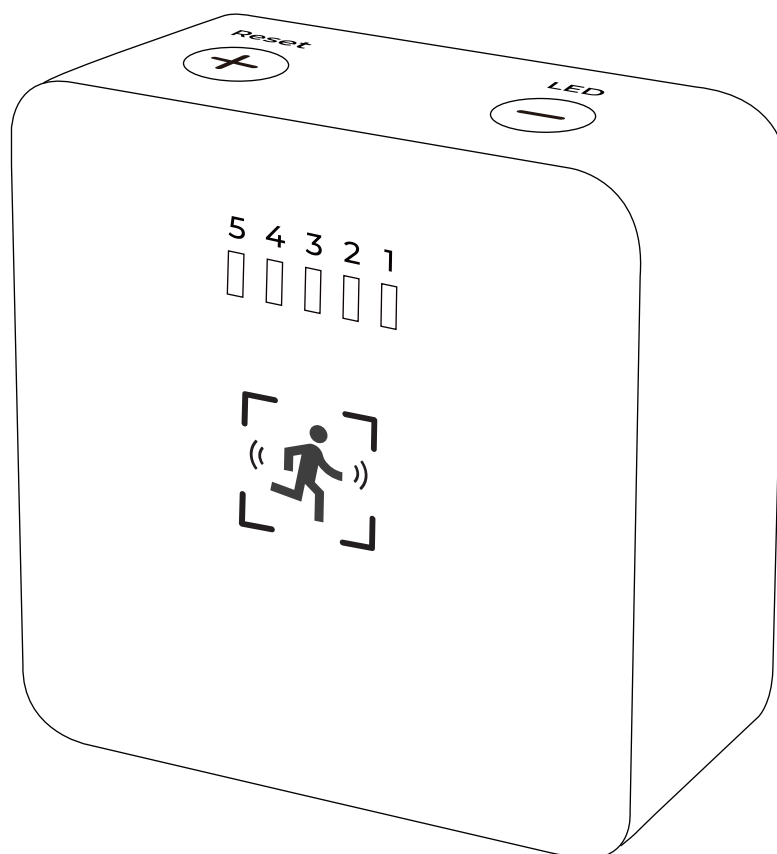


Smart Motion Sensor R1 (Outdoor & Indoor)

User Manual



THIRD REALITY

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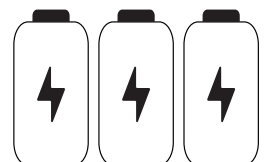
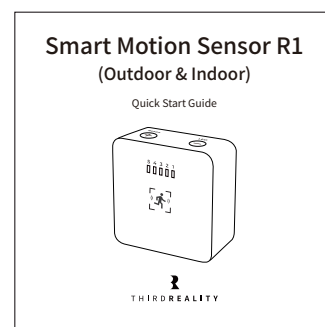
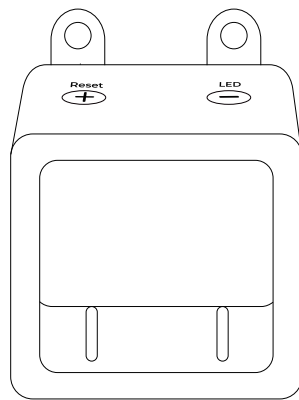
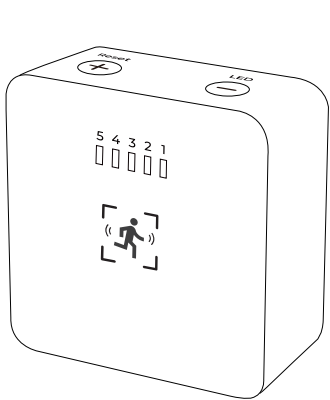
Product Description

The THIRDREALITY Motion Sensor R1 is a versatile Zigbee motion sensor designed for smart home security and automation. It works seamlessly with Zigbee hubs such as Echo devices with built-in Zigbee hubs, Smart-Things, and Home Assistant, making it easy to integrate into existing systems.

With an adjustable detection range from 1.5 to 9.5 meters, the sensor can be tailored for different spaces such as living rooms, hallways, offices, or garages. Powered by three AA batteries, it delivers up to 3 years of typical battery life, reducing the need for frequent maintenance.

When paired with compatible platforms, users can create automations such as turning on lights when motion is detected or receiving instant alerts. With the optional silicone protective casing, the Motion Sensor R1 can also be used in covered outdoor areas, such as porches or entryways, where Zigbee signal coverage is available.

What's in the Box



Smart Motion Sensor R1 × 1

Silicone Casing × 1

Quick Start Guide × 1

AA Battery × 3

Specifications

Name	Smart Motion Sensor R1
Model	3RSMR01067Z
Dimensions	2.56 inch × 1.18 inch × 2.56 inch
Operating Voltage	DC 4.5V
Battery Type	AA battery × 3 (included)
Working Frequency	Zigbee 3.0 : 2.4GHz, Radar : 5.8GHz
Indoor	
Detection Level	5 levels adjustable (1-9.5m)
Detection target	Mainly People
Outdoor	
Detection Level	5 levels adjustable (1-9.5m)
Detection target	Mainly car

Detect Level & Range

Level	Range (m/inch)
1	1.5 / 59
2	3.5 / 138
3	5.5 / 217
4	7.5 / 295
5	9.5 / 374

Sensitivity Level Recommendations

The sensor supports five sensitivity levels (1–5), from low to high. Sensitivity can only be adjusted directly on the device.

Indoor Sensitivity

- Recommended starting point: Level 3 (default)
- If the detection range is too short: increase to Level 4–5
- If unintended triggers occur: reduce to Level 1–2

Outdoor Sensitivity (Covered Areas)

- Recommended starting point: Level 4 (to cover wider detection needs)
- If unintended triggers occur (e.g., swaying branches, pets): reduce the level
- If presence is not detected at the desired range: increase the level

When motion is detected, the LED indicator corresponding to the current sensitivity level will illuminate for 1 second.

Button functions

	Function	Procedure
Reset (+)	Reset Indication	Press and hold for 10 seconds
	Enhance sensitivity	Click once
LED (-)	En/Disable motion detect light	Press and hold for 3 seconds
	Decrease sensitivity	Click once

*The sensitivity indicator light will be reused with the status indicator light.

Setup

1. Open the battery cover on the device and remove the insulation strip to power the device.
2. When the device is powered on, the sensitivity indicator will flash rapidly and the device will enter the Zigbee pairing mode. If the sensor is not in the pairing mode, press and hold the + button for 10 seconds to factory reset the sensor.
3. Follow the instructions on the platform to add the device.

Compatible Platforms

Platform	Requirement
Amazon	Echo with built-in Zigbee hub
SmartThings	2015/2018 models, Station
Home Assistant	ZHA and Z2M with Zigbee dongle
Hubitat	With Zigbee hub
ThirdReality	Smart Hub/Smart Bridge MZ1
Homey	Homey Bridge/Pro
Aeotec	Aeotec Hub

Installation Recommendations

Indoor Installation

- Place the sensor on a stable, vibration-free surface, such as a table, shelf, or wall.
- Avoid installing near appliances that may cause slight vibrations (e.g., washing machines, dryers, or fans).
- Keep the detection area clear of large moving objects that could cause unintended triggers.
- When using multiple sensors in the same area, ensure their detection zones do not overlap.

Outdoor Installation (Covered Areas Only)

- Install the sensor in a protected outdoor location, such as under an eave, on a covered wall, or on a sheltered pole.
- Avoid direct exposure to rain, snow, or strong sunlight.
- Keep the sensor away from sources of continuous vibration, such as HVAC outdoor units or exhaust fans.
- Ensure a clear wireless path to the hub/router, as walls, trees, or other outdoor obstacles may weaken the signal.
- When installing multiple outdoor sensors, avoid overlapping detection areas to reduce false triggers.

