

User's Manual

IR People Counter

FP110 (Standalone Version)

Statement

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Notice

- The parameters used in the screenshots shown in this manual are only used as setting examples for reference and may not be completely consistent with the actual situation. Please set the parameters according to your actual needs.
- The housing is prohibited from being disassembled during operation. Anti-disassembly reminder: Be careful when manually disassembling the housing of the device to avoid damage to the device. This is a Class A product. In a living environment, this product may cause radio interference. In this case, the user may need to take practical measures to deal with the interference.
- Due to different software versions, the screenshots shown in this manual may not be exactly the same as the web interface of the product you purchased. Please configure your product according to the actual web interface.
- If you find that there is a shortage or damage to any accessories, please contact your local dealer in time. The product pictures/screenshots in this manual are for reference only and are intended to help users install and configure the product. Please refer to the actual product/actual interface for details.



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1. Product Introduction

1.1 Product Introduction

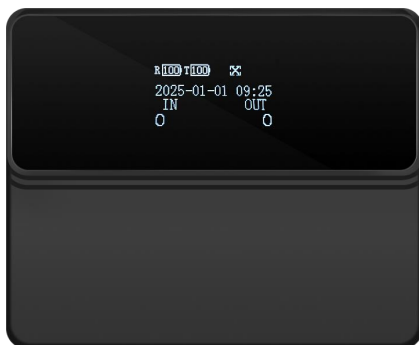
The IR people counter FP110 (standalone version) is mainly based on infrared blocking counting. The infrared receiving module automatically identifies the walking direction of pedestrians by the infrared blocking direction and generates a count. It is widely used in shopping malls, retail stores, public transportation, scenic spots, libraries, museums, restaurants, factories, supermarkets, parks, buildings, toilets, etc.

1.2 Product Features

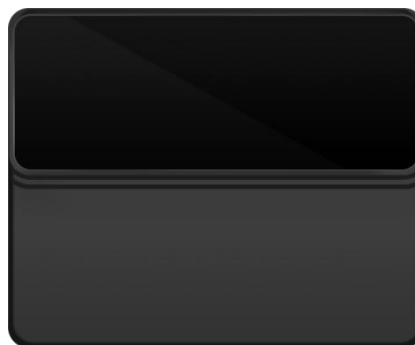
- ◆ **Accurate Counting in Multiple Scenarios:** Supports accurate counting of single people walking normally, passing quickly, and elderly people walking slowly.
- ◆ **Simple Installation Experience:** After configuration, simply paste the pairing code and start using it. Operation is effortless.
- ◆ **Flexible Power Supply Options:** Supports Type-C interface power supply and battery charging; comes standard with 4 18650 batteries, which can be used continuously for up to one year.
- ◆ **Convenient App Management:** Once the device is connected to Bluetooth, you can upgrade to the latest version with a single click in the app. If a device malfunctions, you can also perform a one-click self-diagnosis.
- ◆ **App Data Query:** Query multi-dimensional data (hourly data for the last 720 hours, daily data for the last 730 days, weekly data for 100 weeks, monthly data for the last 120 months, and annual data for the last 10 years) through the mobile app, and support exporting to CSV files.
- ◆ **Strong Anti-interference Ability:** Supports normal operation under ESA alarms and other infrared bands.

2. Product Structure

2.1 Packing List



Receiver*1



Transmitter*1



18650 batteries *4



3M adhesive *4



Charger *1

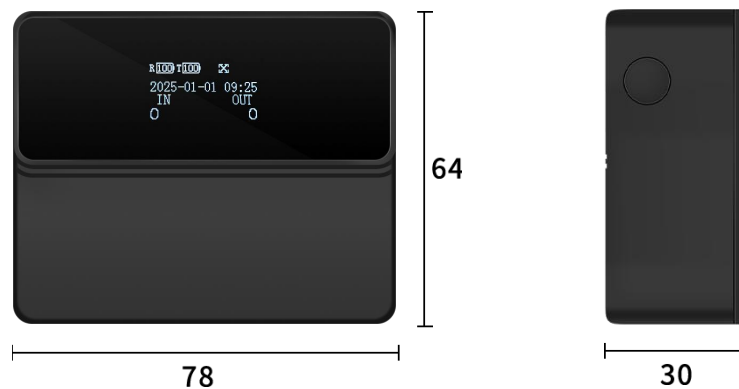


Quick Guide *1

! If any of the above items are damaged or lost, please contact your supplier in a timely manner.

