



# MerryIoT Trackers & App

## Quick Installation Guide

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# Safety Warning

### Read this manual before attempting to install the device!

Failure to observe recommendations included in this manual may be dangerous or cause a violation of the law. The manufacturer, **Browan Communications Inc.** will not be held responsible for any loss or damage resulting from not following the instructions of this user manual.

- The device must not be dismantled or modified in any way.
- The device is only intended for indoor use. Do not expose it to moisture.
- The device is not intended to be used as a reference sensor, and **Browan Communications Inc.** will not be held liable for any damage which may result from inaccurate readings.
- The battery should be removed from the device if it is not to be used for an extended period. Otherwise, the battery might leak and damage the equipment. Never leave a discharged battery in the battery compartment.
- The device must never be subjected to shocks or impacts.
- To clean the device, wipe with a soft moistened cloth. Use another soft, dry cloth to wipe dry. Do not use any detergent or alcohol to clean the device.

## Contact Us

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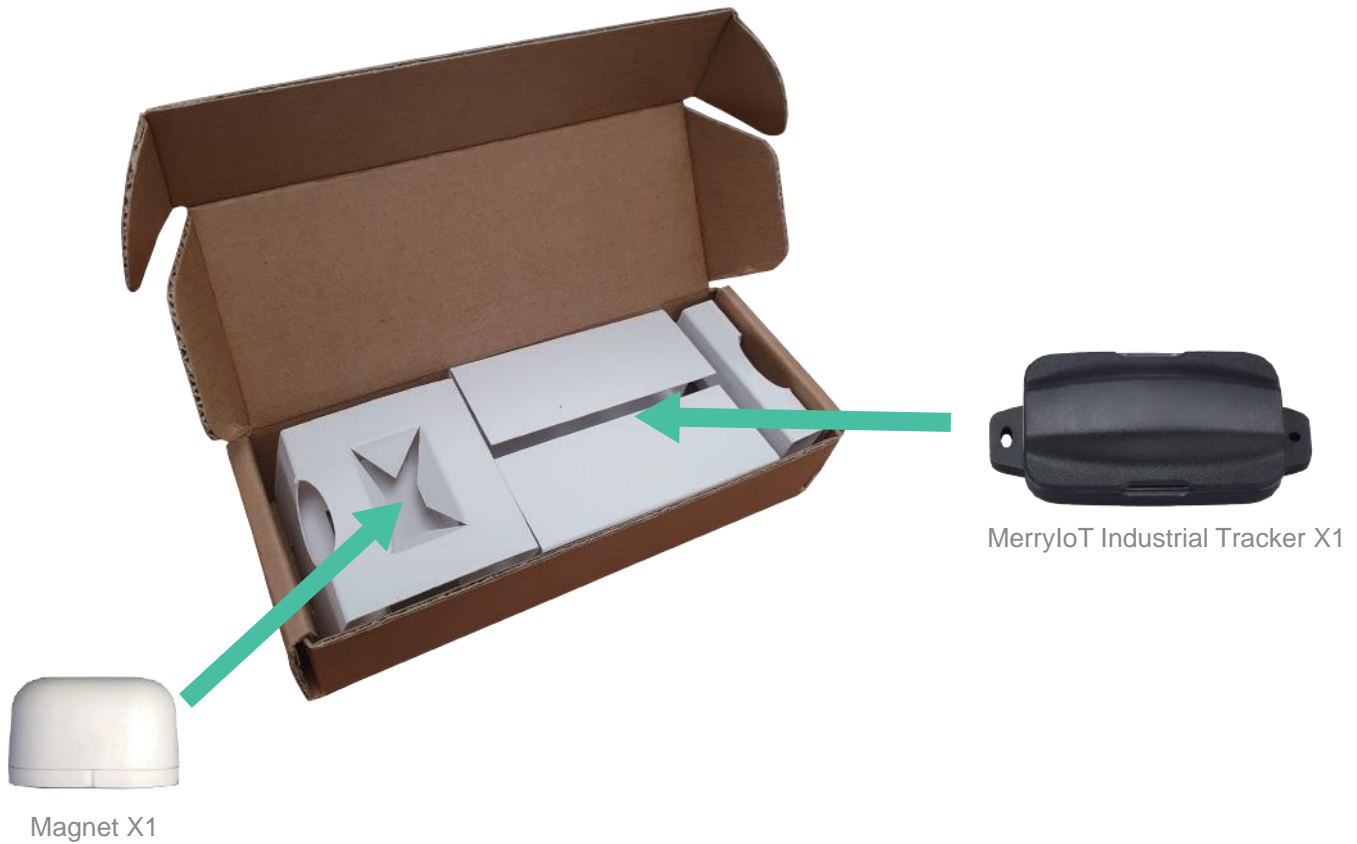
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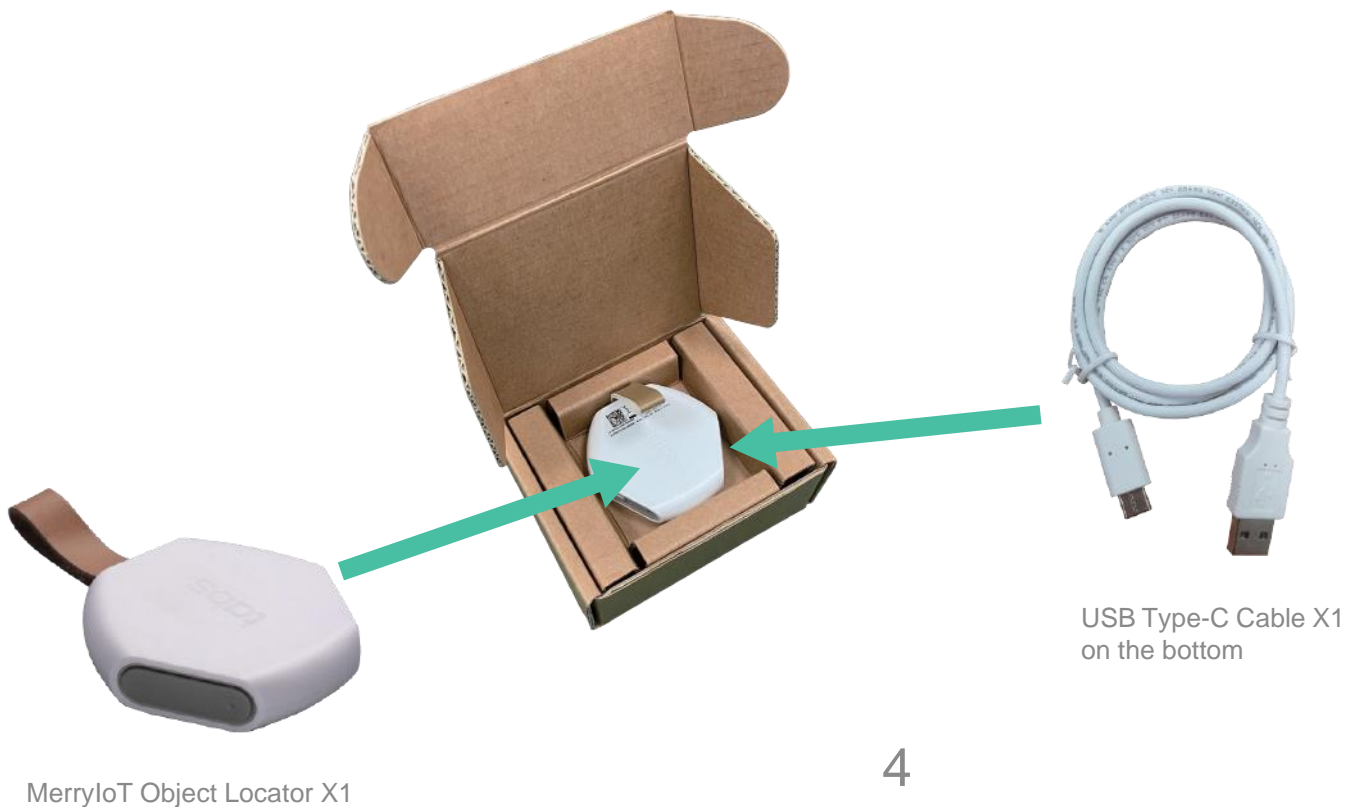
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## Chapter 2 - Open Box Content List.

