People Counting Radar



Model: RS1X-W

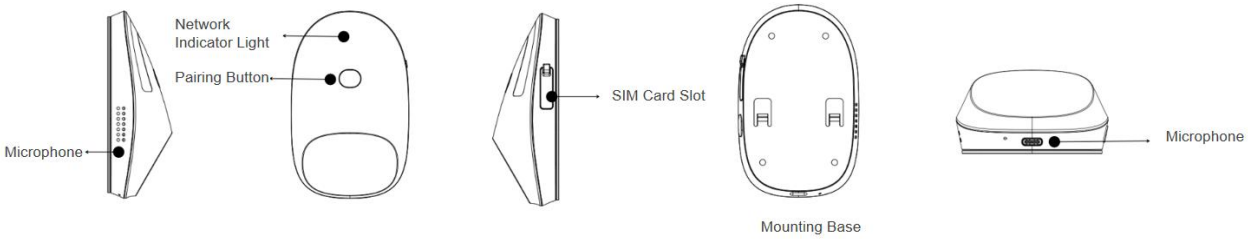
User Manual

1. Product Introduction

The People Counting Radar RS1X-W is designed to detect human trajectories and movement behavior. It provides real-time people counting and entry/exit statistics, and supports flexible detection area configuration to accommodate different installation environments. By connecting to the user's cloud platform via Wi-Fi, it enables scenario automation and real-time status reporting.

Functions	Description
Human Presence	Presence/Absence, Motion/Stationary Status
Real-Time Occupancy Status	Trajectory Coordinate Output, Real-Time People Count
Parameter Settings	Installation Height, Detection Area
History Records	Presence History, Entry/Exit History

**This product must be used with an MQTT server.

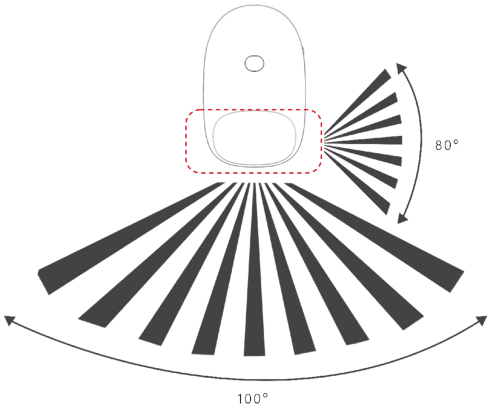


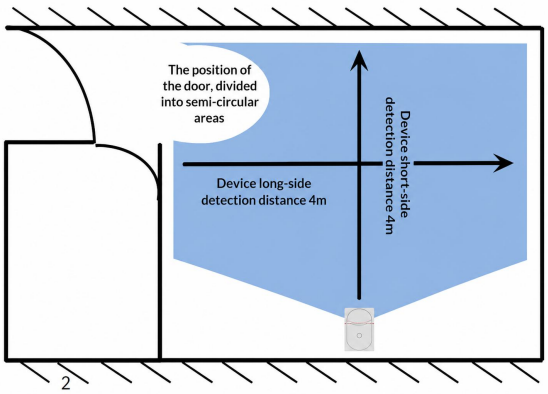
Note: The enclosure is shared across multiple product models. Therefore, features such as the speaker and SIM card slot may be present but are not applicable to this product.

2. Installation Method

1) Detection Range

The area enclosed by the red box has a 100° horizontal field of view and an 80° vertical field of view. The effective detection area for people counting is 4 m × 4 m