2.2 Product Size

Unit: mm



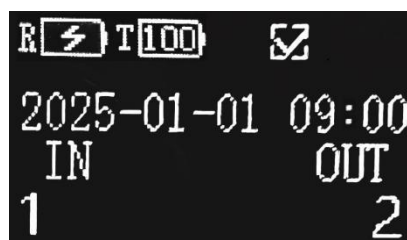
2.3 Product Power Supply

Product power supply mode: supports Type-C interface and 18650 battery.

⚠ The device only supports 18650 batteries, and the indicator light will turn on if the battery is reversely connected.

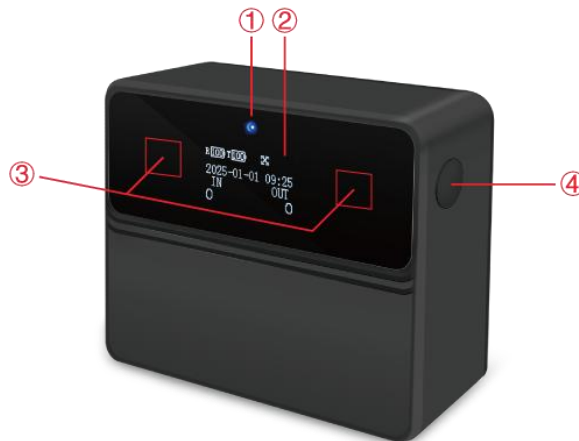
When the device is plugged into a USB port, it will display in three states: Charging, Completed, and Constantly Powered.

1. Charging: The battery icon will display a lightning bolt.
2. Charging Completed: The battery icon will display the number 100.
3. Constantly Powered: The battery icon will display the number 100.



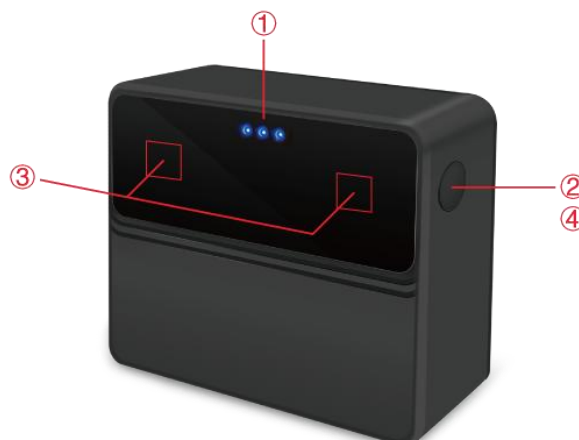
Charging interface

2.4 Appearance and Function



Receiver

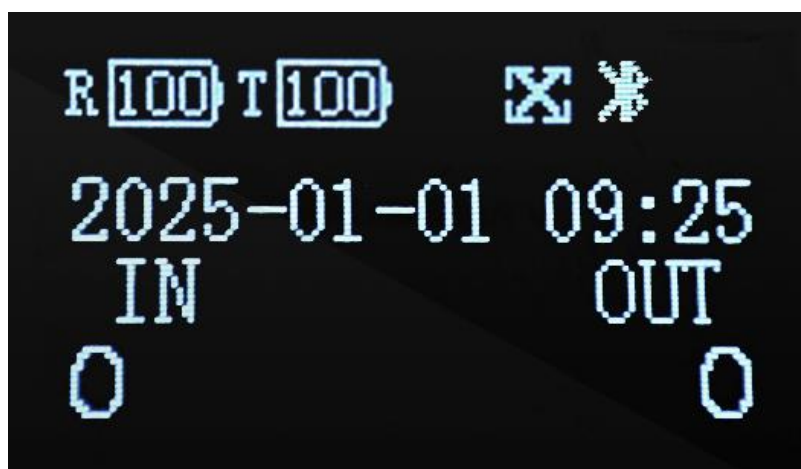
Name	Explain
①LED indicator light	Blue indicator light: The indicator light flashes when the receiver does not receive the transmitter signal or the battery is low.
②OLED display	Press the button: Trigger the OLED screen to light up. If there is no operation for more than 10 seconds, the display will automatically turn off.
③Infrared receiver module	Receive the infrared signal sent by the transmitter.
④Button	A short press wakes up the display. A long press for 3 seconds turns on Bluetooth, and the Bluetooth icon flashes. A long press for 10 seconds restarts the device.