Typical Usage Scenarios

Indoor Usage

- Hallways and Corridors: Trigger lights or automations when motion is detected.
- Living Rooms and Bedrooms: Automate lighting or devices based on presence.
- Home Offices: Control lights or equipment automatically during occupancy.
- Entry Areas: Detect motion near doors to trigger lights or send notifications.

Outdoor Usage (Covered Areas)

- Covered Porches and Entryways: Trigger outdoor lights or alerts when movement is detected.
- Garages or Carports: Monitor presence in sheltered areas with reliable wireless coverage.
- Covered Balconies or Patios: Enable lighting or automation based on detected movement.

Pairing with Third Reality

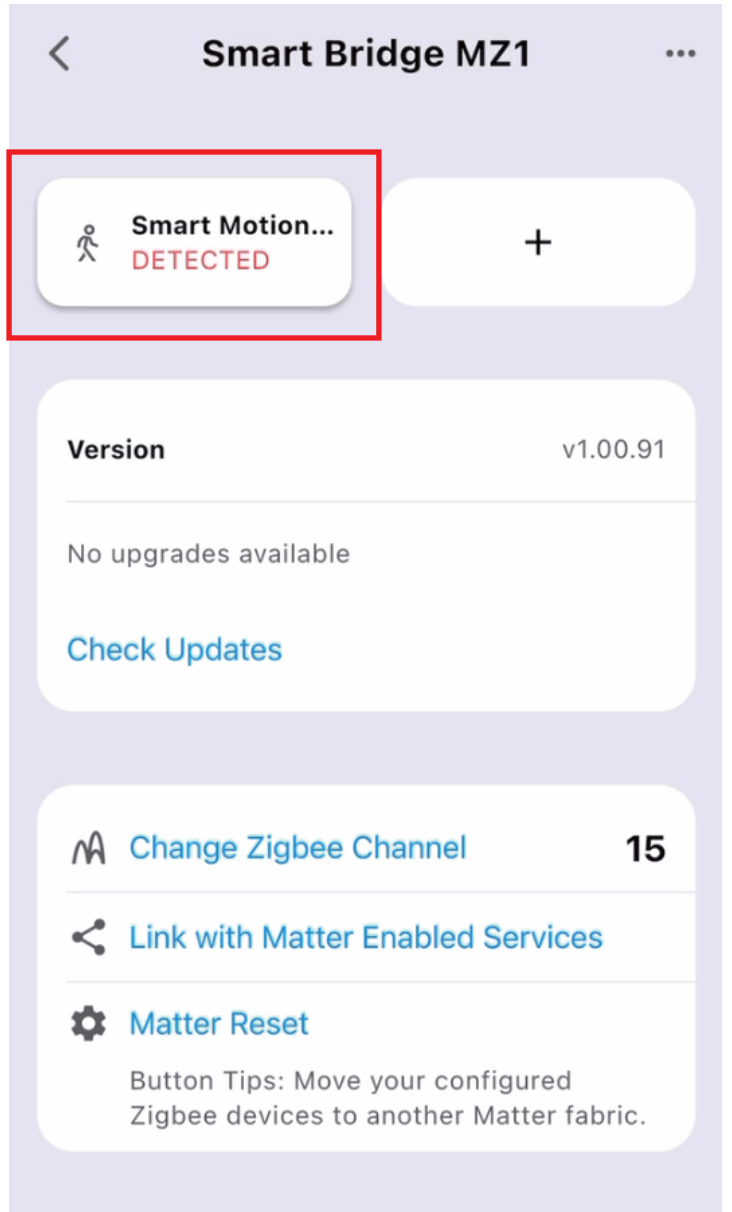
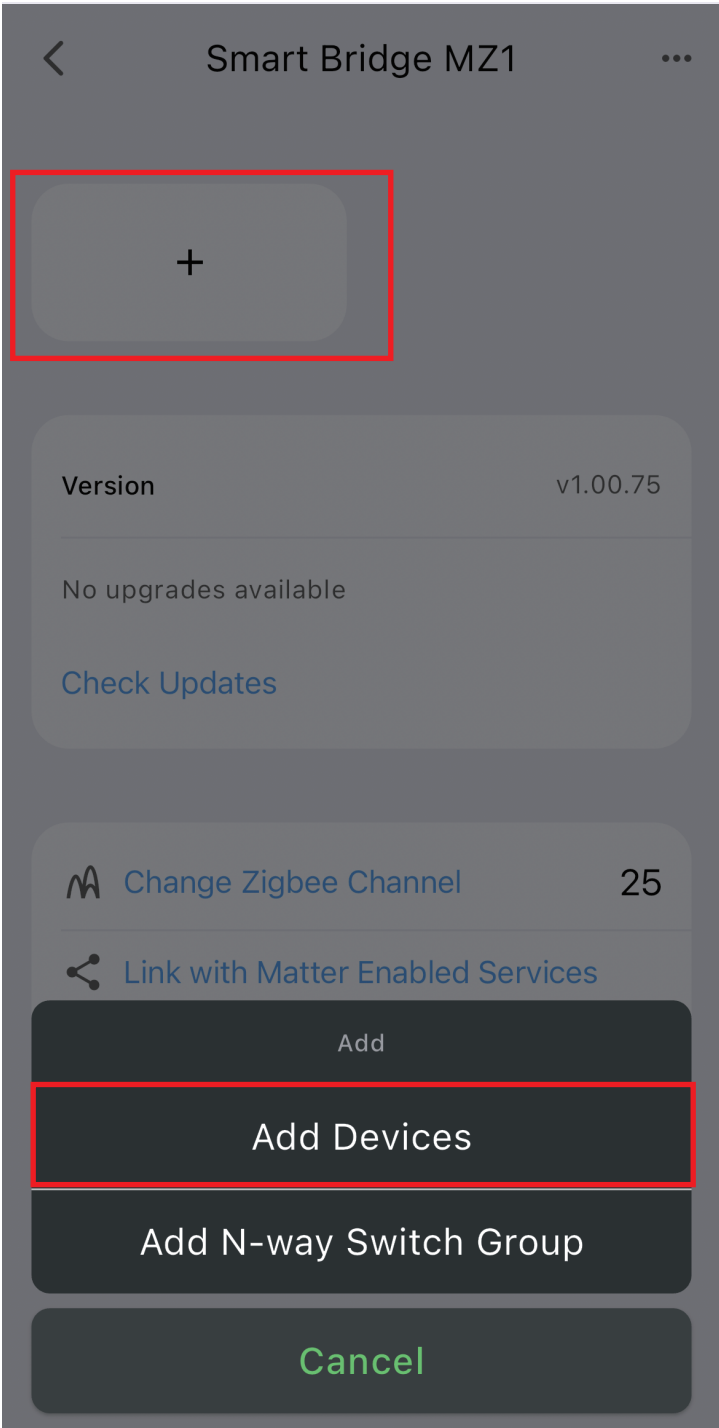
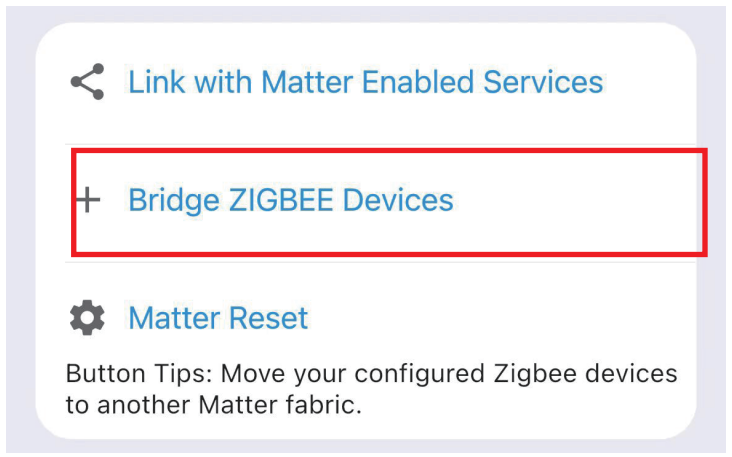
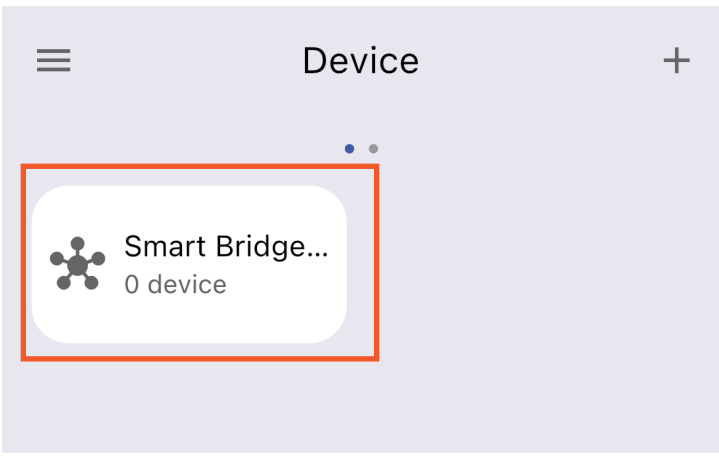
Hub: Third Reality Smart Hub

