FOORIR
Smart Counter Provider

User's Manual

IR People Counter

FP111 (WiFi Version)

Version V1.5

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1. Product Structure

1.1Packing List

Receiver (R)*1

Transmitter (T)*1

3M Adhesive *4

Charging Cable *2

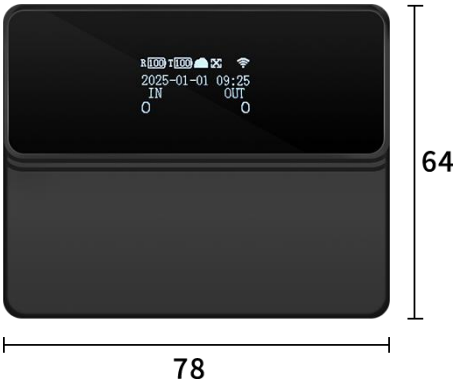
Quick Guide *1

⚠ **The device contains 4 18650 batteries.**

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

1.2 Product Size

Unit: mm



1.3 Product Power Supply

Flexible power supply options: Built-in 4 18650 batteries, supports Type-C interface charging and external power supply (5V/2A adapter not included).

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

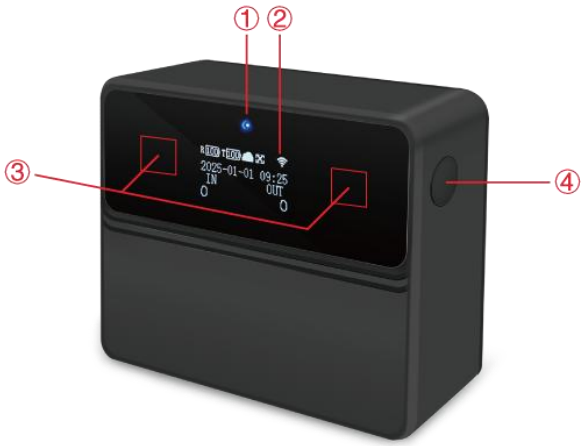
When the device is plugged into a USB port, it will display in three states: Charging, Completed, and Constantly Powered.

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

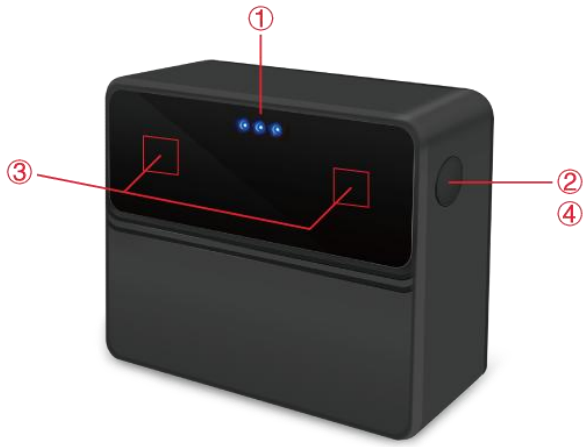
(the battery level of transmitter T can be viewed when the code is paired).

1.4 Appearance and Function



Receiver (R)

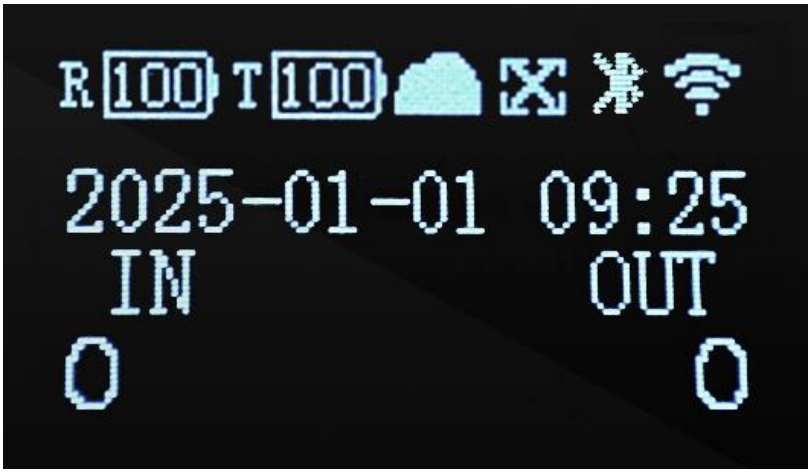
Name	Explain
①LED indicator light	Blue indicator light: The indicator light flashes when the receiver does not receive the transmitter signal or the battery is low.
②OLED display	Press the button: Trigger the OLED screen to light up. If there is no operation for more than 10 seconds, the display will 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.



