# Elderly Care System

## Aerosense Wavve Kit

# Contents

# Important

Please read this User Manual, the User Agreement, and the Privacy Policy on the Aerosense Hub APP carefully before using the device or the service we provide. Failure to follow the instructions may seriously affect the performance of the product, or even cause damages.

# Warnings

1. The Aerosense complies with the relevant standards of electromagnetic compatibility. If you have medical concerns, please consult your doctor before using the product.

2. Always use the cables and power adapter provided within the package. Otherwise it may not function properly or even cause damage to the product due to insufficient or excess power supply.

3. Do not attempt to repair, disassemble, or modify the product without authorization.

4. The device is not water resistant. Please avoid water and other liquid.

5. This product is NOT a toy. Keep this product and accessories out of children's reach.
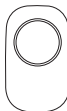
# Wavve Hub and Accessories

Wavve Hub x 1
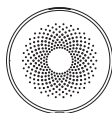
Indoor Siren x 1

Door Sensor x 1

SOS Button x 1
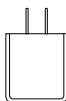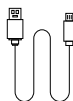
## Wavve Hub

Package List

Wavve Hub x 1

Mount x 1

Power Adapter x 1

USB Cable x 1
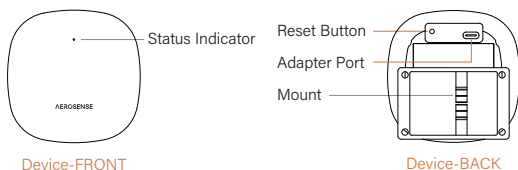
Screw with Spring x 1

User Manual x 1

Nail x 4

Sticker x 2

## Appearance

Status Indicator

Device-FRONT

Reset Button

Adapter Port

Mount

Device-BACK

## Status Indicator

| Blue Light (flashing) | Device in setup mode. |
|---|---|
| Blue Light (constant) | Configuration is successful and the device is working properly. |
| Red Light (constant) | Device disconnected from the server or the Wi-Fi network. |
| Light Off | Once the Aerosense is successfully set up, the indicator will be blue for 30 seconds and then automatically turned off. The user can press the Reset button to wake up the indicator. |

## Product Parameters

| Radar type | FMCW |
|---|---|
| Frequency band | 24GHz ISM Band |
| Effective Detection Range | 0.5-1.5m (1.6-5ft) |
| Communication Interface | 2.4G Wi-Fi/Bluetooth 5/Zigbee 3.0 |
| Voltage Rating | DC 5V/0.6A Max |
| Extended Accessories | Up to 30 accessories |
| Operating Temperature | -10-+50℃ (14-122°F) |
| Power Consumption | 2W |
| Dimensions | 83x83x58 (mm)/3.3x3.3x2.3 (in) |

## Product Installation and Configuration

Tips:

1. Where and how to install the device are especially important. Improper installation may severely affect user experience. Be sure to follow the instructions for the best performance.

2. The Wavve Hub supports ONLY the 2.4GHz wireless networks. Please install it in a place where the Wi-Fi network signal is stable.

3. The Wavve Hub App supports iOS 13.0, Android 6 and above.

## A. Where to install the Wavve hub?

It is recommended to install the device in the bedroom, **right above the headboard and where the user to be monitored usually sleeps. Mount it on the wall, about 0.8-1.2 meters (2.6-3.9ft) away from the mattress**. The FRONT face of the device must aim directly at the user's chest, otherwise the result may not be accurate. The device is more accurate when there is only one user within the effective field of view.
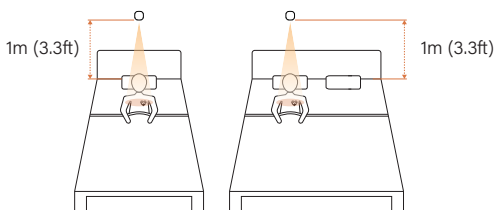


1m (3.3ft)  |  1m (3.3ft)

✳ It is recommended to install it about 1m (3.3ft) away from the mattress.