App: Third Reality App




Pairing steps:

1. Make sure the app and the firmware of the hub has been updated to the latest version.
2. Open the battery cover on the device and remove the insulation strip to power the device.
3. When the device is powered on, the sensitivity indicator will flash rapidly and the device will enter the Zigbee pairing mode. If the sensor is not in the pairing mode, press and hold the + button for 10 seconds to factory reset the sensor.
4. Open Third Reality App, go to device page, tap "+" in the up right and follow on-screen instructions to add device.
5. After the pairing is successful, tap "Complete", then back to main interface.
6. Tap "Smart Presence Sensor R1" icon on device page, you can see the details. Follow the instructions to control the sensor.



Smart Motion Sensor R1



DETECTED


Battery 94%


Version v1.00.05

No upgrades available

[Check Updates](#)

 [Change Zigbee Channel](#) 25


 [Link with Matter Enabled Services](#)


 [Matter Reset](#)

Button Tips: Move your configured Zigbee devices to another Matter fabric.

Link with Manual Setup Code or Scan the QR Code

Effective duration: 2 minutes 54 seconds

1324-192-6558 



[Done](#)

Pairing with 3R-Installer App

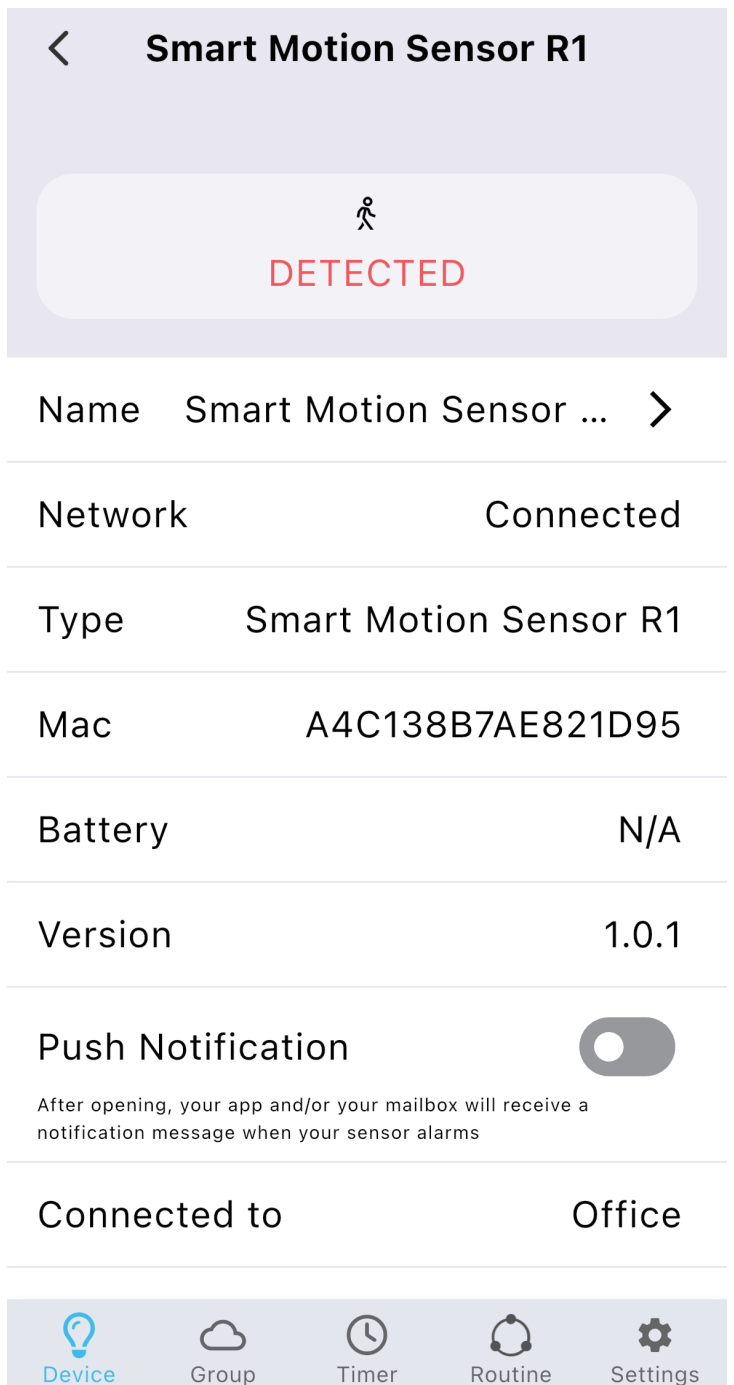
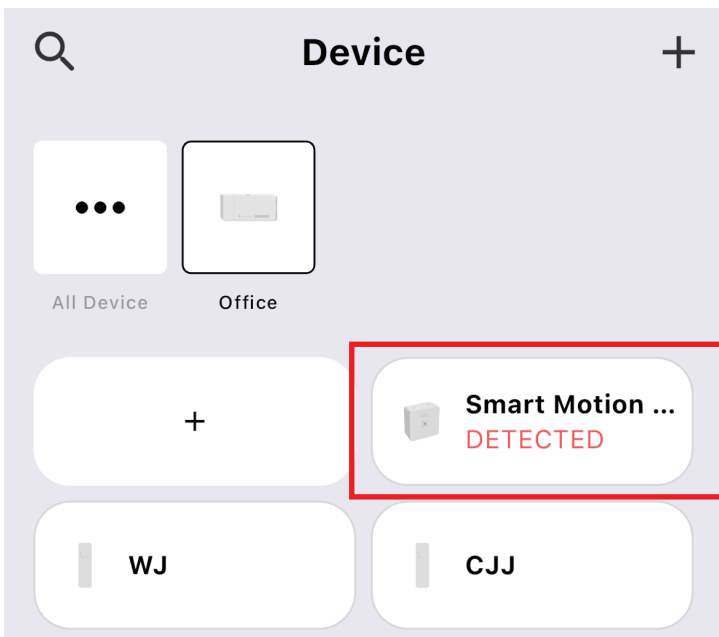
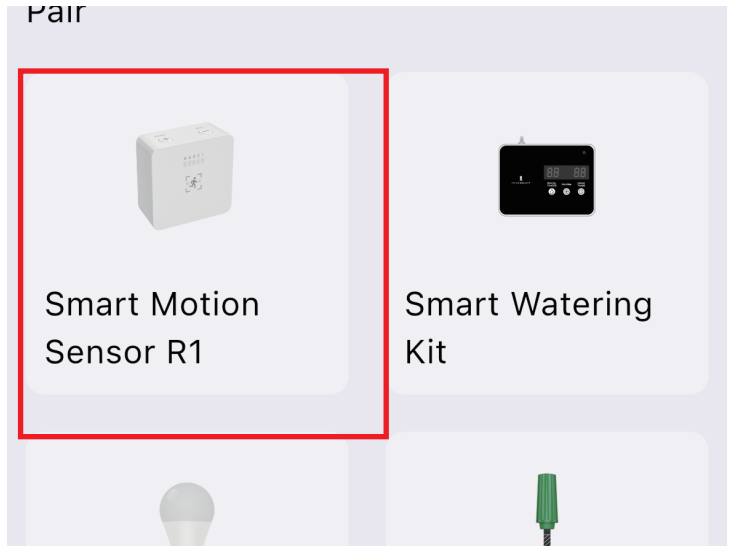
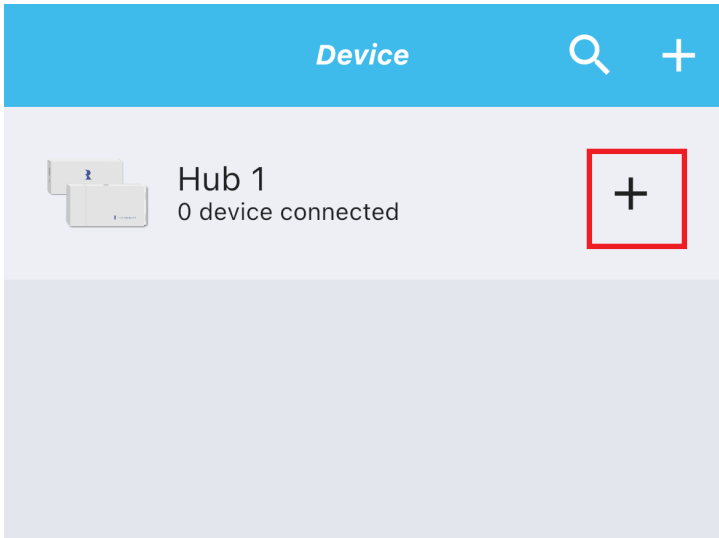
Device: Smart Bridge MZ1