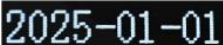
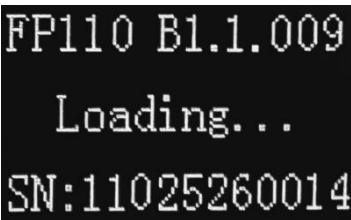
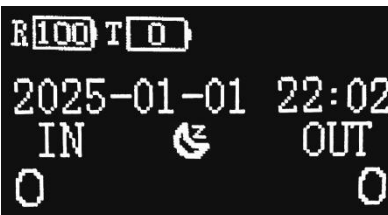
Transmitter

Name	Explain
① Status indicator	Blue indicator light: When the battery is low, the indicator light flashes.
② Button	Press once, and one indicator light will illuminate, indicating the first gear position. Press once, and two indicator lights will illuminate, indicating the second gear position. Press once, and three indicator lights will illuminate, indicating the third gear position.
③ Infrared transmitter module	Transmits infrared wireless signals.
④ Transmitter power switch (factory default: low power consumption, generally no need to change)	Level 1: Low Power: Default setting. Level 2: Medium Power: Press the button once to switch to Level 2, and both indicators will flash. Level 3: High Power: Press the button again to switch to Level 3, and all three indicators will flash.
Note: The higher the power, the longer the transmission distance and the shorter the device standby time.	

1st gear <Close distance>	Indoors: 1-10m	Outdoors: 1-6m
2nd gear <Medium distance>	Indoors: 1-12m	Outdoors: 1-8m
3rd gear <Long distance>	Indoors: 1-15m	Outdoors: 1-9m



Product Screen

Pattern	Explain
	IN represents the number of people entering, and OUT represents the number of people leaving.
	R represents the power level of the receiving end, T represents the power level of the transmitting end, and lightning represents charging.
	√ indicates successful binding with the transmitter X indicates the device is out of focus
	If the Bluetooth icon flashes, it means Bluetooth is on. If the Bluetooth icon does not flash, it means the device is connected. Turn Bluetooth on and off (1) Turn Bluetooth on When the device's Bluetooth is not on and the device screen does not display Bluetooth, long press the right button for 2s to 8s and the Bluetooth icon will appear on the device screen. Release the button and the device will turn on Bluetooth. (2) Bluetooth connection and disconnection judgment Bluetooth disconnected state: When Bluetooth is on and not connected, the Bluetooth icon on the screen will be displayed in a 1s cycle. Bluetooth connected state: When Bluetooth is on and connected, the Bluetooth icon on the screen will be constantly lit. (3) Turn Bluetooth off When the device's Bluetooth is on (the screen displays the Bluetooth icon), long press the right button for 2s to 8s and the icon on the screen will go out. Release the button and the device will turn off Bluetooth.
	If the server time is not synchronized, the default value is 2025-01-01. If the server time is successfully synchronized, the server time is displayed.
	Power-on interface: The device will automatically power on after powering on. The blue indicator light will illuminate for 1 second before turning off and the screen will display the power-on interface. FP110 is the device model, B1.1.009 is the device version number, and SN:XXX is the device's unique identification code.
	Sleep interface: The device will not be counted during non-business hours. The non-business hours display icon is between "IN" and "OUT" in the third row.

3. Mobile Phone Networking Configuration

Step 1: Activate Bluetooth.

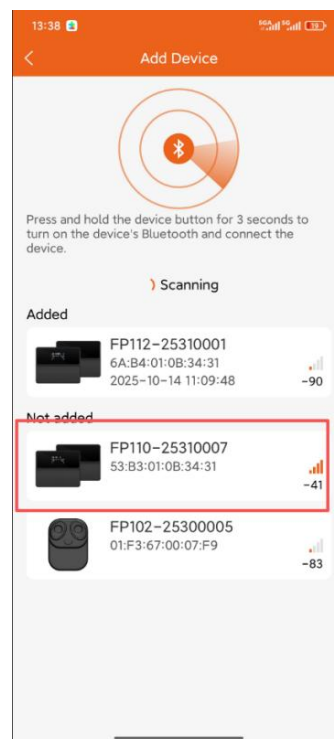
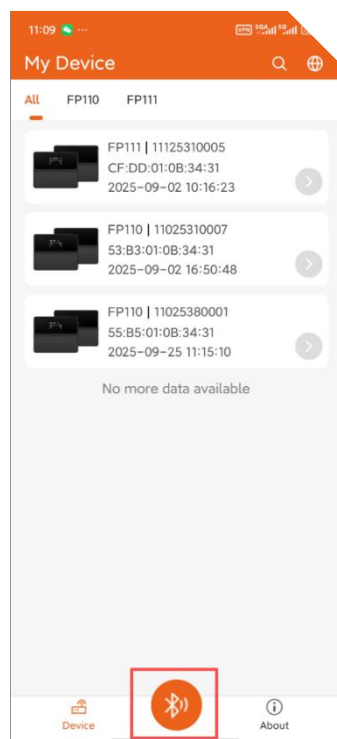
Tap this button to activate Bluetooth on your device.