## B. Secure the mount.

Find a proper location to install the device. Please use the sticker and the nails to secure the mount on the wall. Please make sure the mount is horizontal and the arrow points up.

Please make sure the mount is horizontal and the arrow points up.
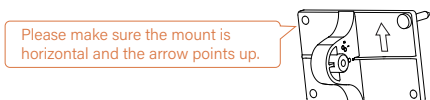
## C. Device assembly.

Fix the device to the mount using the screw with spring. Check whether the status indicator is on the top. If not, you may need to flip the mount.

The status indicator must be on the top.

ΛEROSENSE

## D. Adjust the device angle so that it aims directly at the chest of the user.

For the best performance, please aim the device directly at the user's chest whilst he or she normally sleeps. To adjust the angle, please hold the device and push it to the right whilst tilting the device up or down to adjust the angle. If the device is installed around 0.8-1.2m (2.6-3.9ft), it is usually recommended to tilt the device at STOP1. Once the desired stop is reached, the user will be able to feel the locating pin locked in place.
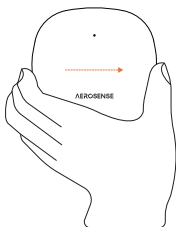


Push the device to the right and tilt to adjust the angle.
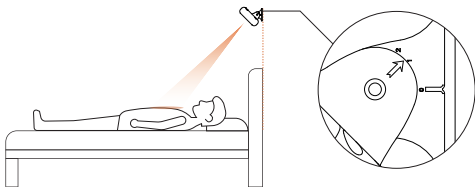


Adjust the angle so that the device is aiming directly at the chest of the user whilst the user is in his normal position whilst sleep.

## E. Device configuration.

1. Download the Aerosense Hub App that is available in iOS App Store or Google Play.



Scan the code to download the App.

2. Power on the device, and the status indicator will flash blue.

3. Follow the steps in the APP to complete device configuration.

4. When the device is properly setup, the status indicator will be blue for about 30 seconds before automatically turned off. If it is red, press and hold the Reset button for 3-5 seconds until the status indicator flashes blue. Repeat the configuration steps.

5. When you have successfully set up the device, it is recommended to test its performance by checking the real-time heart and respiratory rates readings that are available in the APP. When testing it, please lie in bed on your back, in the exact location where the user usually sleeps. Avoid any movements and do not speak. Do not have anyone else around the bed. The readings should be stable in about 1 min. If you find the results inaccurate, it is more likely that the device is not installed correctly and it is not aiming at your chest. In this case, it is recommended to adjust the angle or the height of the device or where you lie in the bed.
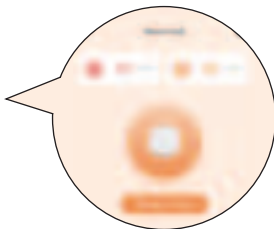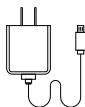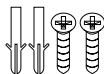
## Indoor Siren

### Package List
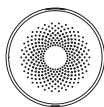
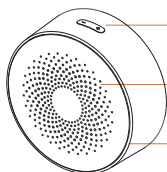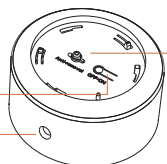Indoor Siren x 1

Power Adapter x 1

Screw with Wall Plugs x 2

Sticker x 1

Volume Button

Buzzer

Status Indicator

Tamper Switch
* The alarm will be triggered if the device is damaged or removed by accident or on purpose.

OFF/ON Button

Adapter Port

## Status Indicator

| Light on for 3s (beeps twice) | Power on/off |
|---|---|
| Light flashing | Device in setup mode |
| Light flash to off | Unsuccessful setup, Pleasetry it again. |
| Light on for 5s and off | Configuration is successful |

## Product Parameters

| Communication Interface | 2.4G Zigbee |
|---|---|
| Voltage Rating | DC 12V |
| Volume | 100dB |
| Transmitting Distance | ≤80m (≤262.5ft) (open area) |
| Operating Temperature | -10-+55°C (14-131°F) |
| Dimensions | Φ80x35mm (Φ3.1x1.4in) |

