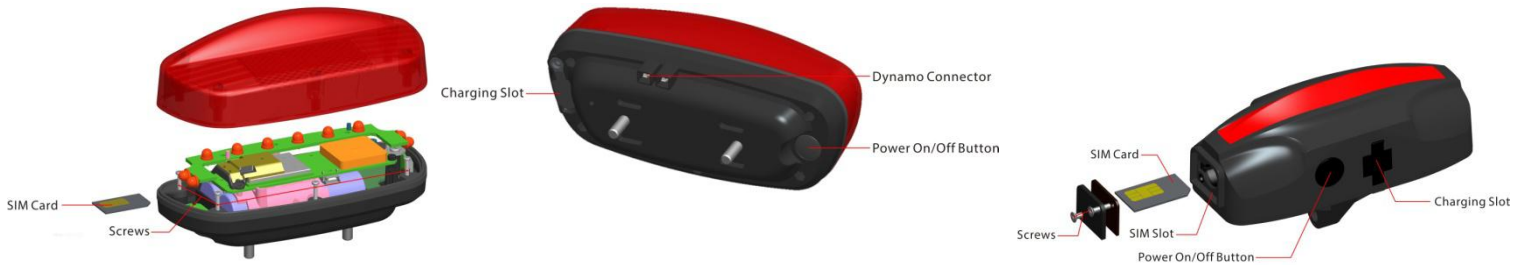


BIKE-LIGHT SERIES USER GUIDE

1. Product Image



a.T16

b.T19

Content of the packaging

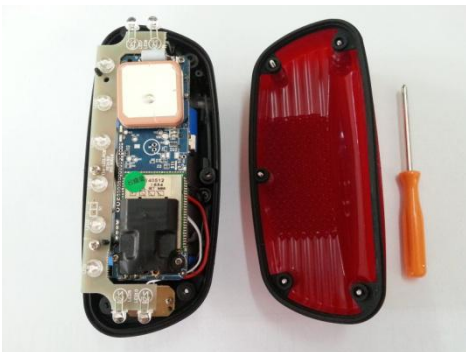
- a. Tracking device
- b. USB charging cable
- c. Screwdriver and screws
- d. User Guide

2. Installation Manual

2.1 SIM Card Pre-installation, specification note

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

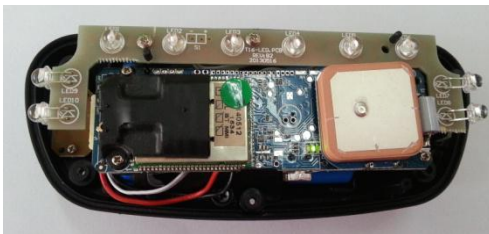
2.2 SIM Card Installations and Removal



- a. Unscrew device. (For T18 and T18H, please unscrew the SIM slot cover instead of the front cover)



- b. Insert SIM card into the SIM slot, metal face up, clipped corner to the right.
- c. Green light flashes once and 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.)



3. Button Operation

We strongly recommend you to charge the product before using it the first time. And device will be automatically on once SIM is inserted. Please DO NOT PRESS ANY BUTTON when you use it for the first time.

3.1 Button Operation for GPS function

NOTE: "button" presses must be less than 2 seconds each in all uses

- a. **GPS On:** Press control button and hold for 5 seconds. Green light flashes once and turns to steadily on for 10 seconds, and then turns off.
- b. **GPS Off:** Send command ***poweroff***. The blue indicating light will flash for 5 times.
- c. **Real-Time Tracking On:** Press control button and hold for 5 seconds
- d. **LED Light Flashing:** Press On button 1 time
- e. **LED Light Always On:** Press On button 2 times
- f. **LED Light Off:** Press On button 3 times
- g. **Reset:** Press On button 10 times. The blue indicating light will flash for 5 times. Insert Sim card again to turn the device on.
- h. **Charge:** A red light on the PCB board is steadily on during charging and turns off when it is fully charged.

App User Guide

A login form with two input fields: 'Username' and 'Password'. The 'Password' field has an eye icon for toggling visibility. Below the fields are two buttons: 'Register' (grey) and 'Login' (blue).

1. Tracking via website and applications

Tracking Website: www.miltown.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

The 'Register' screen shows two options: 'APN Setting' (selected with a blue circle) and 'Register Account' (with a blue checkmark). Below each option is a grey box with instructions. At the bottom, a grey box says 'Please confirm APN correctly set.'

The 'APN Setting' screen has a 'Back' button and a 'Set Phone number in the device' section with a 'Country code is required' error message. Below are fields for 'APN', 'User name', and 'Password', followed by a 'Submit' button.