**Step 2:** Search and add a device.

Scan for Bluetooth devices and find your device in the list.

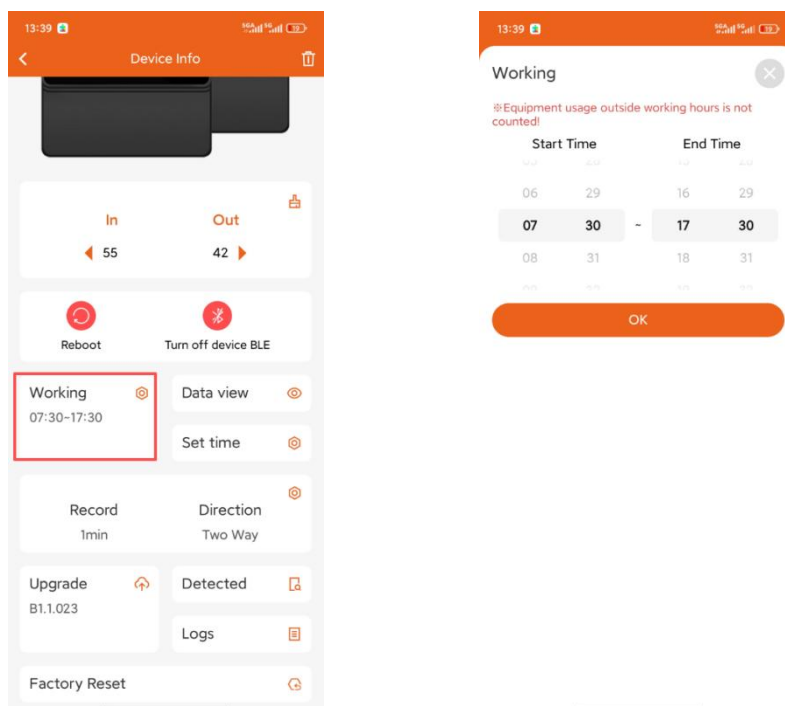
The device name format is: model number + the last 8 digits of the serial number (which can be found on the device label).

Select the device to add it.



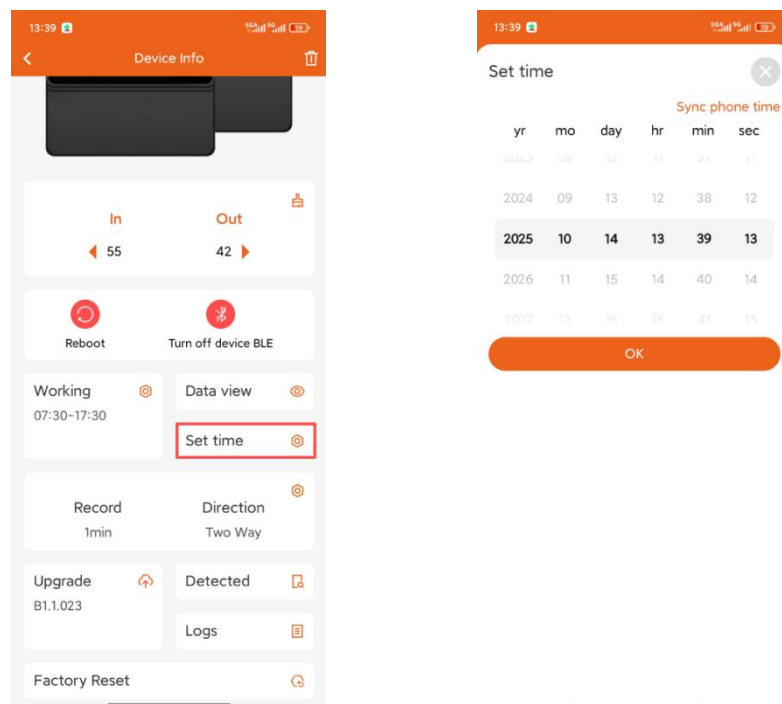
Step 3: Working hours settings

The current setting is 07:30 to 17:30. You can adjust the start and end times of the device statistics each day as needed. After making changes, click "Confirm".



"System Time" settings.

Ensuring the device's date and time are accurate is crucial for ensuring accurate data recording. After making changes, click "Confirm."



Set the "**Recording Period**" and "**Counting Direction.**"

The recording period is fixed at 1 minute.

Counting Rules:

Bidirectional (most commonly used): Counts both entrances and exits.