## Configuration

1. Plug in the Siren. The LED will be on for 3s and it will beep twice.

2. In the Aerosense Hub App, click **Add a new device** in **Device** page, and select **Indoor Siren**.

3. Follow the steps in the App to complete the device configuration.

## Installation

1. Please install the product on an indoor tile, a gypsum wall, or painted wood. The product is NOT water-resistant.

2. Reinforced concrete may compromise the effective range of the device, and the transmitting distance may be less than 80m (263ft).
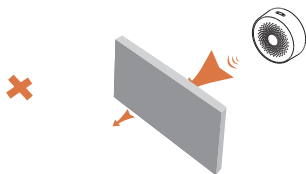
3. Before you install the device, it is necessary to check the Zigbee connection. Plug the device where you intend to install it. Check the status of this device in the Aerosense Hub APP. If the device is offline, please install the device in another location.

4. Rotate the mounting base counterclockwise to remove it from the product.



Unlock ⇐
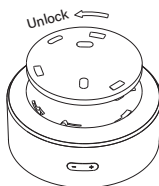
5. Fix the mounting base on the wall using the expansion tube and screws or a 3M sticker. Rotate the product clockwise onto the mounting base to lock it back on. If you use only the 3M sticker, please make sure that the wall is smooth and clean.



Lock

6. Connect the siren to the power adapter.
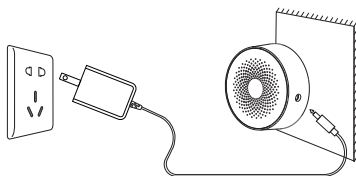
# Door Sensor

## Package List



Reset Button

Status Indicator

Matching Mark

Magnet

Main Body

Door Sensor x 1



Tamper Switch

* The alarm will be triggered if the device is damaged or removed by accident or on purpose.

## Product Parameters

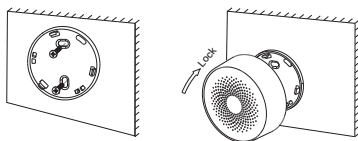| Communication Interface | 2.4G Zigbee |
|---|---|
| Voltage Rating | DC3V (CR2032 battery) |
| Transmitting Distance | ≤80m (≤262.5ft) (open area) |
| Operating Temperature | -10-+55℃ (14-131°F) |
| Dimensions | Mainbody: 52.6x26.5x13.8 (mm) 2.1x1.0x0.5 (in) Magnet: 25.5x12.5x13.0 (mm) 1.0x0.5x0.5 (in) |

## Configuration

1. Power on the product.

Slide down to open the rear cover.

Remove the battery insulation film to power on the product.
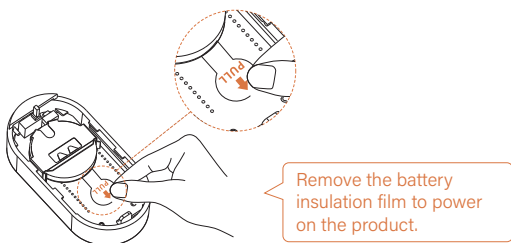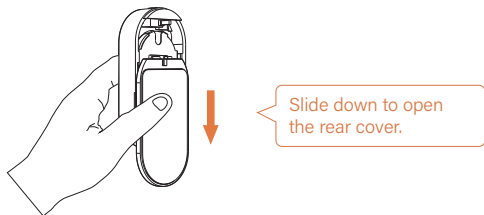
2. In the Aerosense Hub App, Click **Add a new device** in **Device** page, and select **Door Sensor**.

3. Follow the steps in the App to complete the device configuration.

## Installation

Tips:

* Please avoid other magnetic materials when installing the door sensor.

1. Please make sure the door sensor is installed where with stable Zigbee wireless connection to the Wavve Hub. In the Aerosense Hub App, click **Device** page and view the status of the device, if the device is offline, Please adjust to another location to install.

2. Please clean the surface where to stick the sensor. It adheres only on smooth and clean surface.

3. Align the mark that are on the surface of the sensor and the magnet. The distance between the marks must be kept at most 10mm (0.39in) apart.