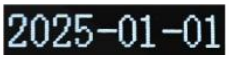
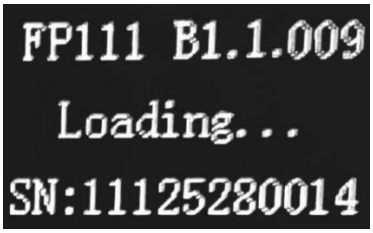
Transmitter (T)

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.
	The platform connection status icon displayed on the device screen has three states: successful data upload, device not linked to the platform, and data upload failure. A cloud with an upload arrow indicates data is uploading. An X indicates data upload failure (check your WiFi network/server configuration).
	√ indicates successful pairing with the transmitter X indicates the device is out of focus
 	The WiFi icons represent successful and failed connections. The WiFi strength of the connection is divided into four bars, with four bars indicating the strongest WiFi signal and one bar indicating the weakest. ERR: If the "Module Not Responding" icon appears in the "Signal" position on the screen, communication between the MCU and the module is not working properly. If "No Signal" appears in the "Signal" position, the WiFi signal between the module and the router is very weak or not connected.
	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 automatically powers 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. FP111 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.

2. Networking Configuration

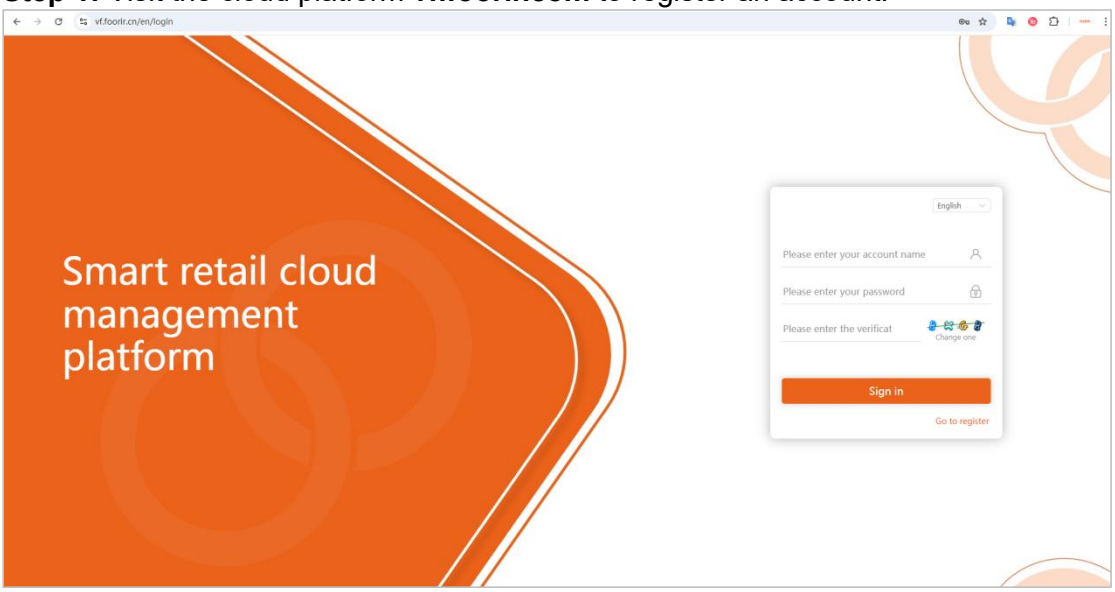
2.1 Configuration Notes

- **Network configuration: It consists** of web page network configuration and mobile phone network configuration.
- Perform networking configuration before device installation
- Before configuration, you need to go to the web page to bind the device. **For specific steps, refer to the web page network configuration**
- configuring mobile phone network , you need to fill in the accurate server address and port
- If the device is pushed to a third-party server, please skip the web configuration step

⚠ **If there are any rules, restrictions, or DNS-related settings on the network , the device may not be able to successfully connect to the server.**

2.2 Web Page Networking Configuration

Step 1: Visit the cloud platform **vf.foorir.com** to register an account.