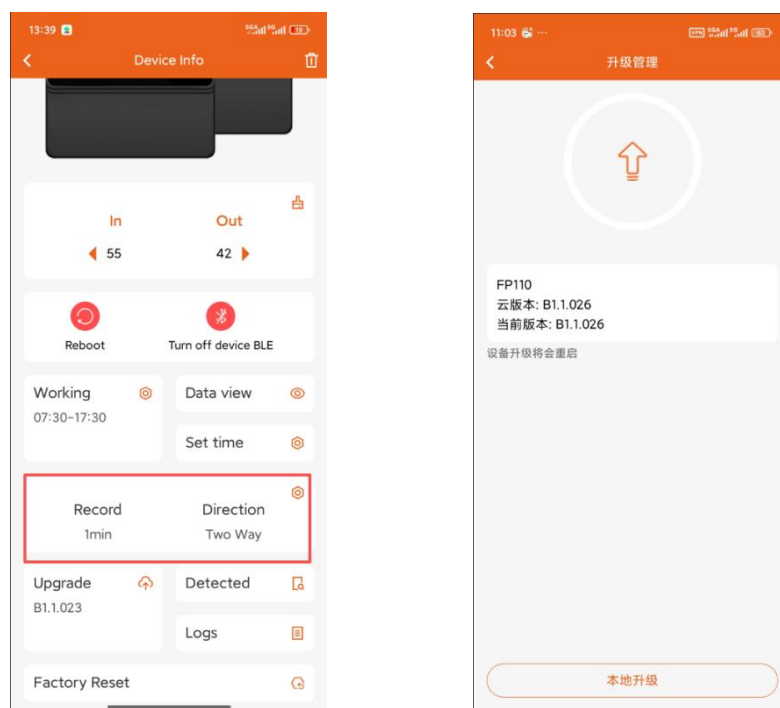
Entry Only: Counts only those who enter.

Exit Only: Counts only those who leave.

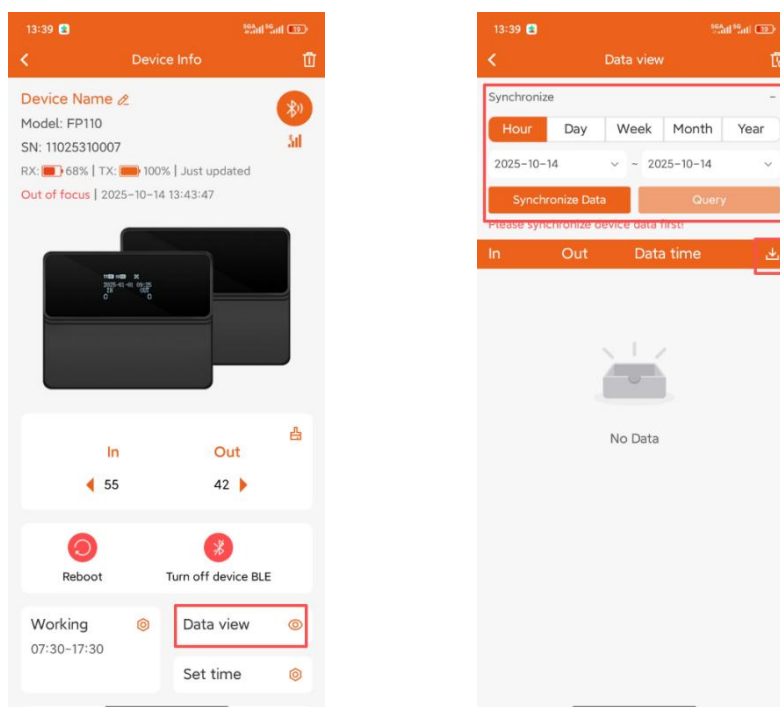
Reverse: If you find that the "Entry" and "Exit" counts are reversed, use this function to correct them.

Total: Counts only the total number of people passing through, regardless of entry or exit.