### MerryloT Industrial Tracker(TNIT100)



### MerryloT Object Locator(TBOL100)



MerryIoT Industrial Tracker(TNIT100)



MerryIoT Object Locator(TBOL100)



## Chapter 4 - Tracker Introduction



MerryloT Industrial Tracker  
TNIT100

MerryloT Industrial Tracker is a general-purpose tracker, designed for GPS tracking on various applications: bicycles, cars, pallets, bins, or shipping containers. It is equipped with GPS and 3-axis accelerometer, which provides a much more cost-effective way for service providers to deploy this for tracking applications.

### Features:

- High precision GPS positioning technologies
- Customizable geofencing with limited zone (circle: 10~500m, rectangle: 20~1000m)
- Support motion detection (report an alarm message when the asset from stationary to moving)
- 5-year operating time (Under typical scenario)
- LoRaWAN technology with a long communication distance
- Board temperature monitoring



MerryloT Object Locator  
TBOL100

MerryloT Object Locator is a multi-purpose tracker designed for asset tracking, pet tracking, personal objects, and valuable assets. It contains a LiPo battery that can be recharged through the USB-C connector, and also includes a three-axis accelerometer that is optimized for different asset applications for response time and battery life.

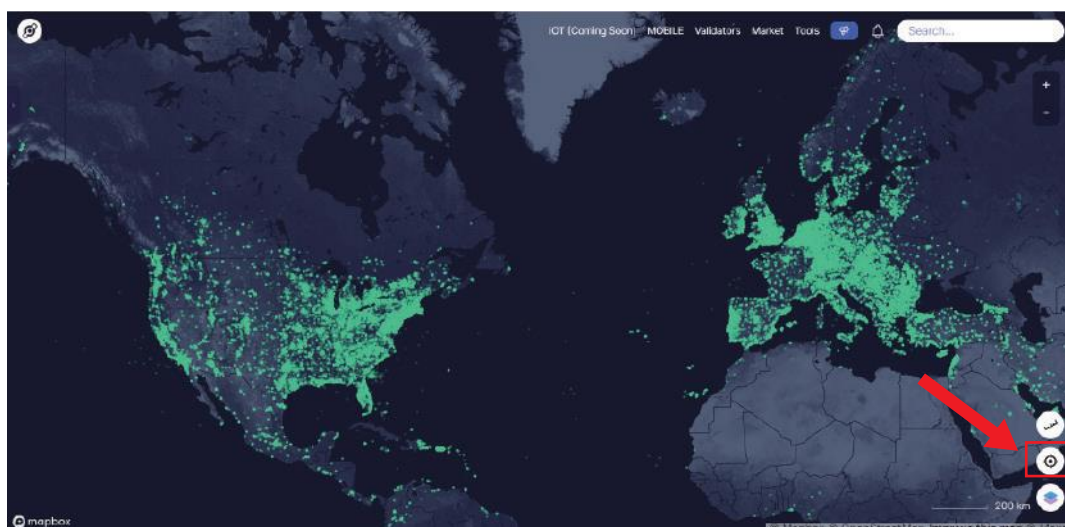
### Features:

- Minimalistic and stylish design
- High precision GPS positioning technologies
- Built-in rechargeable 4.2V LiPo battery
- Customizable geofencing with limited zone (circle: 10~500m, rectangle: 20~1000m)
- Support motion detection (report an alarm message when the asset from stationary to moving)
- LoRaWAN technology with a long communication distance
- Coverage test button for easy installation

## Chapter 5 - Tracker Installation

- 1 Please make sure you have Helium coverage before installing the MerryloT Sensors.
  1. Best senerio is you already have a Helium miner up and running.
  2. If you don't have a Helium miner running, you need to check your neighborhood's helium coverage. Go to <https://explorer.helium.com> and follow the following steps.

- 1 Press "find my location" icon, and the map will redirect to the vicinity of your location.
- 2 According to the vicinity of your location, to find your accurate location to see if any Helium coverage around here.



\*Annotation: Hexagons in Helium, it is a semi-precise point location covering 300 m<sup>2</sup> (3200 ft<sup>2</sup>), which is comparable to the footprint of a large house. The number display on the Hexagons, it means how many Helium hotspot is been asserted location here, you could imagine that how many Helium hotspots installed in 300 m<sup>2</sup> (3200 ft<sup>2</sup>).

## Chapter 5 - Tracker Installation

- 2 Install and launch MerryloT mobile application on your phone



\*Search:MerryloT Sensor



- 3 Register your account.

### Sign in by social media

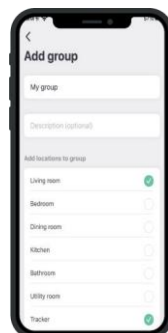
- 1 Press Sign In



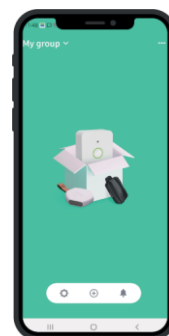
- 2 select Sign In WITH GOOGLE/FACEBOOK/APPLE



- 3 Add your group, you will see the main view after



Sign In successfully

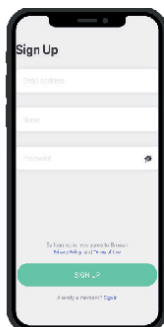


### Create an account

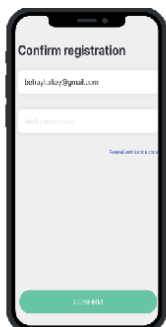
- 1 Press Sign Up



- 2 Fill in your information



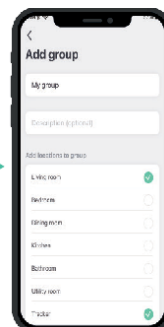
- 3 Confirm your mail (fill in the verification code)



- 4 Press Sign In and select "Sign In WITH EMAIL"