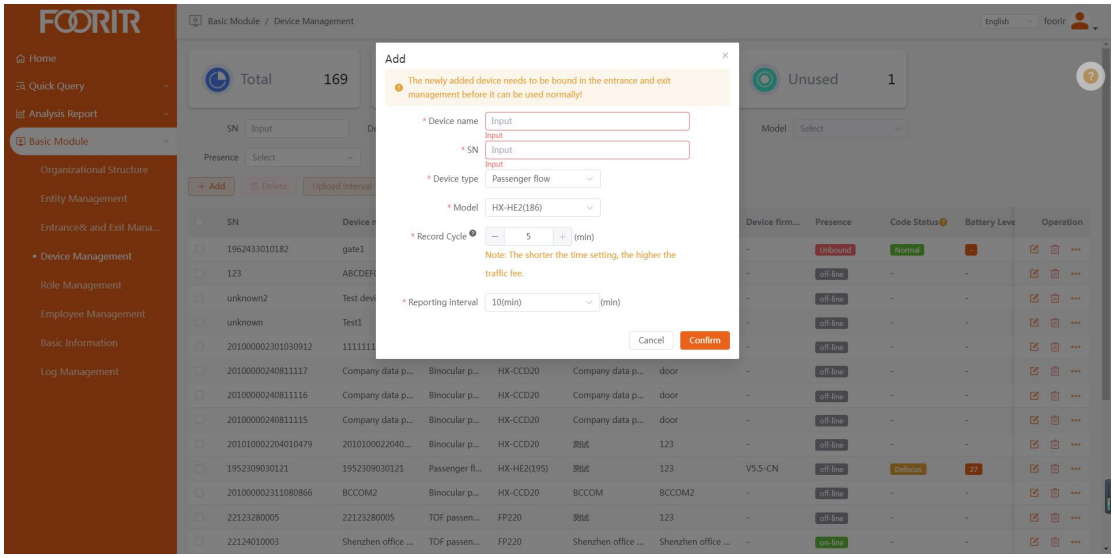


Step 2: Add a device, select "Basic Module- > Device Management- > Add Device"

⚠ **The device name is recommended to fill in the device installation location**

⚠ **The serial number is the unique identification code of the device and must be filled in strictly according to the serial number displayed on the device**

⚠ **Serial Number Check: Refer to the <SN> on the power-on screen and the label on the back of the receiver (after opening the back cover).**



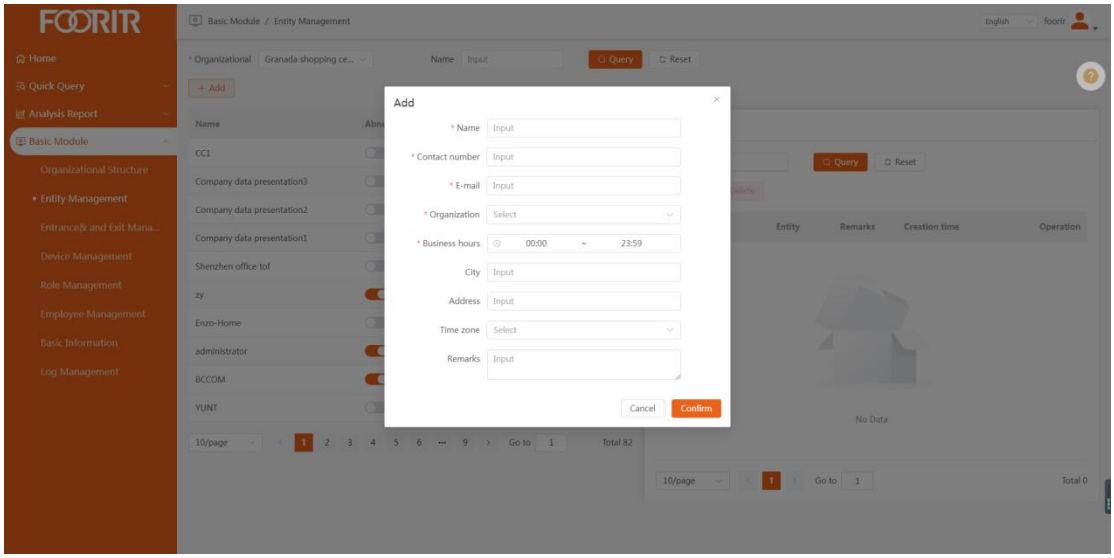
Step 3: Create an entity , select "Basic Module- > Entity Management- > Add Entity"

⚠ **Email: used to push abnormal status of the device**

⚠ **Organizational structure: Select the default structure**

⚠ **Business Hours: Used to synchronize device working hours, counted during business hours and not counted outside business hours.**

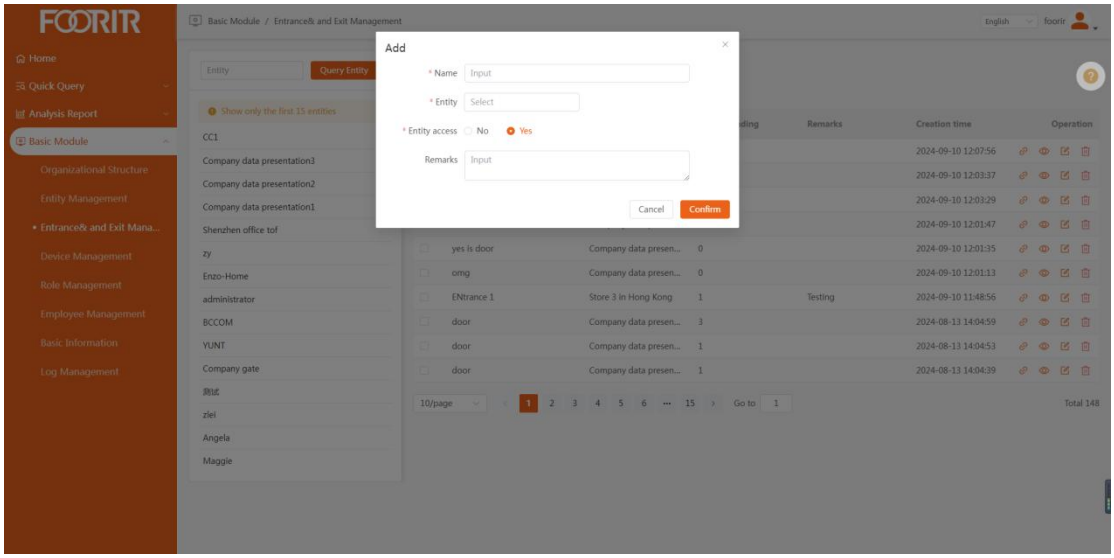
⚠ **Time zone: used to synchronize device time. It is selected according to the local time zone.**