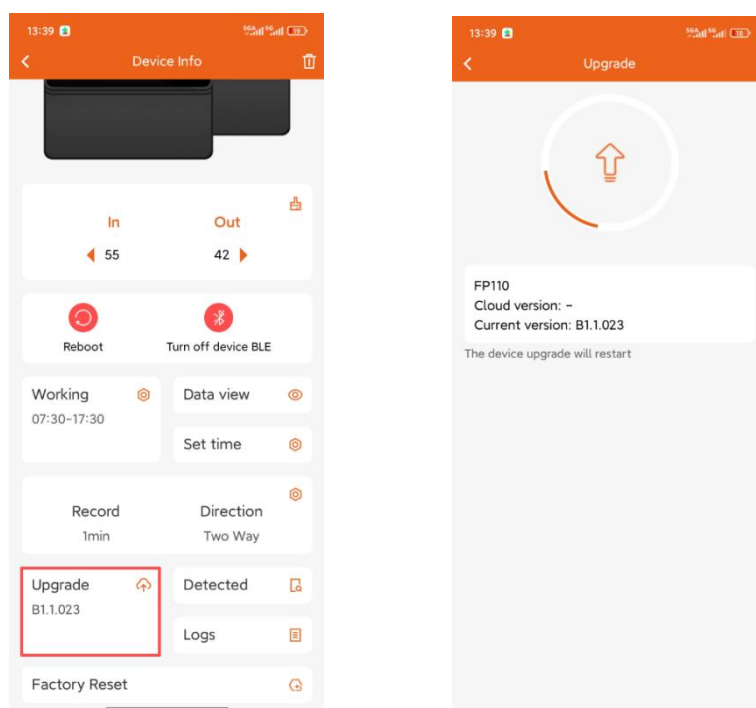
Select based on user needs. For example, if you're checking customer flow in a store, choose "Entry Only." If you're counting meeting rooms, choose "Bidirectional." If you only need the total number of people, choose "Total."



Data View and Export: Click View to jump to the historical data record page, where you can view a detailed report on the number of people entering and leaving the building during a specific time period. Click Download to export the report.

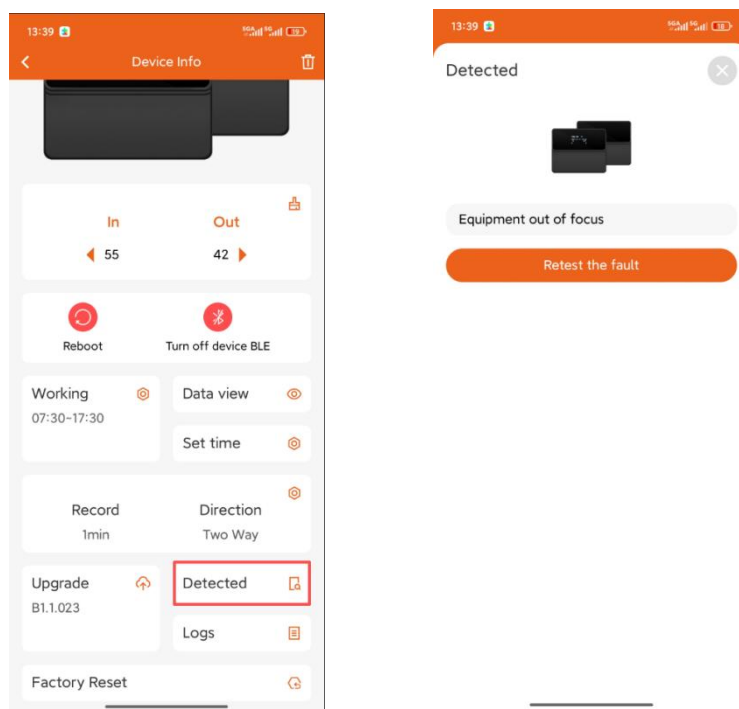
**Maintenance 1: Equipment upgrade.**

The system will detect whether there is a new version. If there is a new version, you can directly download the firmware from the cloud to the device for upgrading.



Maintenance 2: Fault Detection.

After the setup is complete, if the device does not work properly or there is a problem with the data, you can click Fault Detection here to help you identify the problem.



4. Installation Instructions

4.1 Installation Instructions

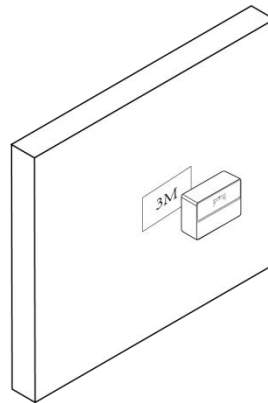
- ❖ At the installation location, first configure the network and then install the device
- ❖ The receiving end is installed on the right hand side of the channel entrance direction
- ❖ There should be no obstructions between devices. If there is glass, the higher the light transmittance, the less impact it has on accuracy.
- ❖ **The recommended installation height is 1.2-1.4m, and the receiving end and the transmitting end should be installed parallel and aligned.**