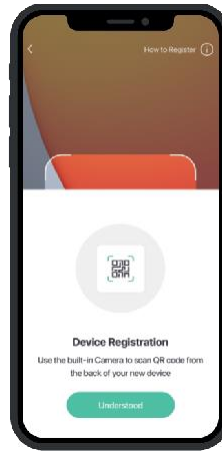
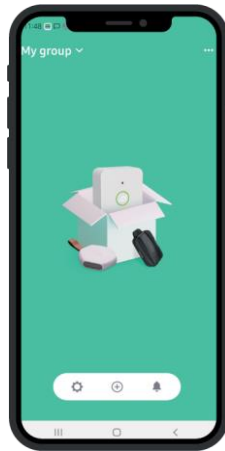
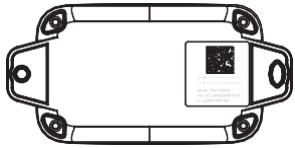
- 5 Add your group, you will see the main view after



## Chapter 5 - Tracker Installation

### 4 Add the Tracker to your APP

#### MerryIoT Industrial Tracker TNIT100

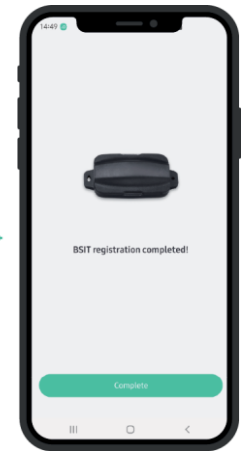


I)BWIT100915XXXXXX  
E8E1E1XXXXXXXXXX  
xdel: TNIT100915  
C ID: 2AMUGTNIT100  
22980-TNIT100  
ice in China

After scan

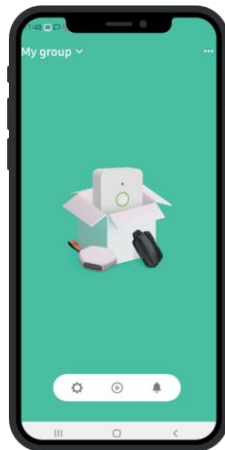
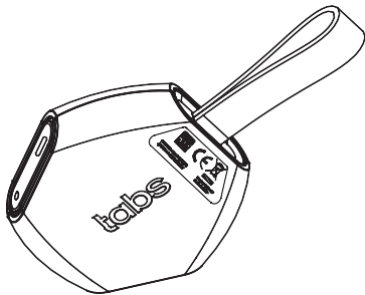


fill in the name and the location



Click the "complete", after the group page show, you successfully added your sensors!

#### MerryIoT Object Locator TBOL100

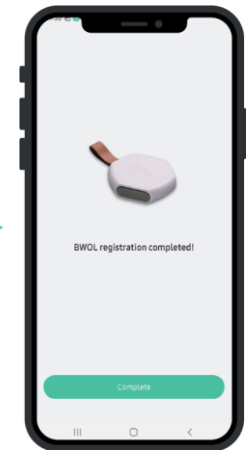


E8E1E1000101363F  
E8E1E1XXXXXXXXXXXX  
TBOL100915: XXXXXXXX  
MODEL: TBOL100

After scan



fill in the name and the location



Click the "complete", after the group page show, you successfully added your sensors!

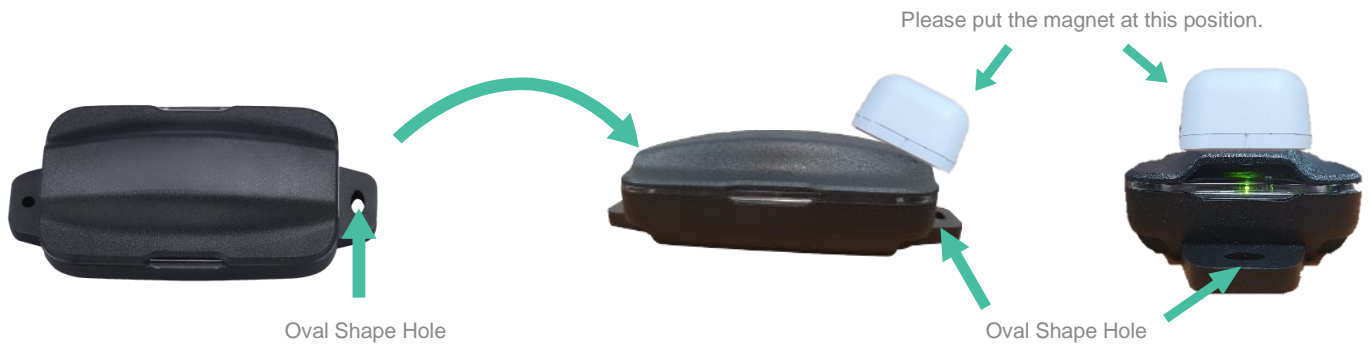


## Chapter 5 - Tracker Installation

### 5 Activate the tracker

#### MerryIoT Industrial Tracker(TNIT100)

- 1 Place the magnet to trigger the tracker for at least 10 seconds.  
\*The magnets must be placed on the side that has the oval shape hole.