Step 4.1: Create an entrance and exit, select "Basic Module- > Entrance and Exit Management- > Add Entrance and Exit"

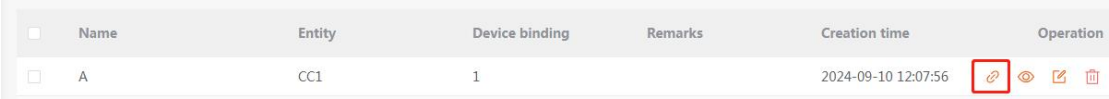
⚠ **Belonging entity: Select the created entity**

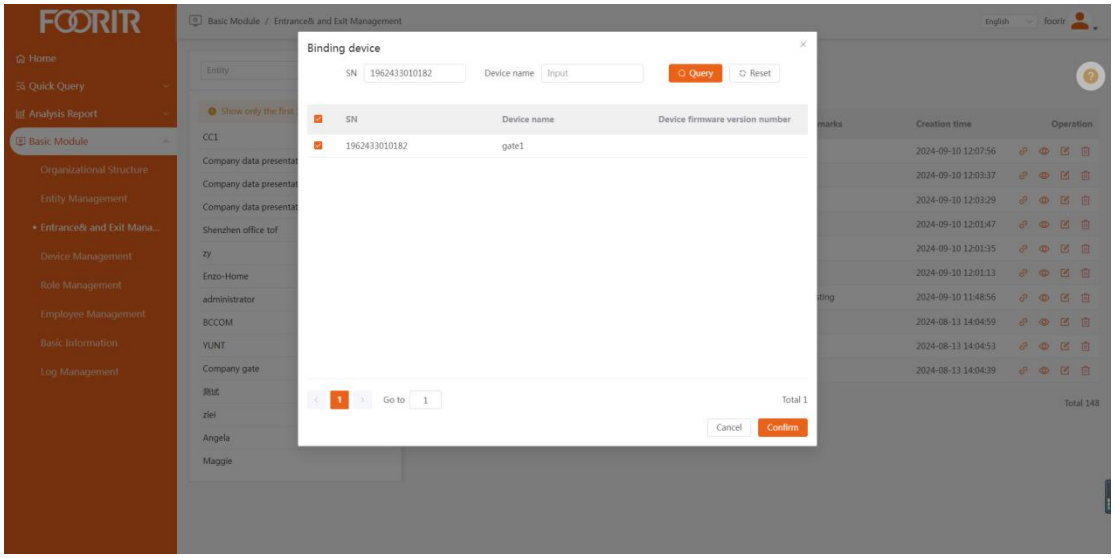
⚠ **Physical entrance and exit: Select "Yes"**



Step 4.2: Bind the device , select the entrance and exit to be bound, click the binding icon at the back, enter the binding page, check the device to be bound, and click " Confirm " ; the web networking configuration is completed.

⚠ **After completing this step, you can configure the mobile phone network.**



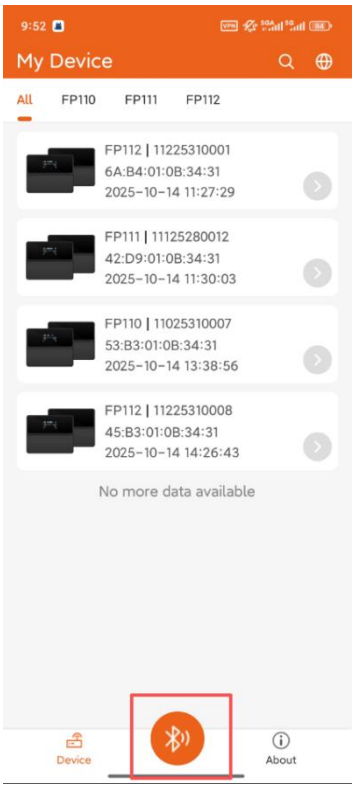


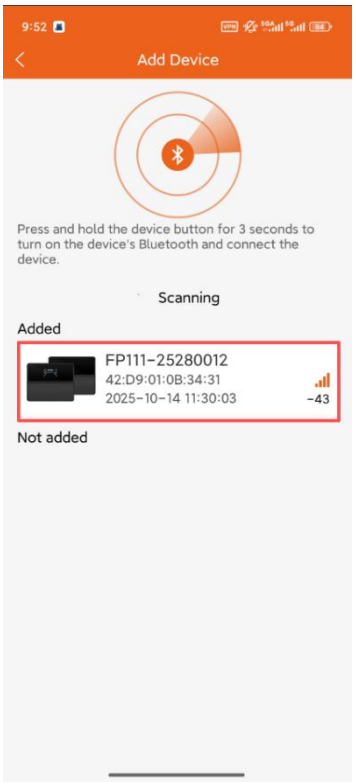
2.3 Mobile Phone Networking Configuration

- Configure network connectivity before installing the device.
- Please use your browser to scan the QR code to download the "FOORIR" app.
- IOS users can search for "FOORIR" in the App Store to download it.