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.vociestream.com	-	-
Vodafone (NZ)	www.vodafone.net.nz	-	-
O2 (DE)	internet	-	-
TIM (IT)	inbox.tim.it	-	-
Mobistar (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 changed on the tracking website at www.miitown.com

< Back
Register Account

Phone Number in the Device

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)

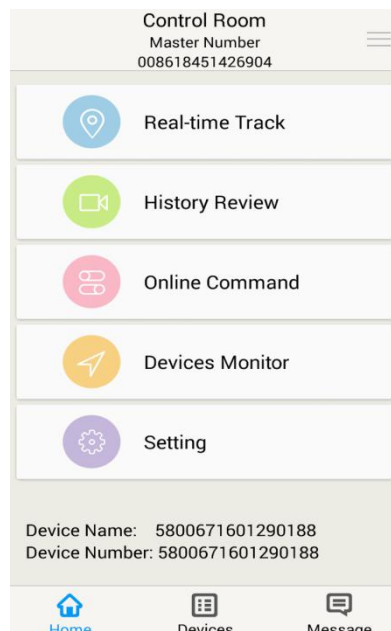
Password

Confirm Password

3. Control Room

Home

Function list of the app



Devices	
<input checked="" type="checkbox"/>	0024601402260074 0024601402260074
<input type="checkbox"/>	0024601402270074 0024601402270074
<input type="checkbox"/>	0024601402270081 0024601402270081

Devices

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

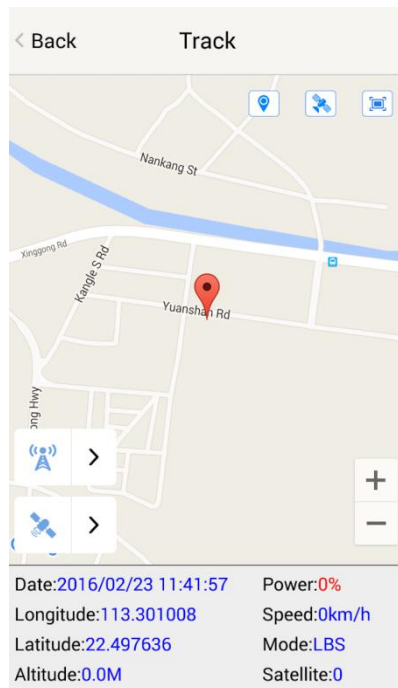


3.1 Real-time Tracking

To get latest location of the device.

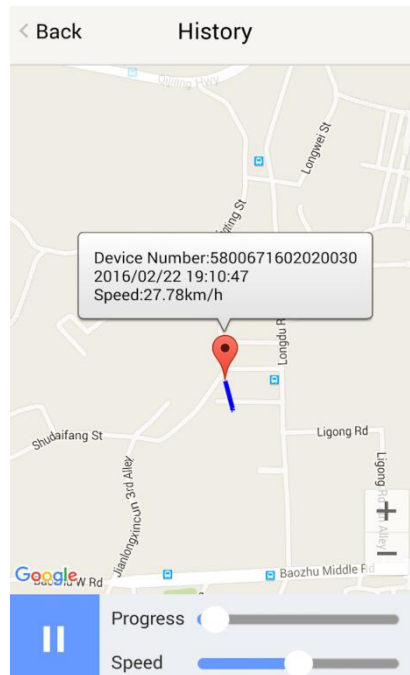
Tap to get GSM location

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.

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. **Only when device in in motion**. Default as 1GPS location uploads every 72 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.

Note:

1. Interface of the App you download could be different from the screenshot in the user manual since it is kept updated.
2. Certain functions in APP might not support the models 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* APN's name*username* password

Some APN goes without username and password, you can just leave them blank.

Example: Orange France

APN: orange.fr

Username: orange

Password: orange

**Correct command format *apn*orange.fr*
orange*orange***

Example: China Union

APN : uninet

Username: null

Password: null

Correct command format *apn*uninet*

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

Text Message
Fri, Nov 15, 1:06 PM

*apn*uninet*

Apn is set to uninet.
Username: null. Password:
null.

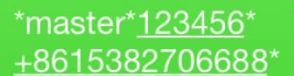
1.2 Registering the “Master” Controller

- 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

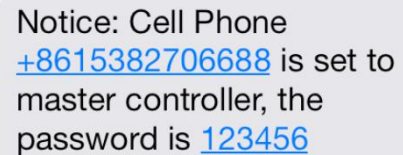
*master*123456*+319876543210* (+31 refers to Netherlands country code, 9876543210 refers to the cell phone number)

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



*master*123456*
+8615382706688*

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 [123456](#)

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. Motion Alert

The motion alert enables device triggered a call/sms alert when motion is detected, after 3-minutes of non-movement.

2.1 Set vibration sensitivity

There are 5 levels of the motion sensitivity. 1 being the most sensitive, 5 the least, default setting is 1.