App: 3R-Installer App



Pairing steps:

1. Open 3R-Installer App, Ensure your bridge is already set up within your smart home system.
2. Open the battery cover on the device and remove the insulation strip to power the device.
3. When the device is powered on, the sensitivity indicator will flash rapidly and the device will enter the Zigbee pairing mode. If the sensor is not in the pairing mode, press and hold the + button for 10 seconds to factory reset the sensor.
4. The sensor will pair with the bridge, and a new device will appear in your smart home app.
5. After the pairing is successful, tap "Complete", then back to main interface.
6. Tap "Smart Presence Sensor R1" icon on device page, you can see the details. Follow the instructions to control the sensor.



Pairing with SmartThings

App: SmartThings App

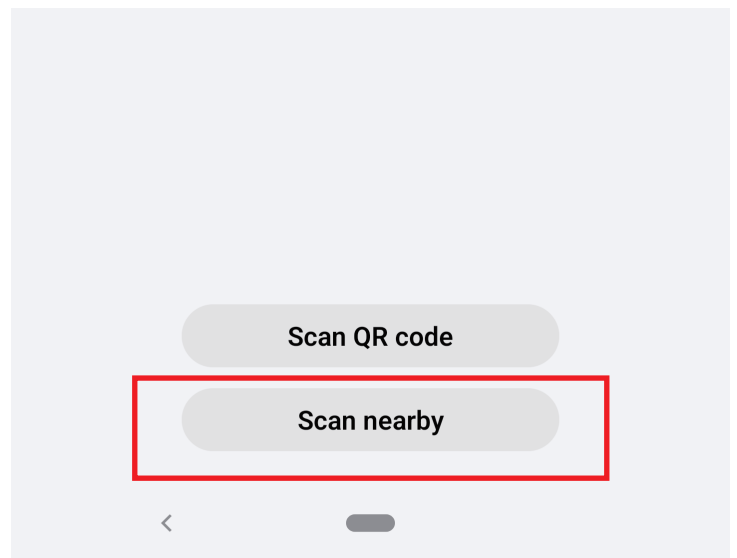
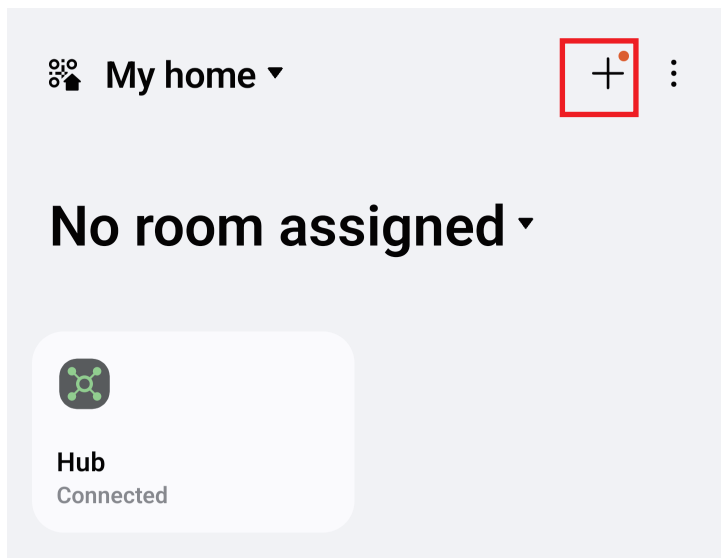
Devices: SmartThings Hub 2nd Gen(2015) and 3rd Gen(2018), Aeotec Smart Home Hub.