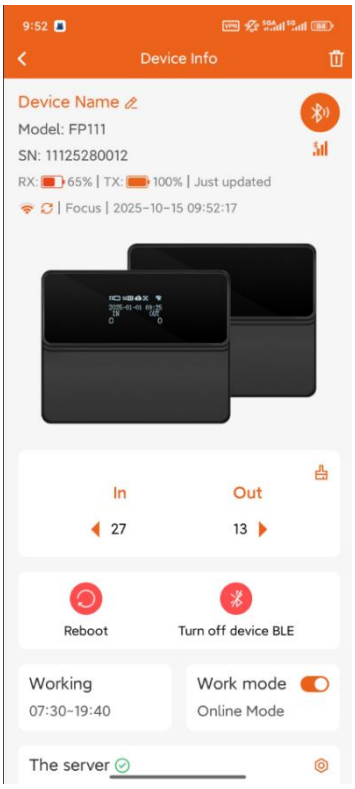
Step 1: Activate Bluetooth.
Press and hold the button for 3 seconds to power on the device, then press and hold the button again for 3 seconds to activate the device's Bluetooth.

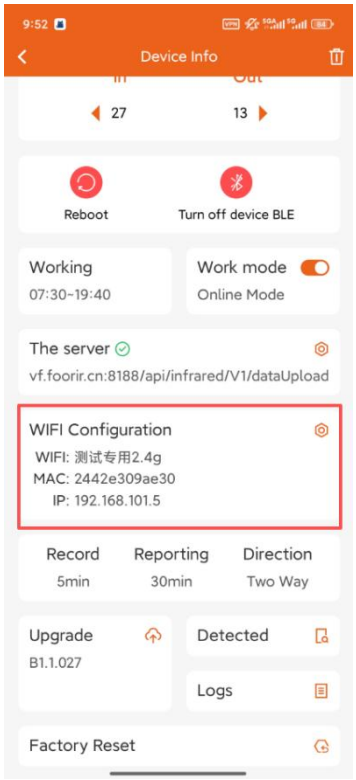
Step 2: Search and add a device.
Scan for Bluetooth devices and find your device in the list.
The device name format is: model number + the last 8 digits of the serial number (Refer to the <SN on the power-on screen> and the label on the back of the receiver (after opening the back cover) for details.).
Select the device to add it.



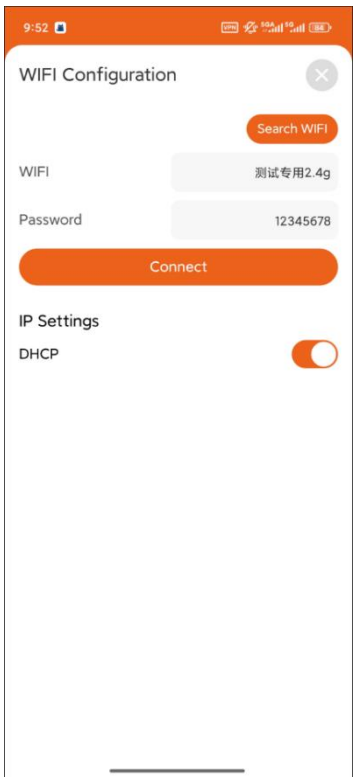


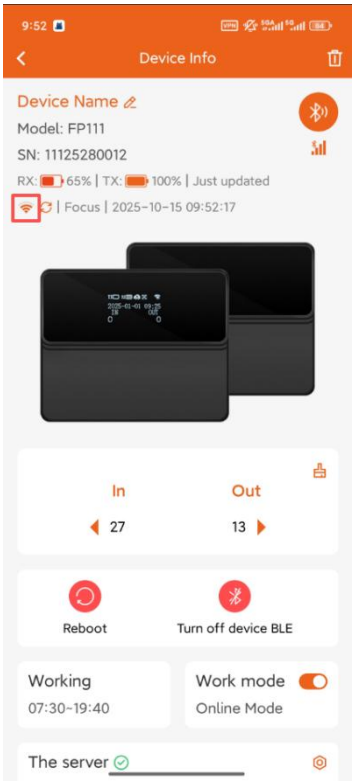
Step 3: WiFi Configuration.
Go to the device configuration page and scroll down to the "WiFi Configuration" area.