4.2 Factors Affecting Accuracy

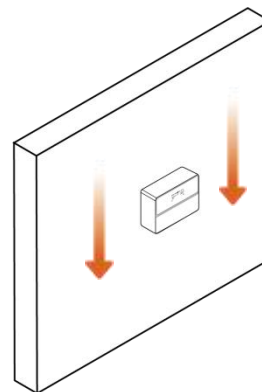
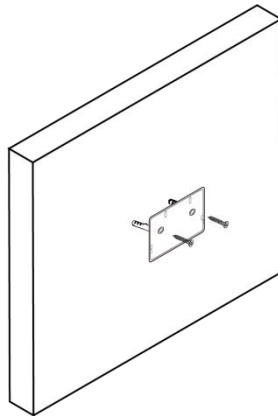
- ❖ The devices cannot be blocked by people or objects for a long time, which will cause the devices to lose focus.
- ❖ If two people pass side by side, there will be omissions.
- ❖ If you hold a large object or push a shopping cart through, there is a chance that it will be recorded incorrectly.

4.3 Installation Method

Two installation methods: 3M adhesive or screw fixation



3M Adhesive

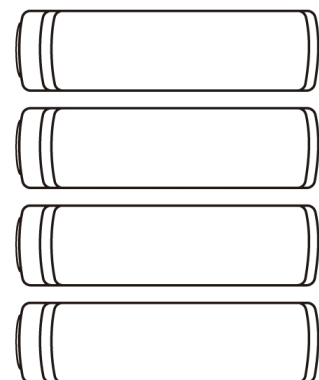
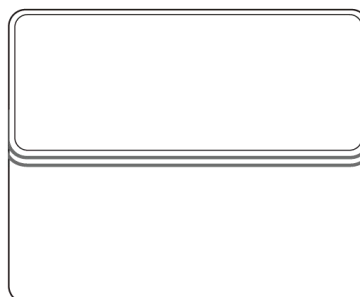
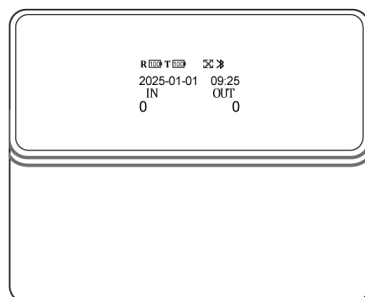


Screw Fixation

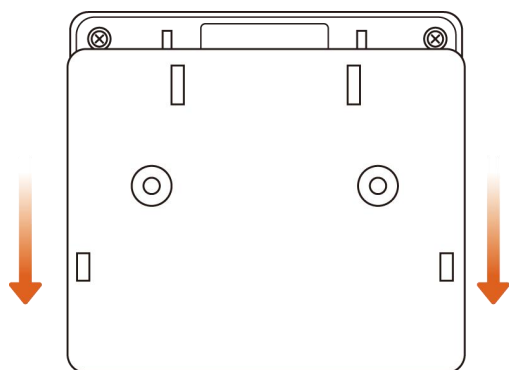
5. Installation Steps

5.1 Installation Method 1

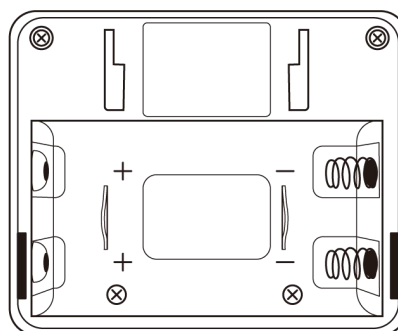
Step 1: Open the box and take out two infrared passenger flow counter devices and four batteries.



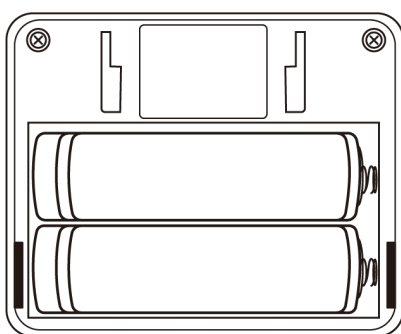
Step 2: As shown in the battery area, install the battery, the device will start automatically, and then close the battery cover.