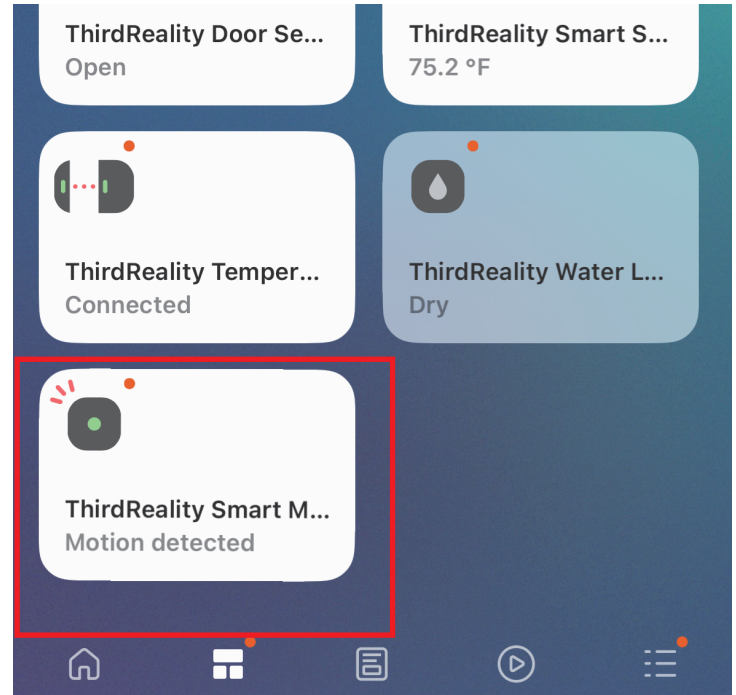
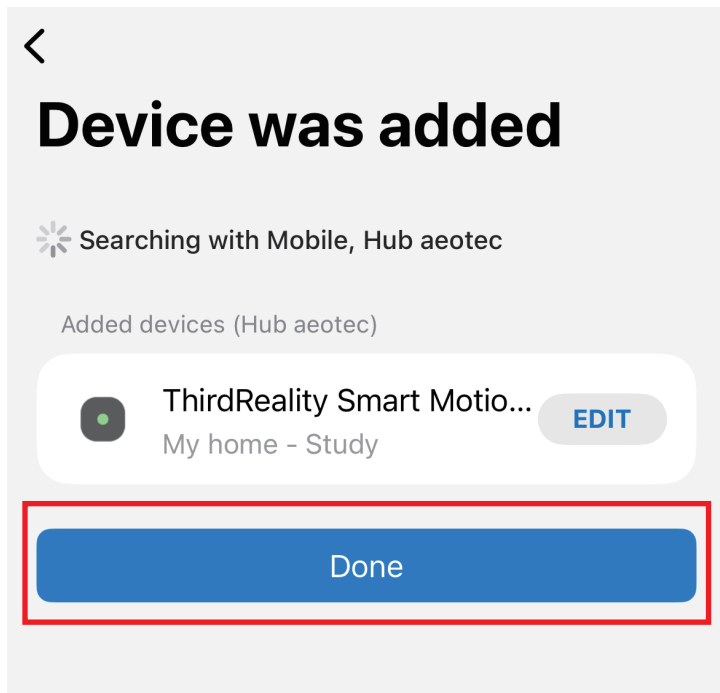
Pairing steps:

1. Before pairing, check for updates to make sure the SmartThings Hub firmware is up to date.
2. Add SmartThings drivers for ThirdReality Motion Sensor
 - Open this link in your PC browser. Log in your SmartThings Account.
<https://bestow-regional.api.smarththings.com/invite/adMKr50EXzj9>
 - Click "Enroll" -- "Available Drivers" -- "Install" to install the device driver.

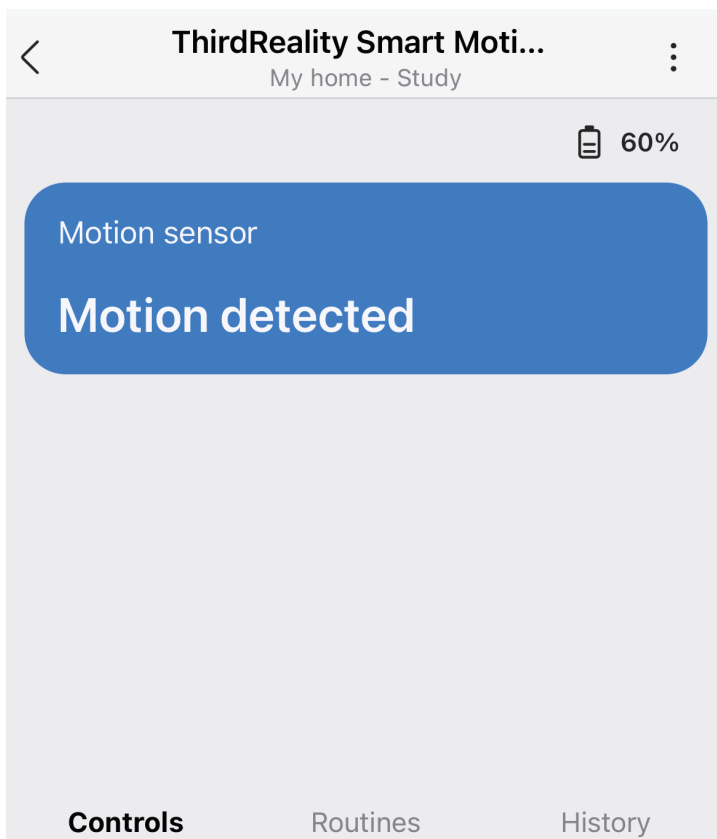
3. Open the battery cover on the device and remove the insulation strip to power the device.
4. When the device is powered on, the sensitivity indicator will flash rapidly and the device will enter the Zigbee pairing mode. If the sensor is not in the pairing mode, press and hold the + button for 10 seconds to factory reset the sensor.
5. Open your SmartThings App, tap “+” on the up right corner to ”Add device” and then tap “Scan nearby”.