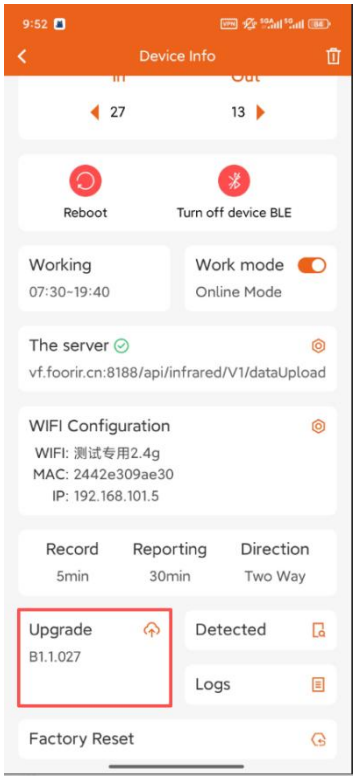


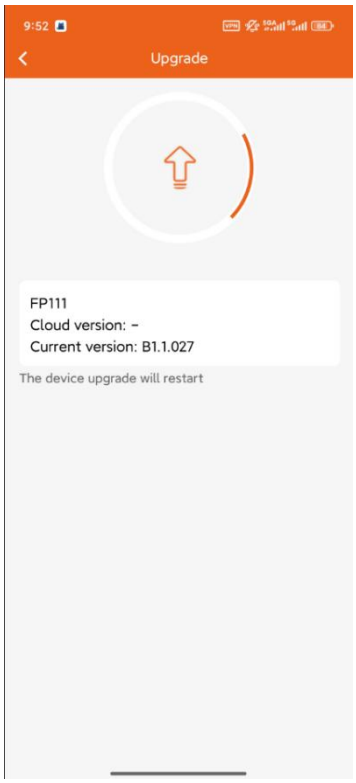
Select the WiFi network you want to connect to, enter the password, and confirm it. Check the WiFi connection status.



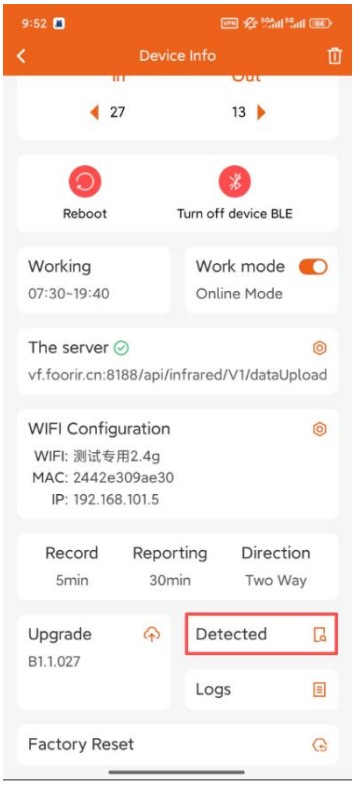


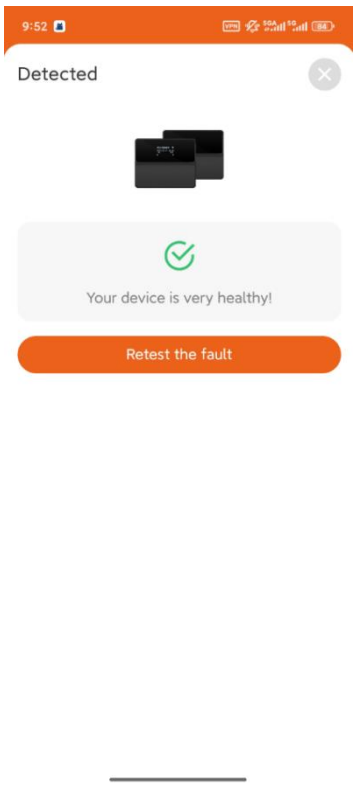
Maintenance 1: Equipment upgrade.
The system will detect whether there is a new version. If there is a new version, you can directly download the firmware from the cloud to the device for upgrading.





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.





3. Installation Instructions

3.1 Installation Instructions

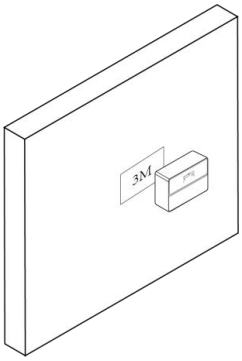
- At the installation location, first configure the network and then install the device
- The receiving end is installed on the right hand side of the channel entrance direction
- There should be no obstructions between devices. If there is glass, the higher the light transmittance, the less impact it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