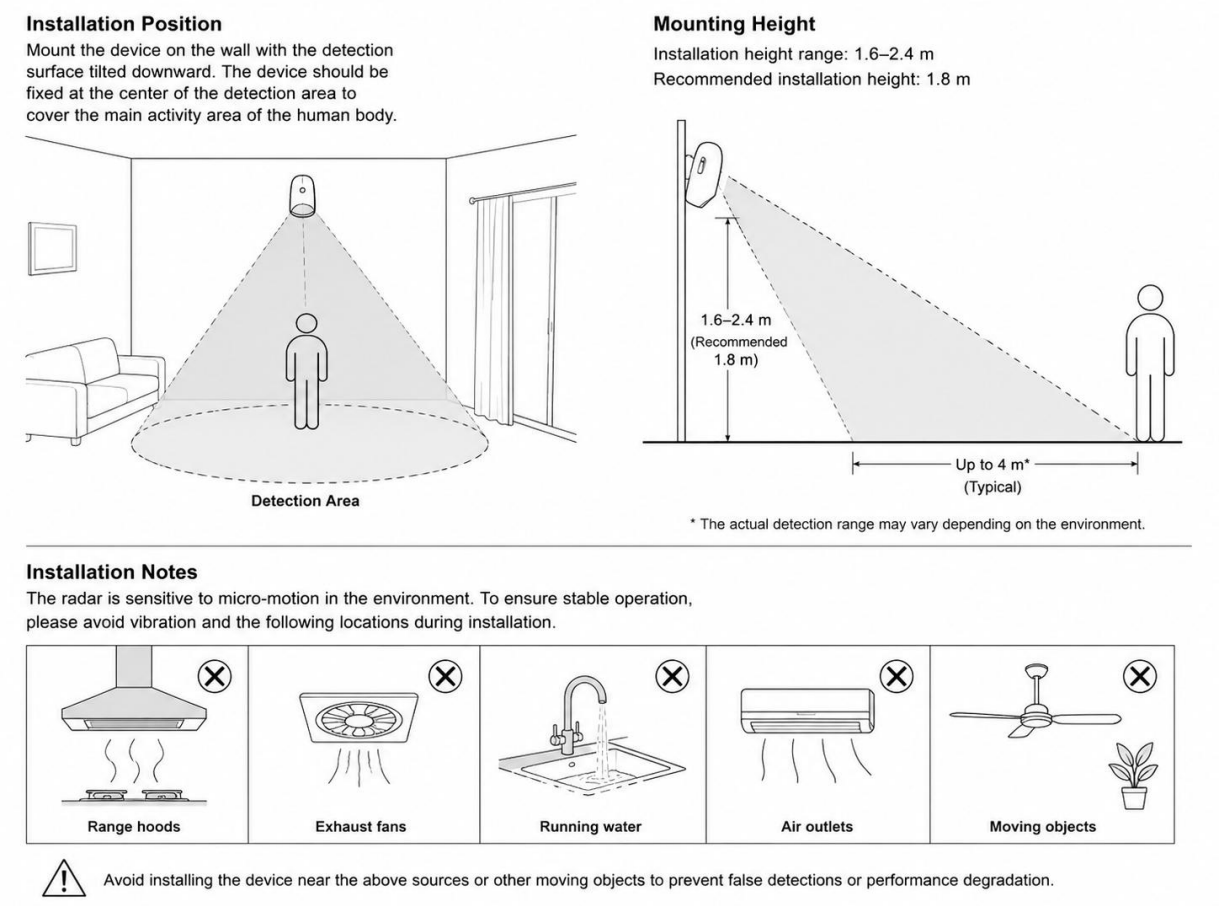


2) Recommended Installation Position

Install the device on a wall with the sensing surface tilted downward. The recommended installation height is 1.8 m, with an allowable installation height range of 1.6–2.4 m. Mount the device at the center of the detection area to ensure optimal coverage of the primary human activity area.

3) Installation Precautions

The radar is sensitive to slight movements within its detection area. To ensure reliable performance, avoid vibration during operation. When selecting the installation location, keep the device away from sources of interference such as range hoods, exhaust fans, running water, and air outlets. The device should also be installed away from moving objects whenever possible.



4) Installation Procedures

- Secure the mounting base to the wall with screws. Align the device with the mounting base and slide it into place until it locks securely.
- Plug the power adapter into a power outlet, then connect the device's USB power cable to the adapter.
- Power on the device, configure the network settings, and connect it to the server.

5) Network Configuration（Wi-Fi）

- Server Configuration

After the device is powered on, it starts automatically. Press and hold the button for 10 seconds to enter Server Configuration mode. For detailed instructions, refer to the *Side-Mounted People Counting Sensor Quick Start Guide.*

Open the Wi-Fi settings on your smartphone, search for the device hotspot, and connect to the hotspot with the "RadarConfig" prefix.