SMS: *sensitive*1-5*

2.2 Set SMS/CALL Alert

There will be a Call/SMS alert sent 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 command.**

SMS: *alertoff*

To turn off motion alert function.

SMS: *smsalert*

To enable motion sms alert function.

SMS: *callalert*

To enable motion call alert function.

3. Tracking via SMS

3.1 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.

3.2 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.

4. Tracking via website and applications

Tracking Website: www.miitown.com

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.

4.1 Real-time Tracking (High Power Consumption)

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

4.1.1 Routetrack

SMS: *routetrack*1-99*

1-98 represents the number of hours that the routetrack 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

4.1.1.1 Rsampling

Rsampling is to set routetrack data collecting interval.

The smaller interval, the higher accuracy, but the higher power consumption.

SMS *rsampling*10-999*

1-999 represents seconds of data collecting interval, default as 10 seconds

4.1.1.2 Rupload

Rupload is to set routetrack 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**

Example

*rsampling*30* plus *rupload*120* means 4 location data will be uploaded to server every 2 minutes when routetrack function is on.

SMS: *routetrackoff*

To turn off route track function.

4.2 Check GPS Location (Medium Power Consumption)

Check function enables device to upload GPS location in an appointed interval, **when device is in motion**. If GPS location is invalid, system will upload the closest cell tower location instead.

SMS: *checkm*5-1800*

5-1800 represents the number of minutes that the device Check's data upload interval, **minimum rate should not be less than 5**.

Example

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

Noted:

1. Check function is able to work with routetrack and Checkgsm functions at the same time.
2. System is default as *checkm*4320*. 1 location will be uploaded to server every 72 hours.
3. Location will be uploaded to server when device is in motion.

4.3 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**. If GPS location is invalid, system will update the closest cell tower location instead.

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 off**; rate should not be less than 5.

Example

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

4.4 Track Off

Track off will end all the tracking functions, including routetrack, checkm, checkgsm, timing locate and period locate.

SMS : *trackoff*

5 Upload Alert

The upload alert function enables device upload alert status to the server including **motion alert and low battery alert** and etc. User can check alert status on the tracking website or message section in app.

This function is default as ON.

SMS: *uploadalert*on*

To enable upload alert function.

SMS: *uploadalert*off*

To disable upload alert function.

6. Sleep Function (Lowest Power Consumption)

6.1 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.

6.2 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 cycle 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.

7. Status query

SMS: *status*

To check device setting status and performance. GPS tracking data will show up only when routetrack function is on.

8. Low battery Alert

There will be a low battery SMS alert sent to master number when battery drops to 20% of its 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*

9. Reboot

SMS: [88888888](#)

Reboot system, previous settings will not be cleared.

10. Master query

SMS: [999999](#)

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

11. Default

SMS: [default](#)

To operate factory default, previous settings will be cleared.

12. Multi Controller

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

12. 1 SMS: [*multiquery*](#)

To enable multi controller function.

12. 2 SMS: [*multiqueryoff*](#)

To turn off the multi controller function.

13. Device Information

SMS: [*about*](#)

To check device information including software edition and serial number.

Command Setting List

Function	Command	Description
APN Settings	*apn*APN's name *username*password*	Enable device to access internet.
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.
Vibration Sensitivity	*sensitive*1-5*	Set motion alert sensitivity, 1 is the most sensitive, 5 is the least
Motion Alert	*alertoff*	End motion alert
	smsalert	Motion alert via SMS
	callalert	Motion alert via Call
Address Query	*locateaddress*	Address information of current location.
Google Map Search	*locatemap*	Google Map link with current location.
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.

Function	Command	Description
Real-time Tracking sampling interval	*rsampling*10-999*	10-999 represents seconds of routetrack sampling interval
Real-time Tracking upload interval	*rupload*60-999*	60-999 represents seconds of routetrack upload interval
Real-time Tracking Off	*routetrackoff*	End routetrack function.
Check Location	*checkm*5-1800*	5-1800 represents minutes of check function data upload interval
	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.
Upload Alert	*uploadalert*on*	Enable upload alert function
	*uploadalert*off*	End upload alert function
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
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.

Model	Size	Battery Capacity	Dynamo Connector	LED Color
T16 (Tail-light)	135mmx58mmx58mm	4400mAh	N	Red
T19 (Tail-light)	110mmx40mmx50mm	2000mAh	N	Red

Hardware Specifications:

- GPRS:MTK 6261D
- Quad band; GSM 850/900/1800/1900 MHzAntennae: Internal, GPRS Class 12
- Power: Rechargeable, Lithium-Polymer Battery(T18 &T18H), Lithium-ion battery (T16 &T16+)
- Built-in Vibration/motion sensor
- GPS: U-BLOX G7020-ST, 50 channel
- Antennae: Internal
- Position Accuracy: $\geq 5\text{m}$
- 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.