a new master number.

2. Tracking via SMS

2.1 SMS: *locateaddress*

Master number will receive the GPS address of the device via SMS. If GPS location is invalid, device will reply the closest cell tower location instead.

2.2 SMS: *locatemap*

Master number will receive a Google map link. Click the link to view the map via cellphone browser. If GPS location is invalid, device will reply the map link of the closest cell tower location instead.

And this function is suitable for smart phone user only.

3. Tracking via website and applications

Tracking Website: <u>www.miitown.com</u>

ID: Registered Master phone number. Password: Default as 123456. It can be changed on the tracking website.

Recommended Web browsers are Chrome, Firefox or cell phone default browser.

3.1 Real-time Tracking (High Power Consumption)

Routetrack function enables device to upload 6 locations to server every minute when device is **in motion**.

3.1.1 Routetrack

SMS: *routetrack*1-99*

1-98 represents the number of hours that the routerack function works. 99 represents to turn the routetrack function always on.

Example

*routetrack*1* means uploading 6 location GPS data every minutes for 1 hour

SMS:*routetrackoff*

To turn off route track function.

3.2 Check GPS Location (Medium Power Consumption)

Check function enables device to upload GPS location in an appointed interval, when device is **motion or not in motion**.

If GPS location is invalid, system will upload the closest cell tower location instead.

And it can be used with routetrack and Checkgsm functions at the same time.

SMS: *checkm*5-1800*

5-1800 represents the number of minutes that the device Check's data upload interval, default as 360 minutes (6 hours), **rate should not be less than 5**.

Example

*checkm*360* means uploading GPS data every 6 hours.

3.3 Check GSM Location (Low Power Consumption)

Checkgsm function enables device to upload ONLY the GSM location in appointed interval of time. Data will be uploaded to server on both occasions, i.e, if the device is in **motion or not in motion**.

And this function can be used with routetrack and Check function at the same time.

SMS: *checkgsm*5-1800*

5-1800 represents the the number of minutes of Checkgsm's data upload interval, default as 30 minutes; rate should not be less than 5.

Example

*checkgsm*30* means uploading GSM data every 30 minutes.

3.4 Track Off

Track off will end all the tracking functions, including routetrack, check, and checkgsm.

SMS: *trackoff*

To turn off all tracking functions, including routetrack, check, and checkgsm.

4. Sleep Function (Lowest Power Consumption)

4.1 Interval Sleep

Device will go to deep sleep mode and wake up after appointed interval, and stay awake for 12 minutes. If there is no new commands received in 12 minutes, device will go back to deep sleep mode for the next set interval.

Note: System will shut down GPS and GSM module during deep sleep period, so no call or SMS can be received or responded.

SMS: *sleep*1-99*

1-99 refers to the hours of appointed sleep interval.

Example

*sleep*6* means to enable device to go to deep sleep mode and wake up in every 6 hours.

4.2 Motion Sleep

Motion Sleep function enables device to stay in deep sleep mode and wakes up once motion is detected. System will upload the current location of the device. If motion continues, system will stay on and operate the previous tracking settings. If there is no further motion detected, device will go back to deep sleep in 12 minutes. And the circle repeats.

Note: System will shut down GPS and GSM module during deep sleep period, so no call or SMS can be received or responded.

SMS: *sleepv*

To enable motion sleep function.

SMS: * sleepoff*

To turn off motion sleep and interval sleep function.

5. SOS Alert

SOS Alert function enables device to send SOS alert to preset number when the panic button is triggered.

Up to 3 SOS numbers can be preset.

The registered master number is the default SOS alert number.

5.1 Register the SOS alert number

SMS: *master*123456<u>*cellphone number 1*cellphone number</u> 2*cellphone number 3*

NOTE: Please make sure country code is included in the cellphone number.

5.2 Panic Button

Power button is the panic button. If there is a Sim card inserted, press and hold to trigger SOS alert. Preset numbers will receive the following SOS SMS "SOS! HELP! SOS!! HELP!! SOS!!! HELP!!!"

SMS: *soson*

To enable SOS alert function. System default as on. **SMS:** *sosoff* To turn off SOS alert function.