Once connected, the browser will automatically open the Server Configuration web page, where you can configure the server parameters.

- Wi-Fi Configuration

To connect the device to a Wi-Fi network, press and hold the button for 5 seconds until the red LED indicator starts flashing. Then use the Android configuration application Network Test (Android demo source code is available) to complete the network setup.

- Tap CHOOSE BLUETOOTH to scan for nearby Bluetooth devices, then select Radar_BLE.
- Tap CHOOSE SSID to select a Wi-Fi network. Only 2.4 GHz Wi-Fi networks are supported.
- Tap START CONFIGURING NETWORK to begin the Wi-Fi configuration process.

6) Device Verification/Performance Test

After the device has successfully connected to the network, verify its functionality by following the instructions in the *Side-Mounted People Counting Sensor Quick Start Guide*.

3. Product Operation

- Device Operation

  The device reports real-time 2D coordinates of detected people based on their movement, as well as the real-time people count.

- Device Configuration

On the configuration, configure the following parameters:

- Installation height (distance from the device to the floor)
- Detection area
- Label Area (entry/exit area)

For detailed configuration instructions, refer to the *Side-Mounted People Counting Sensor Quick Start Guide*.

4. Product Parameters

Model:	RS1X-W
Input:	5V ⎓ 1A
Wireless Connectivity:	2.4G GHz Wi-Fi
Radar Frequency:	60GHz
Operating Temperature:	-10℃ ~ +60℃
Operating Humidity:	0 ~ 95% RH，non-condensing
Power Adapter Output:	5V ⎓ 1A
Power Adapter Input:	EU: 220V—240V～50Hz 0.6A CN: 180V — 240V～50/60Hz 0.6A

5. Description of Status Indicator

Indicator lamp states	**Device Status**
The red indicator light flashes, alternating on/off every 500ms (turns off after 90s timeout)	Matching network for the device
No indicator light is on	Normal state/No-button state
The red indicator light stays on	The device is disconnected

6. Names and content of hazardous substances in product

	Hazardous substances					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr(VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
PCB components	○	○	○	○	○	○
Plastic parts	○	○	○	○	○	○
Metal parts	○	○	○	○	○	○

Loudspeaker	○	○	○	○	○	○
AC adapter	○	○	○	○	○	○

This sheet is prepared pursuant to SJ/T 11364.

○ indicates that the content of the hazardous substance in all homogeneous materials of the component complies with the limits set forth in GB/T26572.

× indicates that the content of the hazardous substance in at least one of the homogeneous materials of the component is beyond the limit set forth in GB/T26572.



7. After-Sales Service

The after-sales warranty services of repair, replacement and refund for this product is strictly implemented according to the *Law of the People's Republic of China on the Protection of Consumer Rights* and *Interests and the Product Quality Law of the People's Republic of China*, with the following service contents:

Warranty Policy

Within the warranty period, you can enjoy free repair, replacement and refund services as stated herein, and the repair, replacement and refund service will be provided according to original invoices.

Service Type	Service Policy
Return	Returns for poor product quality within 7 days from the day following the date of receipt
Replacement	Replacements within 15 days for poor product quality from the day following the date of receipt.
Repair	Repairs within 1 year for poor product quality from the day following the date of receipt.

Friendly Reminder: Due to the need to use packaging boxes for safe transportation of the product, it is recommended to keep the packaging box for at least 30 days from the date of receipt.

8. Performance Breakdowns

Name	Performance breakdowns
People Counting Radar RS1X-W	1、Surface damage due to structure or material factors 2、Indicator lamp is not working 3、Failure of network connection button 4、Human presence detection failed

9. Non-Warranty Clauses

- Unauthorized repairs, misuse, collisions, negligence, abuse, liquid ingress, accidents, alterations, incorrect use of non-original accessories, or removal/modification of labels and anti-counterfeiting marks.
- Performance faults after the expiration of the warranty period.
- Damage caused by force majeure.
- Performance faults not listed in the Performance Breakdowns.
- Performance faults of the product and its accessories as listed in the Performance Breakdowns but caused by human factors.