6. The motion sensor will be added to your SmartThings hub in a few seconds.



7. Create routines to control connected devices.



Pairing with Amazon Alexa

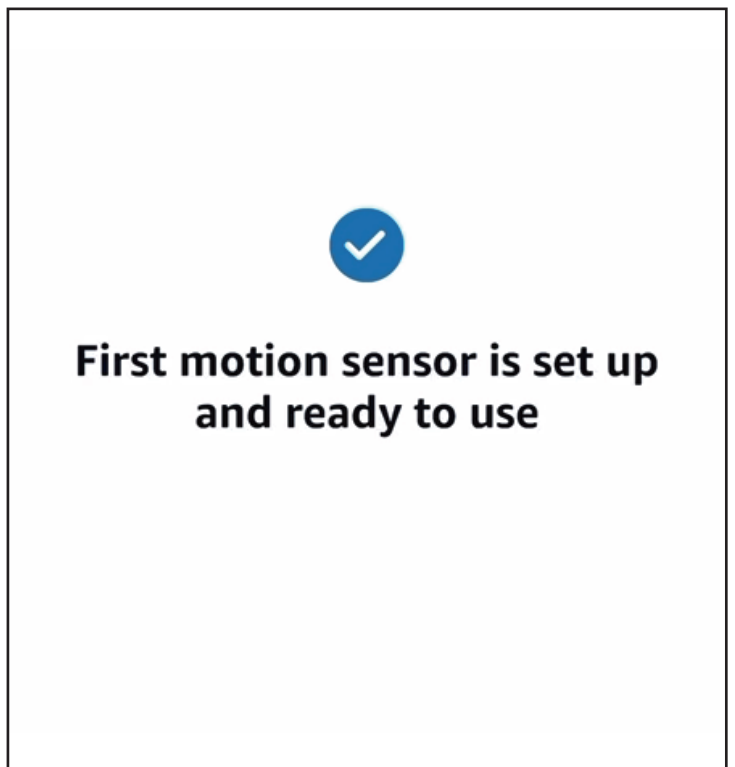
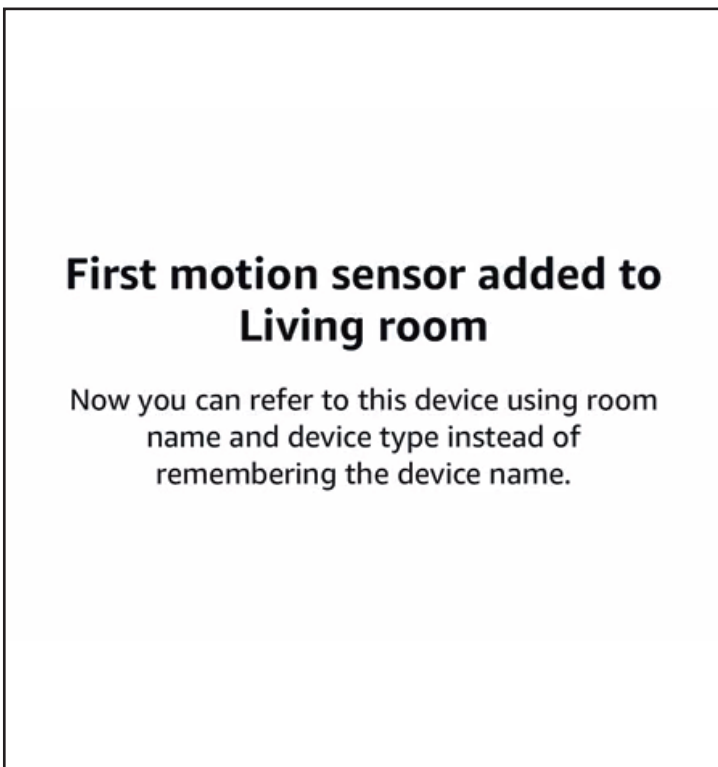
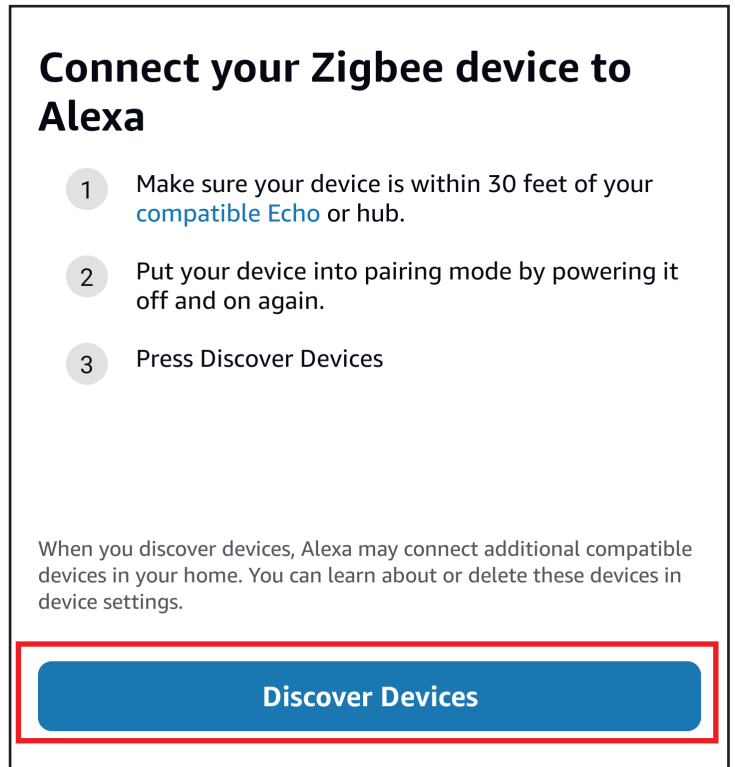
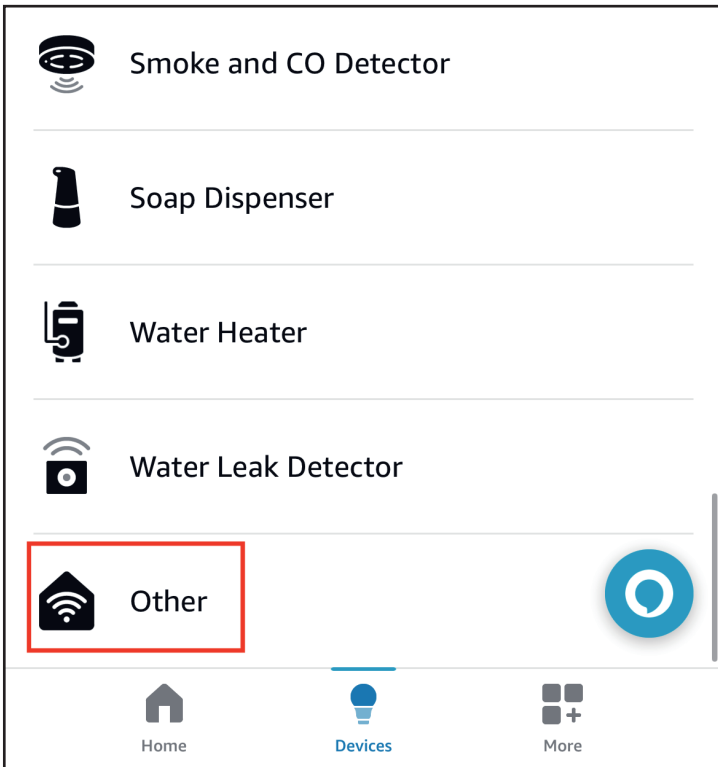
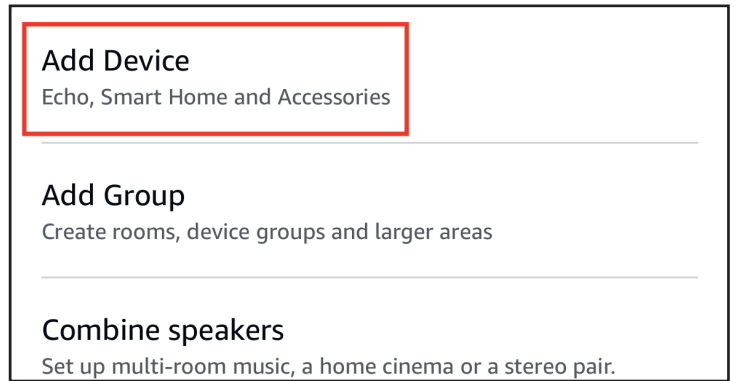
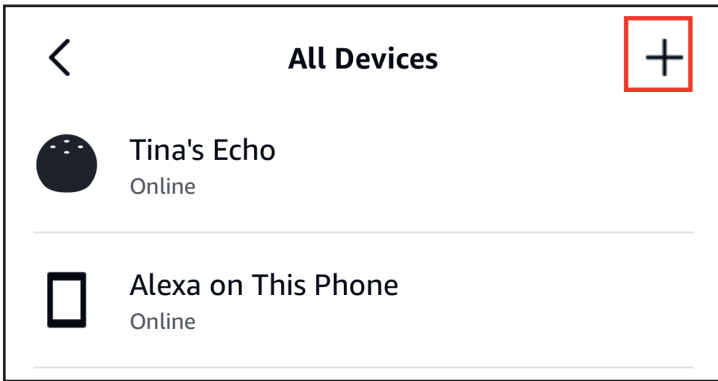
App: Amazon Alexa