- 2 When the Tracker is successfully activated, the LED will light continuously for 3 seconds.  
Once the Tracker is successfully connected, the following icon will appear on the dashboard.  
\*Shake the tracker, the tracker's real-time status will be updated.

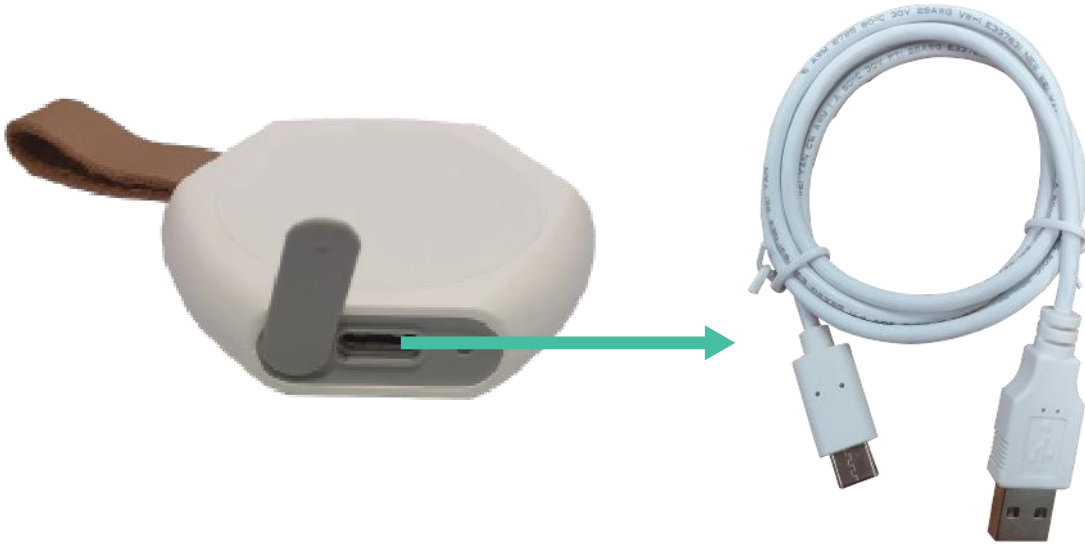


## Chapter 5 - Tracker Installation

### MerryIoT Object Locator(TBOL100)

Before you use your tracker, please do the following steps to activate the tracker.

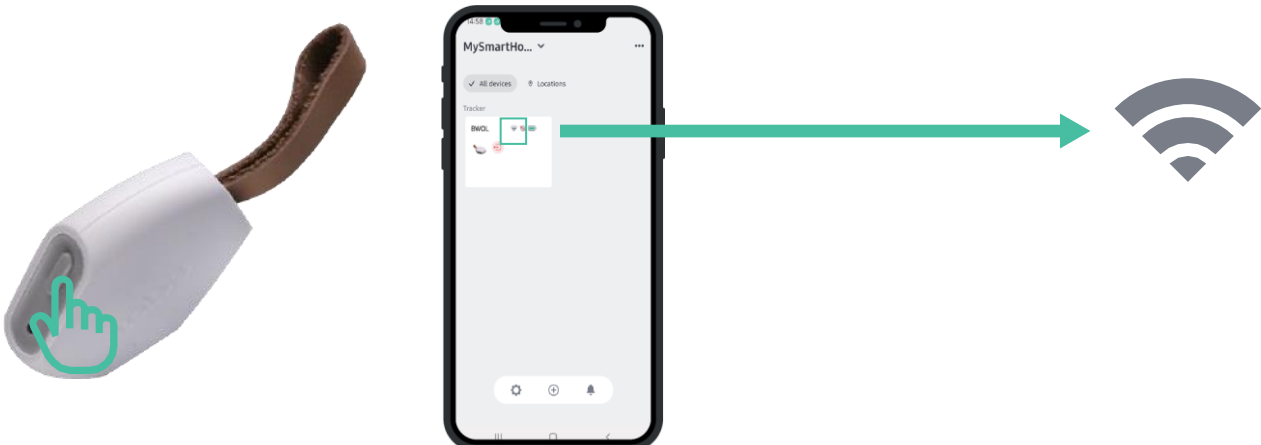
- ① Step 1.  
Charge the Tracker by USB Type-C plug for 8 hours.



- ② Step 2.  
After the LED is fading-in and out, it means that the tracker is fully charged.  
You can remove the charging cable and go on the next step.

- ③ Step 3.  
Press and hold the button for at least 10 seconds.  
When the Tracker is successfully activated, the LED will light continuously for 3 seconds.  
Press the button on the tracker, and if the tracker is successfully connected,  
the following icon will appear on the dashboard.

\*If the tracker's battery is exhausted, please charge the tracker and do the step from 1 to 3.