3.2 Factors Affecting Accuracy

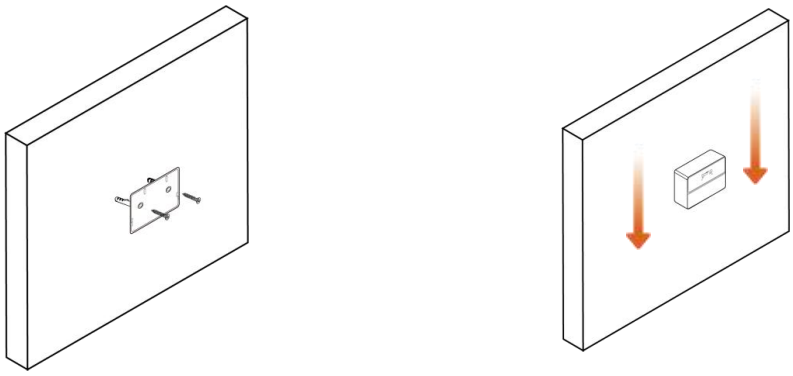
- The devices cannot be blocked by people or objects for a long time, which will cause the devices to lose focus.
- If two people pass side by side, there will be omissions.
- If you hold a large object or push a shopping cart through, there is a chance that it will be recorded incorrectly.

3.3 Installation Method

Two installation methods: 3M adhesive or screw fixation



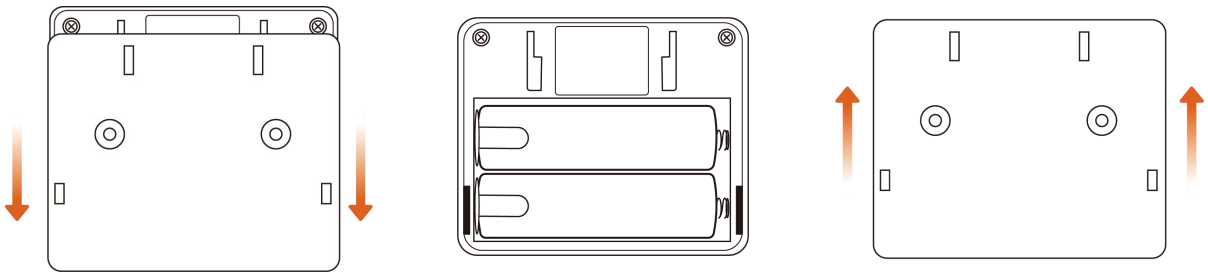
3M Adhesive



Screw Fixation

4. Installation Steps

Step 1: Open the box, take out the two devices, and remove the battery insulating sheet from each.



① Slide the back cover down. ② Remove the insulating sheet. ③ Slide it up to close.

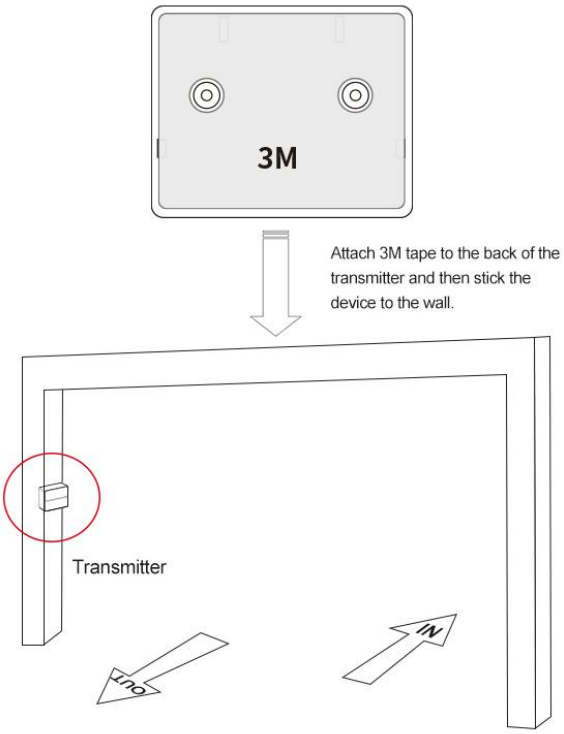
Step 2:

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.