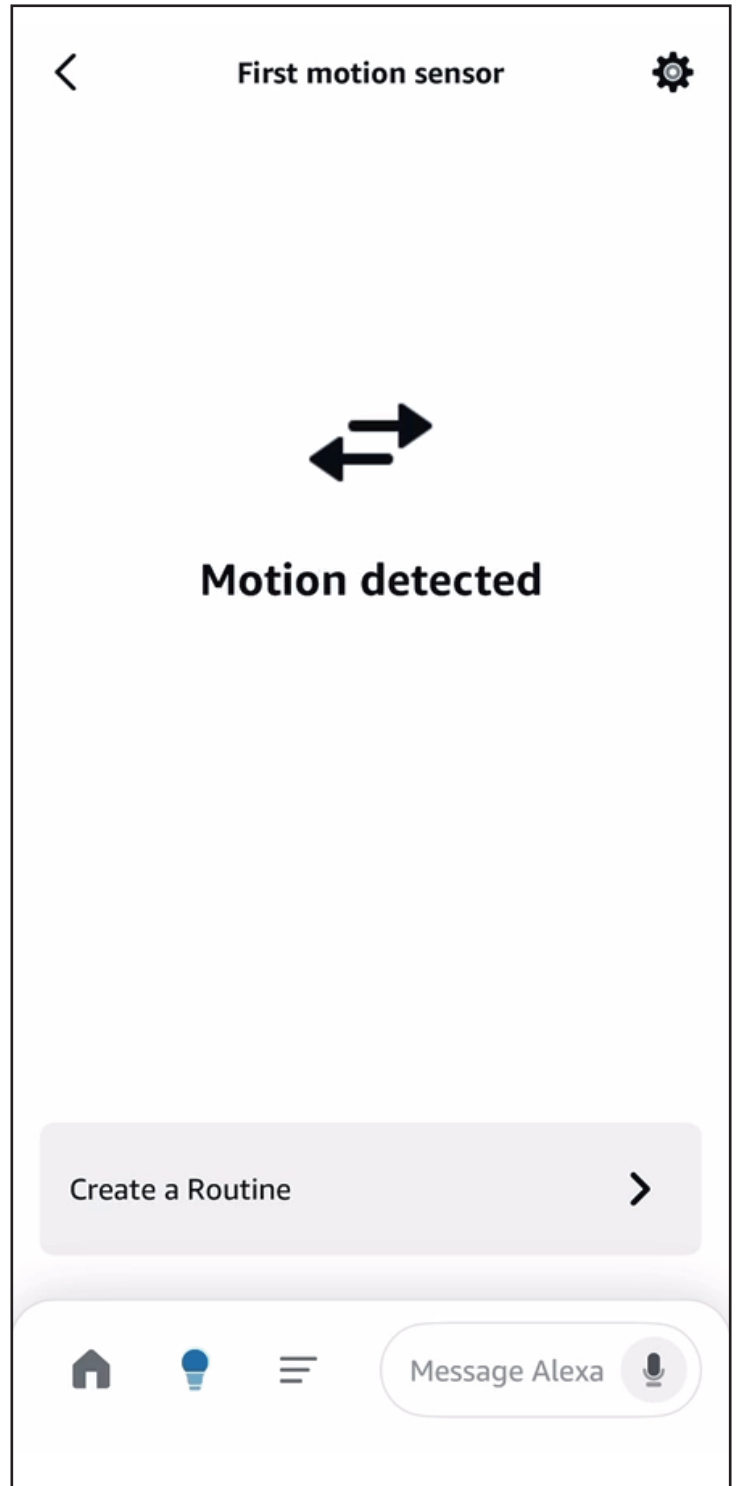
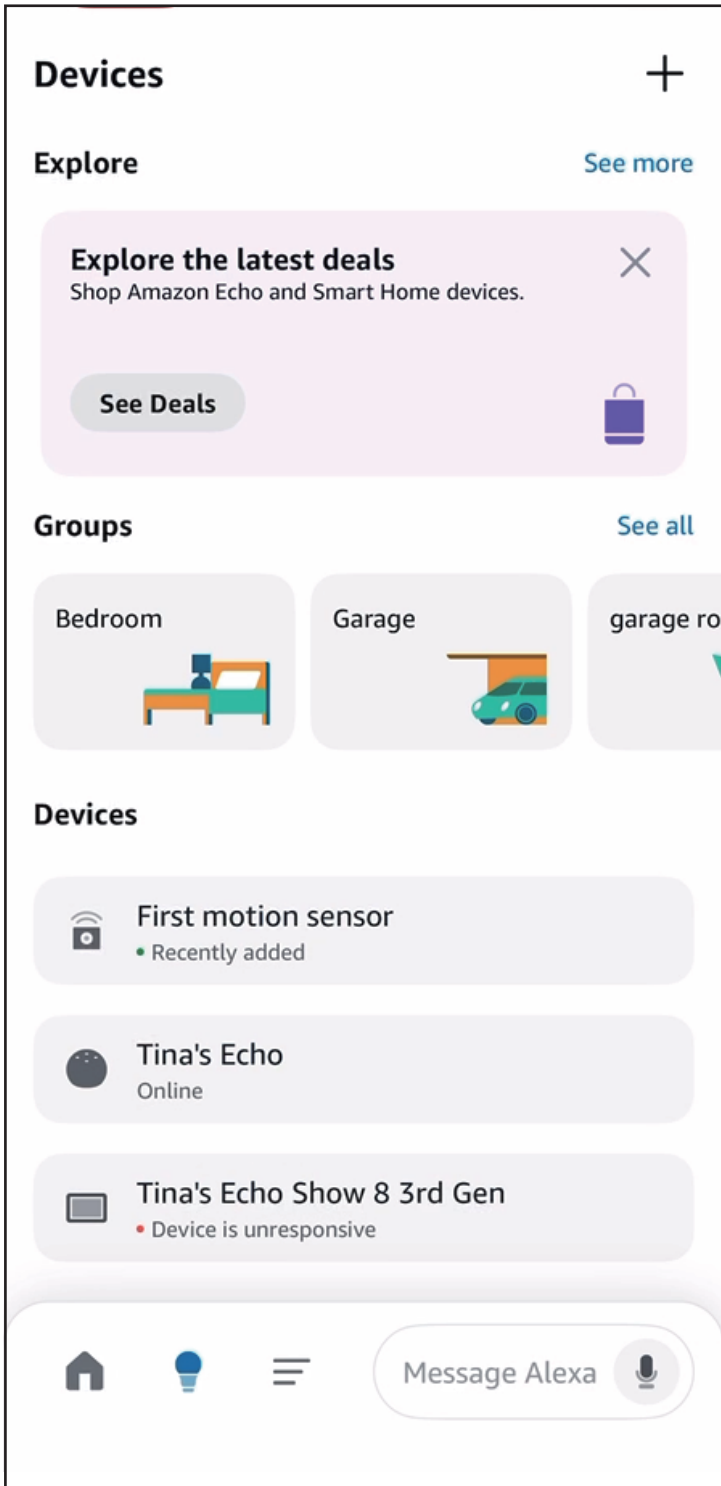
Devices: Echo speakers with built-in Zigbee hub, Echo 4th Gen, Echo Plus 1st & 2nd Gen, Echo Studio



Pairing steps:

1. Ask Alexa to check for updates before pairing.
2. Open the battery cover on the device and remove the insulation strip to power the device.
3. When the device is powered on, the sensitivity indicator will flash rapidly and the device will enter the Zigbee pairing mode. If the sensor is not in the pairing mode, press and hold the + button for 10 seconds to factory reset the sensor.
4. Tap "+" in the Alexa App, choose "Other" and "Zigbee" to add device, the sensor will be added.
5. You can create routines with the device.





Pairing with Hubitat

Website: <http://find.hubitat.com/>



Pairing steps:

1. Open the battery cover on the device and remove the insulation strip to power the device.
2. When the device is powered on, the sensitivity indicator will flash rapidly and the device will enter the Zigbee pairing mode. If the sensor is not in the pairing mode, press and hold the + button for 10 seconds to factory reset the sensor.
3. Visit your Hubitat Elevation hub device page from your web browser, select the Devices menu item from the sidebar, then select Discover Devices in the upper right.
4. Click Start Zigbee Pairing button after you select a Zigbee device type, the Start Zigbee Pairing button will put the hub in Zigbee pairing mode for 60 seconds.
5. Pairing is completed. Change the Generic Zigbee Contact Sensor(-no temp) to Generic Zigbee Motion Sensor (no temp).
6. Tap Apps, and Create New Basic Rules.