Matching Mark

<10mm (0.39in)

# SOS Button

## Package List



Reset Button

SOS Button

Status Indicator

SOS Button x 1

Neck Strap x 1

Reset Pin x 1

## Product Parameters

| Communication Interface | 2.4G Zigbee |
|---|---|
| Voltage Rating | DC3V (CR2032 battery) |
| Transmitting Distance | ≤80m (≤262.5ft) (open area) |
| Operating Temperature | -10-+50°C (14-122°F) |
| Dimensions | 57.5x34.5x13.0 (mm)<br>2.3x1.4x0.5 (in) |

## Power-On and Configuration

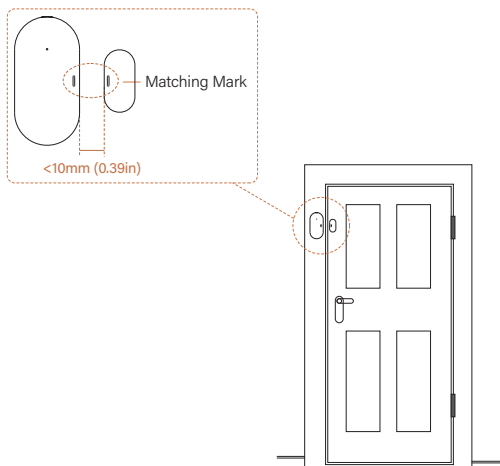1. Remove the battery insulation film to power on the product.
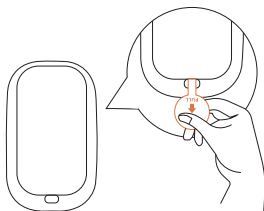
2. In the Aerosense Hub App, click **Add a new device** in **Device** page, and select **SOS Button**.

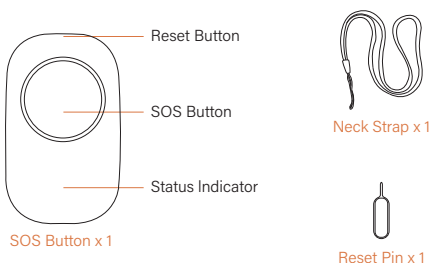3. Follow the steps in the App to complete the device configuration.

## Move the Device or Add Accessories

### To move the Wavve Hub :

1. Power off the device and remove the device and the mount.

2. Secure the mount and the device in the new location.

3. If the new location has the same Wi-Fi as the original one, the Wavve Hub will work automatically once powered back on; otherwise you will need to press and hold the Reset button for 3-5 seconds until the blue light flashes, and repeat the device configuration steps.

### To move the accessories :

1. Power off and remove the sensor.

2. Install the sensor in the new location.

3. Check the Zigbee connection in the Aerosense Hub APP.

### To add new accessories :

1. If you want to add new accessories, please contact support@ax-end.com or your supplier to place an order.

2. Install the new sensor as directed.

3. Add the new sensor to the Aerosense Hub APP as directed.

## Warranty and Service

When a new or certified refurbished device is purchased, we warrant the device against defects in materials and workmanship under ordinary consumer use for 1 year from the date of original purchase. The limited warranty applies only to hardware components of the devices that are not subjected to accidents, misuse, neglect, damages of any kind, alteration, repair, or commercial use. User can reach us through support@ax-end. com or visit us at www.ax-end.com.

## Disclaimer

1. This product is not a medical device and does not guarantee 100% accuracy.

2. If the device is not installed properly, it will affect the accuracy and may result in missed or false alerts.

3. The Wavve Hub may be less sensitive if the user is covered by a thick quilt, lies on his side or stomach.

4. The Wavve Hub will pick up all the vital signals within its field of view. Therefore, pets and individuals other than the user who are present around the user may cause missed or false alert.

5. Check the battery of accessories regularly. If the battery is low, replace with new one.

# MAKING  RADAR  SIMPLER

**AXEND**

AxEnd, Inc.

www.ax-end.com

support@ax-end.com

Redondo Beach, California, US

FCC Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .This equipment should be installed and operated with minimum distance 20cm between the radiator& your body .

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.