6. Low battery Alert

There will be a low battery SMS alert sent to master number when battery drops to 20% of it's capacity, and the routetrack function will be turned off for power saving. And it will resume working when battery is charged. The alert number can be appointed to any other cellphone number if needed.

Appoint low battery alert number

SMS:*lowbat*alert cellphone number*

Note: Please make sure country code is included in the cellphone number.

Example *lowbat*+319876543210*

7. Status query

SMS: *status* To check device setting status and performance.

8. Reboot

```
SMS: 88888888
```

Reboot system, previous settings will not be cleared.

9. Master query

SMS: 999999 To check registered master number, password and device's serial number.

10. Default

SMS: default

To operate factory default, previous settings will be cleared.

11. Multi Controller

Allows any cellphone number to check the device location and status besides the master number.

11. 1 SMS: *multiquery*

To enable multi controller function.

11. 2 SMS: *multiqueryoff*

To turn off the multi controller function.

12. Device Information

SMS:*about*

To check device information including software edition and serial number.

Default Setting List

| Function | Command | Description |
|--------------------|---------------|--|
| Check GPS Location | *checkm*360* | Device will upload GPS location every 6 hours |
| Check GSM Location | *checkgsm*30* | Device will upload GSM location every 30 minutes |

Command Setting List

| Function | Command | Description |
|-------------------|--|---|
| APN Settings | *apn*APN's name *username*password* | Enable device to send data to server. |
| Master Setting | *master*123456*country code (plus) cellphone number* | Register master number. |
| Password Changing | *password*654321* | Original password is default as 123456. 654321 refers to new password. |
| Address Query | *locateaddress* | Address information of current location. |
| Google Map Search | *locatemap* | Google Map link with current location. |

| Function | Command | Description |
|---------------------------|-------------------|---|
| Real-time Tracking | *routetrack*1-99* | Device will upload 6 locations every minute.1-98 represents routetrack data upload interval in hours. 99 represents always on. |
| Real-time Tracking Off | *routetrackoff* | End routetrack function. |
| | *checkm*5-1800* | 5-1800 represents minutes of check function data upload interval |
| Check Location | *checkoff* | End check function |
| | *checkgsm*5-1800* | 5-1800 represents minutes of check gsm function data upload interval |
| Track Off | *trackoff* | End all the tracking functions. |
| Deep Sleep | * sleep*1-99* | 1-99 represents device wake up interval in hours. |
| Motion Sleep | * sleepv* | Motion Sleep function with motion alert. |
| Sleep Off | *sleepoff* | End Deep Sleep function. |
| Status query | *status* | Check system status. |
| Multi Controller | *multiquery* | Enable multi controller function. |
| | *multiqueryoff* | End multi controller function. |

| Function | Command | Description |
|-----------------------------|--|---|
| SOS Alert | *soson* | Enable SOS alert function. |
| | *sosoff* | Disable SOS alert function. |
| Device Information | *about* | Software edition information and device's serial number. |
| Reboot | 88888888 | Reboot the system, previous settings will NOT be cleared. |
| Master Query | 999999 | Registered master number information, password and device's serial number. |
| Low Battery Alert Number | *lowbat*country code (plus) cellphone number* | To set low battery alert number. |
| Factory Default | default | Default system, previous settings will be cleared. |
| Power Off | *poweroff* | Power off the device. |

Hardware Specifications:

Size:88*43*26 (mm), Weight: 133g

GPRS:MTK 6261

Quad band; GSM 850/900/1800/1900 MHzAntennae: Internal, GPRS Class 12

- Power: Rechargeable, 3000mAh, Lithium-Polymer Battery
- Built-in Vibration/Motion Sensor
- GPS: U-BLOX G7020-ST, 50 channel
- Antennae: Internal

 \bigcirc

- Position Accuracy: >=5m
 - Sensitivity: Tracking: (R)C161 dB, Cold starts: (R)C148 dB, Hot starts: (R)C156 dB
- Cold start:<27s, Warm Start: <5s, Hot Start: 1s
 - A-GPS: AssistNow Online and AssistNow Offline services.