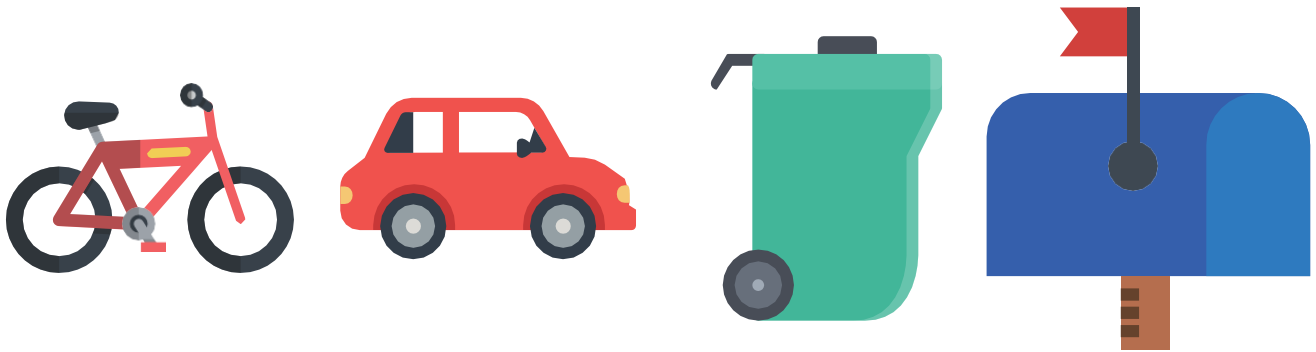


## Chapter 5 - Tracker Installation

- 5 Once the tracker is connected, place the tracker at your desired location

### MerryloT Industrial Tracker(TNIT100)

MerryloT Industrial Tracker is a general-purpose tracker, you can put it on various of valuable assets such as bicycles, cars, bins or mail boxes.



### MerryloT Object Locator(TBOL100)

MerryloT Object Locator is a multi-purpose tracker designed for asset tracking, you can put it on your pet's collar, personal objects or your valuable assets such as handbag. You can also use it on your elderly care, you can put it in the elderlys' pocket to monitor their position in case of getting lost.



# Chapter 6 - Tracker Functions

## MerryIoT Industrial Tracker(TNIT100)

Device group name  
Changing groups

Group settings  
Editable

Location filter

Device Status  
Click to see more details of the device

General settings  
Account management

Add button  
Add new devices via QR code

Notifications

Back to main screen

Device Setting

Tracker  
Press the icon to pop up information

In/Out of geofence  
green: Tracker is in geofence d:  
ReTracker is out of geofence

Updating  
get the latest status

Map Type

Share Location  
Share your tracker's location.

Geofence setting

Alert setting  
Temperature and Key pressed.

Profile Setting  
Fixed and Remote Asset.

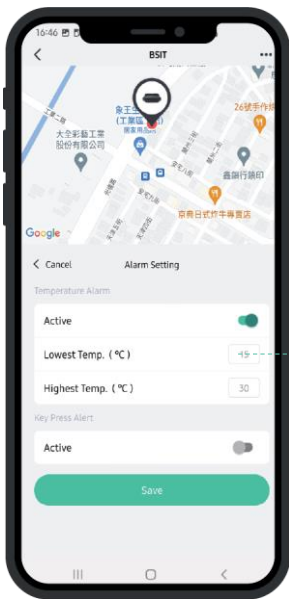
Geofence Marker  
Press the house icon for 1 second, after it disappears then you can move your geofence.

Geofence Shape

Key-in Number  
Adjust your geofence's size.  
Circle: 10~500(m)  
Rectangle: 20~1000(m)

Scroll Bar  
Adjust your geofence's size.

# Chapter 6 - Tracker Functions



Temperature setting  
Key-in the number to set it.



Profile Setting  
Please check the LoRa network is connected when you do the setting.

Remote Asset  
- Update per 30 sec (moving)  
- Update per 6 hours (stationary)

Fixed Asset  
- Update per 5 min (moving)  
- Update per 6 hours (stationary)

## Icons



LoRa status  
Good / Normal / Weak / Offline



GPS status  
Green: < 8M (good)  
Yellow: 8M < Accuracy < 32M(normal)  
Red: > 32M (weak)  
Not fixed(question mark, latest position)



Battery status  
Sufficient / Low / Exhausted / Charging



Start Moving Alert  
This icon will be displayed on your app dashboard immediately when the device is moving.



Entering Geofence  
This icon will be displayed on your app dashboard immediately when the device enter the geofence which you set, and the icon will disappear until the tracker exit the geofence.



Exiting Geofence  
This icon will be displayed on your app dashboard immediately when the device exit the geofence which you set, and the icon will disappear until the tracker enters the geofence.



High Temperature  
This icon will be displayed on your app dashboard immediately when the device's temperature is higher than the level you set.



Low Temperature  
This icon will be displayed on your app dashboard immediately when the device's temperature is lower than the level you set.