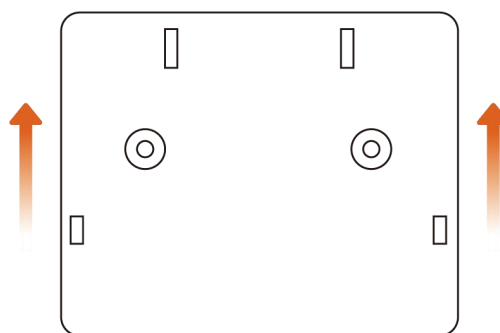
① Slide the back cover down



② Open the back cover



③ Installing the Battery

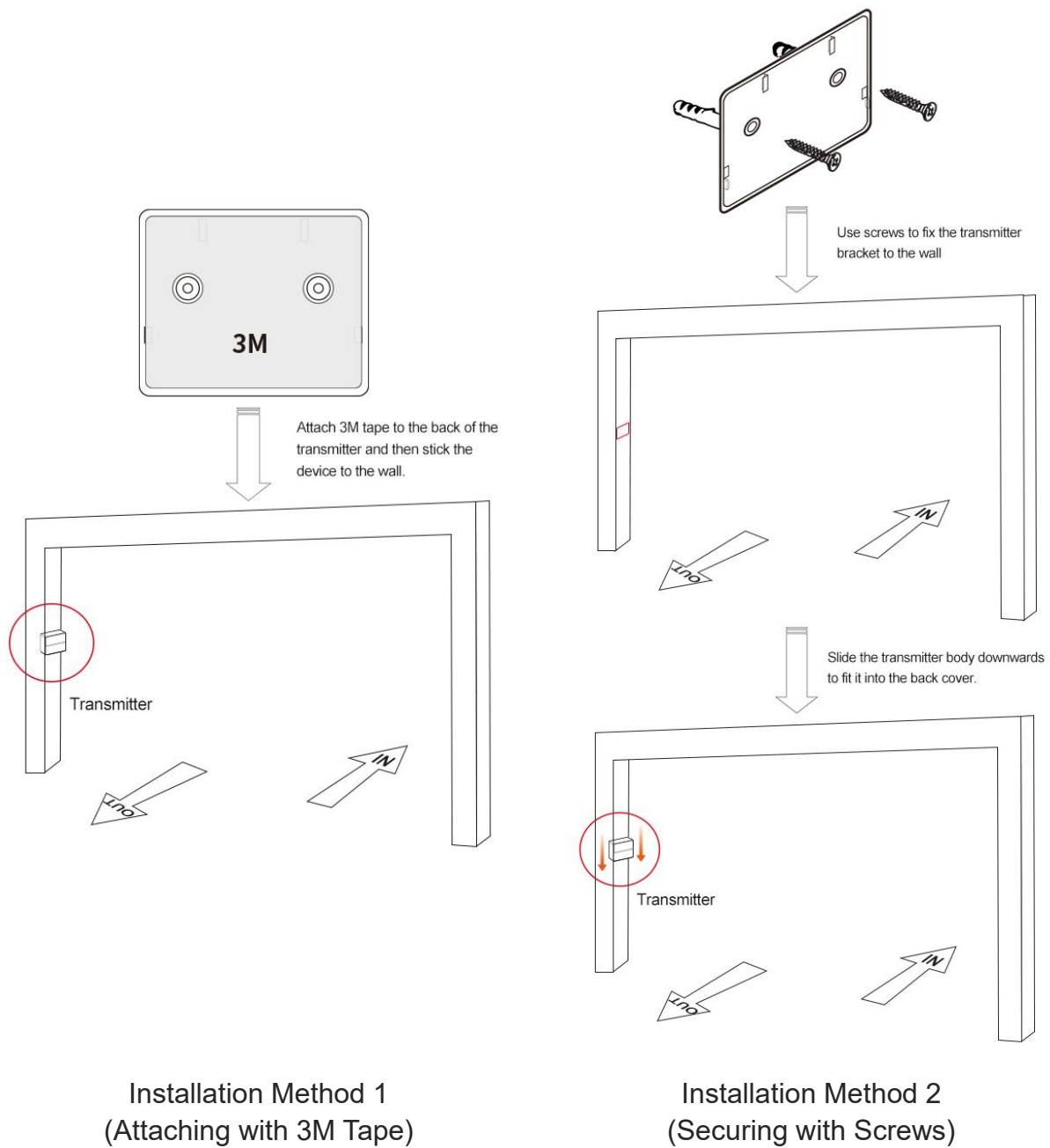


④ Slide the back cover upwards to close it

Step 3:

Installation Method 1 (Attaching with 3M Tape): First, install the transmitter to facilitate receiver pairing. Remove the 3M tape from the packaging and apply it to the back of the device. Then, secure the transmitter to the left side of the door.

Installation Method 2 (Securing with Screws): First, install the transmitter to facilitate receiver pairing. Remove the transmitter's back cover, secure it to the wall with screws, and slide the transmitter downward to mate with the back cover.



Step 4: Pairing is performed at the pre-set installation location. Align the receiver and transmitter parallel to each other, making small adjustments until the "x" changes to a "√" sign, indicating a successful pairing. Mark the pre-installation location for the receiver and then secure it to the wall.