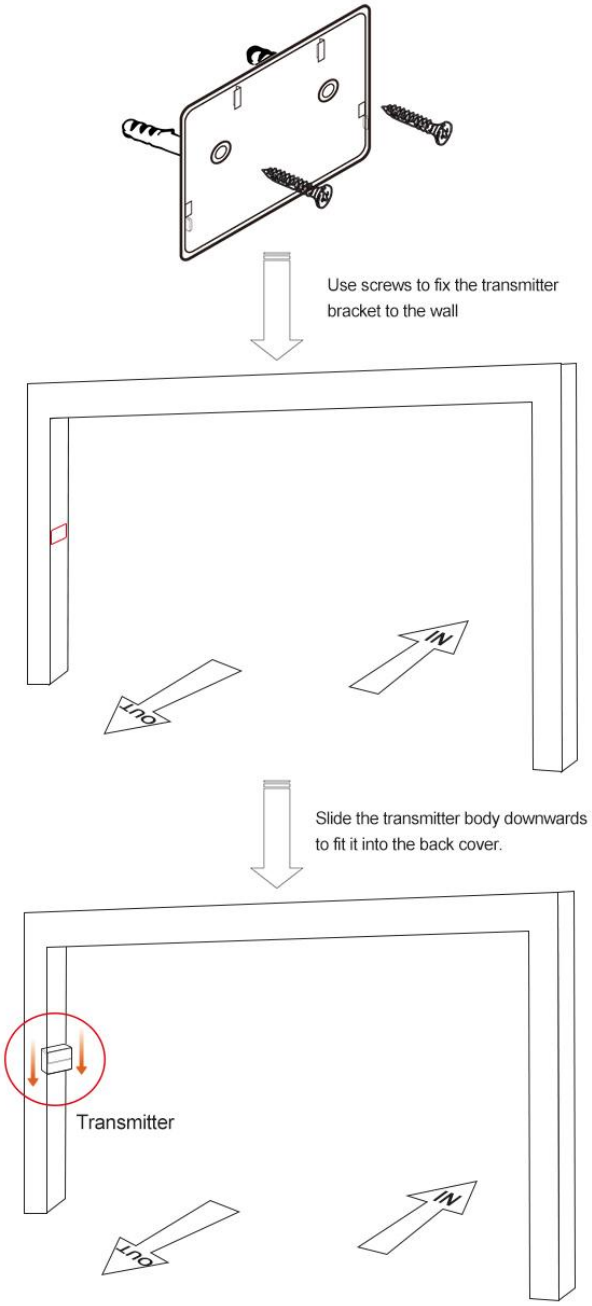
Installation Method 2 (Securing with Screws): First, install the transmitter to facilitate receiver pairing. Remove the transmitter's back cover, secure it to the wall with screws, and slide the transmitter downward to mate with the back cover.

* It is recommended to install according to the direction shown in the diagram, ensuring both ends are horizontally aligned and parallel.

* Left and right sides are interchangeable, and the direction of entry and exit can be flexibly set on the cloud platform.

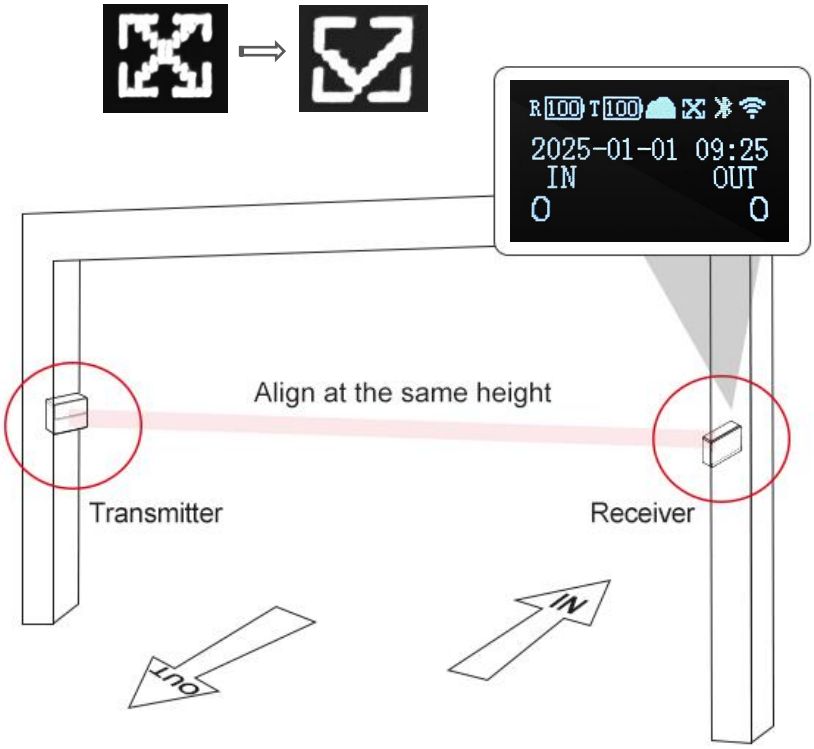


Installation Method 1
(Attaching with 3M Tape)



Installation Method 2
(Securing with Screws)

Step 3: Pairing is performed at the pre-set installation location. Align the receiver and transmitter parallel to each other, making small adjustments until the "×" changes to a "√" sign, indicating a successful pairing. Mark the pre-installation location for the receiver and then secure it to the wall.



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- FOORIR It is a registered trademark of Chengdu Huaxin Zhiyun Technology Co., Ltd. All trademarks mentioned in this manual are owned by their respective owners.
- The product specifications and information mentioned in this manual are for reference only. If there is any content update, no further notice will be given. Unless otherwise agreed, this manual is only used as a guide, and the statements made do not constitute any form of warranty.

FCC Statement
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
The device has evaluated to meet general RF exposure requirement. The device can be used be in portable exposure without restriction.

For assistance, please contact:
Manufacturer: Chengdu Huaxin Zhiyun Technology Co., Ltd.
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Email:info@foorir.com
Official website: www.foorir.com