Low Battery Alert  
This icon will be displayed on your app dashboard immediately when the device's battery is exhausted, and the icon will disappear after the device is replaced the new battery.

# Chapter 6 - Tracker Functions

## MerryIoT Object Locator(TBOL100)

Device group name  
Changing groups

Group settings  
Editable

Back to main screen

Device Setting

Location filter

Device Status  
Click to see more details of the device

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Add button  
Add new devices via QR code

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Map Type

Updating  
get the latest status

Tracker  
Press the icon to pop up information

In/Out of geofence  
green: Tracker is in geofence  
Red: Tracker is out of geofence

Share Location  
Share your tracker's location.

Geofence setting

Alert setting  
Temperature and Button pressed alert.

Profile Setting  
Fixed and Remote Asset.

Scroll Bar  
Adjust your geofence's size.

Geofence Marker  
Press the house icon for 1 second, after it disappears then you can move your geofence.

Geofence Shape  
Circle Rectangle

Key-in Number  
Adjust your geofence's size.  
Circle: 10~500(m)  
Rectangle: 20~1000(m)

Zone Name


Circle Rectangle

Radius

Active Geofence


Save

# Chapter 6 - Tracker Functions



• **Temperature setting**  
Key-in the number to set it

• **Key Press Alert**  
App will alert when the button is pressed.




• **Profile switch**  
Please check the LoRa network is connected when you do the setting.


**Remote Asset**  
- Update per 30 sec (moving)  
- Update per 6 hours (stationary)

**Fixed Asset**  
- Update per 5 min (moving)  
- Update per 6 hours (stationary)


## Icons




**LoRa status**  
Good / Normal / Weak / Offline




**GPS status**  
Green: < 8M (good)  
Yellow: 8M < Accuracy < 32M(normal)  
Red: > 32M (weak)  
Not fixed(question mark, latest position)




**Battery status**  
Sufficient / Low / Exhausted / Charging




**Button pressed**  
this icon will be displayed on your app dashboard when you press the device's test button, also the temperature and humidity will be updated at the same time.




**Start Moving Alert**  
This icon will be displayed on your app dashboard immediately when the device is moving.




**Entering Geofence**  
this icon will be displayed on your app dashboard immediately when the device enter the geofence which you set, and the icon will disappear until the tracker exit the geofence.




**Exiting Geofence**  
this icon will be displayed on your app dashboard immediately when the device exit the geofence which you set, and the icon will disappear until the tracker enters the geofence.



**High Temperature**  
this icon will be displayed on your app dashboard immediately when the device's temperature is higher than the level you set.



**Low Temperature**  
this icon will be displayed on your app dashboard immediately when the device's temperature is lower than the level you set.



**Low Battery Alert**  
this icon will be displayed on your app dashboard immediately when the device's battery is exhausted, and the icon will disappear after the device is fully charged.

## Chapter 7 - Battery Replacement

\*Note: MerryIoT Object Locator(TBOL100) doesn't support battery replacement.

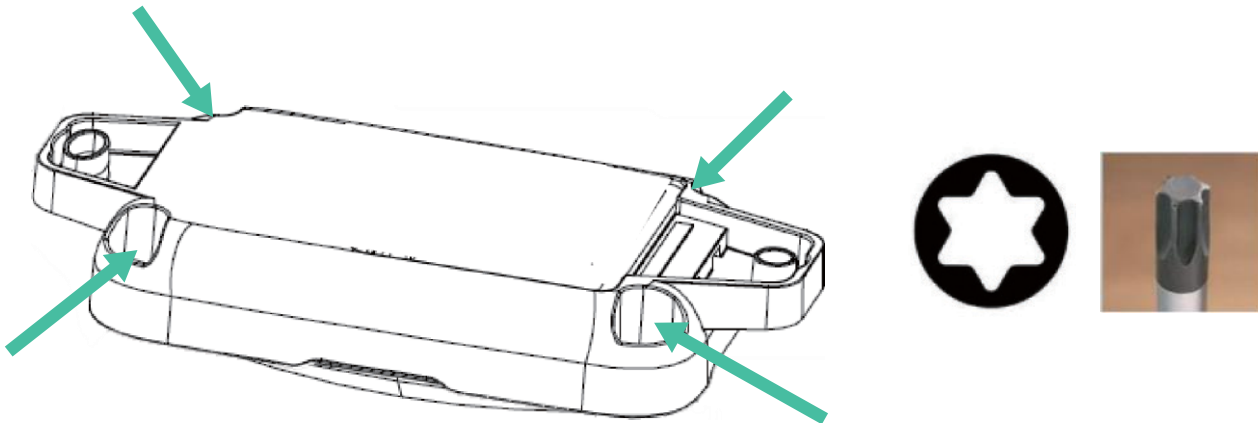
### MerryIoT Industrial Tracker(TNIT100)

If the tracker's battery is exhausted, please do the following step.

- 1 Tools: Star-type screw driver x 1(T8H).



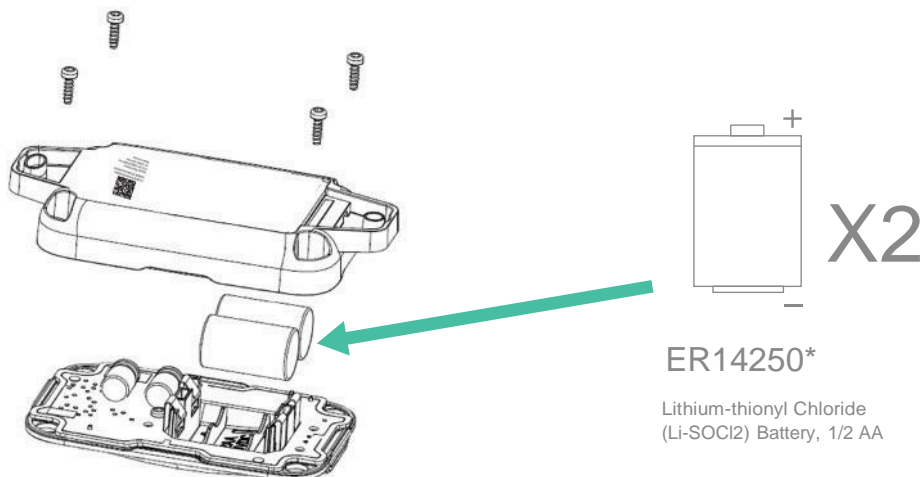
- 2 Remove the bottom cover of the tracker with a star-type screwdriver(T8H size).



- 3 Replace the battery with new ones (Li-SOCI2 battery, "ER14250", 1/2 AA size x 2pcs)

\*Caution: DO NOT remove the battery holder.

\*Caution: Using batteries other than the ones provided may result in loss of performance and battery life, and also damage to the device. Dispose of properly, observing environmental protection rules. Mixing of cells can result in battery leakage and sub-optimal device performance



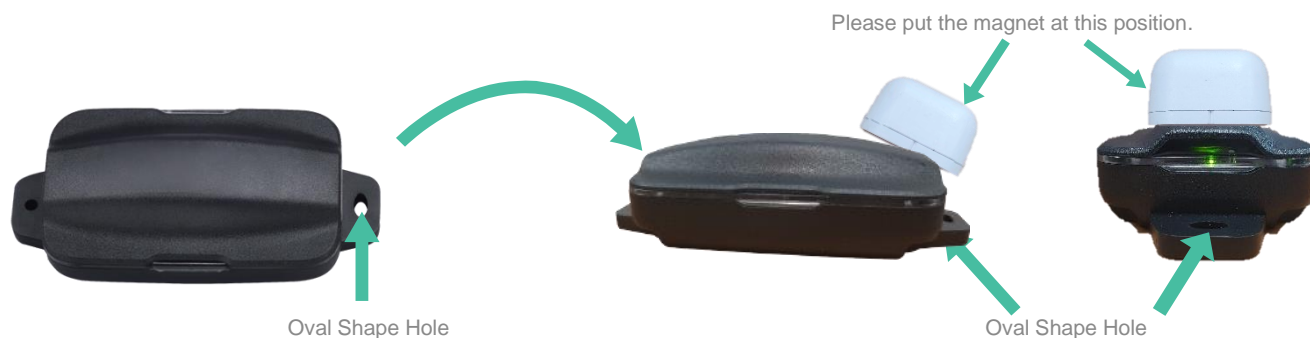
- 4 Re-assemble the battery cover.



## Chapter 7 - Battery Replacement

### 5 Activate the tracker

- 1 Place the magnet to trigger the tracker for at least 10 seconds.  
\*The magnet must be placed on the side that has the oval shape hole.



- 2 When the Tracker is successfully activated, the LED will light continuously for 3 seconds. Shake the tracker, and if the tracker is successfully connected, the following icon will appear on the dashboard.



## Chapter 8 - FAQ

1.  
Why do I have to "sign in" via Google/Apple ID/Facebook twice?

**Answer:**

The first "sign in" is identified as a presign-up process in AWS Cognito which the MerryIoT Sensor uses to manage third-party social media registration. Once the presign-up is complete, the mobile app page will redirect you to the "sign in" page again, then, you can sign in to the mobile app successfully.

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2.  
What is fix asset & remote asset mean in profile setting.

**Answer:**



**Fixed Asset's Behavior**

- Update per 5 min (moving)
- Update per 6 hours (stationary)

**Remote Asset's Behavior**

- Update per 30 sec (moving)
- Update per 6 hours (stationary)

For more FAQs please visit <https://www.merryiot.com/FAQ>

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