Hubitat **Devices** hubitat-c7

Compatible device list Clear Search... **+ Add device**

Disable	Label (Name)	Type	Room	Source	DNI	Status	Last Activity	
<input type="checkbox"/>	1 <small>(Advanced Zigbee CT Bulb)</small>	Advanced Zigbee CT Bulb		System	2EA3 B40ECFD298B00000		8/27/2024 10:42:35	
<input checked="" type="checkbox"/>	+++ <small>(Device)</small>	Device	huan	System	1315 282C028FFFE90901			
<input type="checkbox"/>	729ms <small>(Generic Zigbee Motion Sensor (no temp))</small>	Generic Zigbee Motion Sensor (no temp)		System	8439 282C028FFFE6379		7/29/2024 15:44:55	60
<input type="checkbox"/>	Advanced Zigbee CT Bulb	Advanced Zigbee CT Bulb		System	1AED B40ECFD32AAD0000		8/27/2024 10:42:28	
<input type="checkbox"/>	del <small>(Third Reality Smart Button)</small>	Third Reality Smart Button		System	5A05 282C028FFFE38F45		8/06/2024 13:42:54	100
<input type="checkbox"/>	Plant Watering System	Generic Zigbee Switch		System	4F31 282C028FFFE900C0		8/27/2024 10:13:02	
<input type="checkbox"/>	Smart Soil Moisture Sensor <small>(Device)</small>	Generic Zigbee Temperature/Humidity Sensor		System	952B A4C138EEDB829E73			

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Hubitat **Add device** hubitat-c7

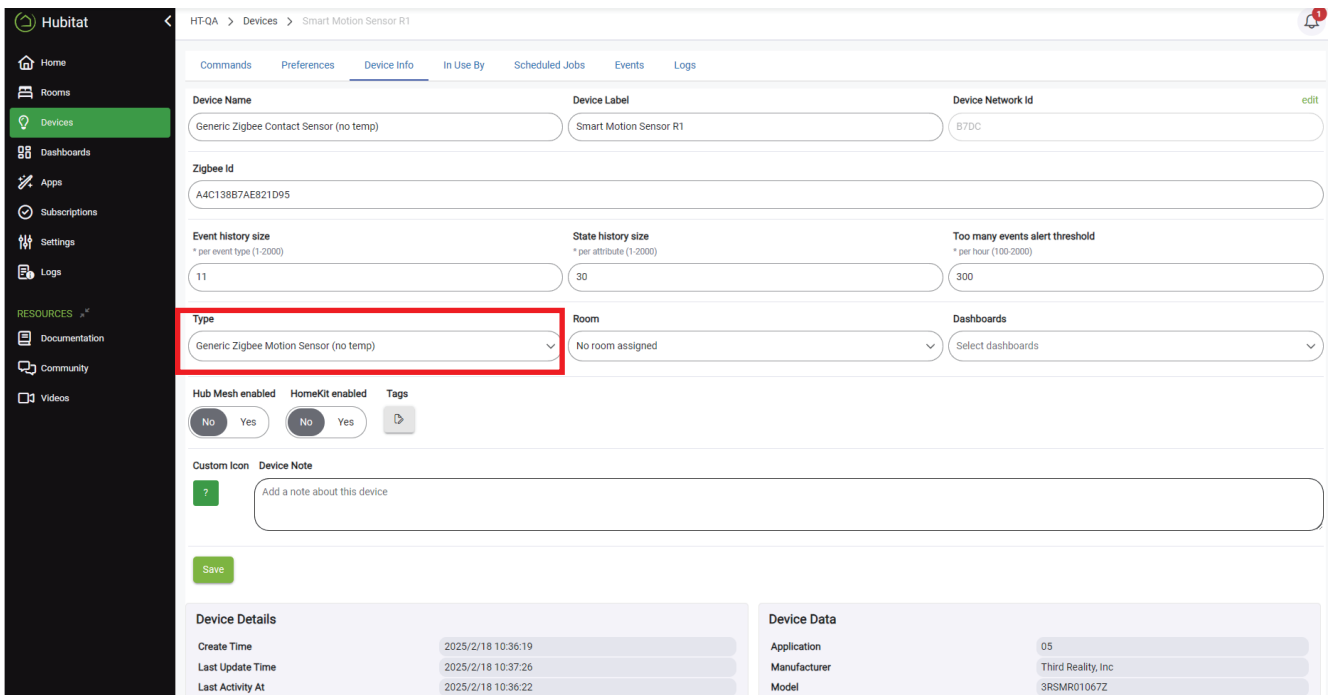
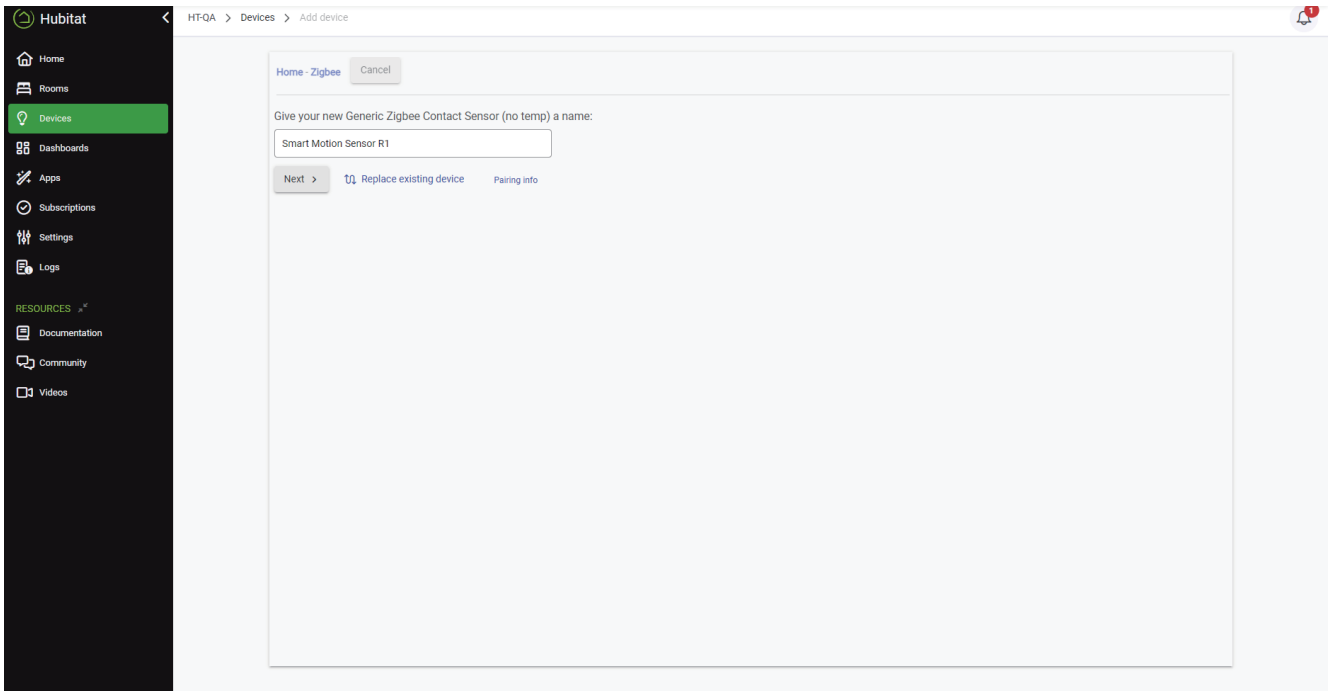
Find by device type
Bulbs, dimmers, locks, outlets, switches...

Find by brand
Aeotec, Bosch, Centralite, Dome, Ecolink...

Add device manually:

- Zigbee
- Z-Wave
- Matter
- Iris V1 Zigbee
- Virtual

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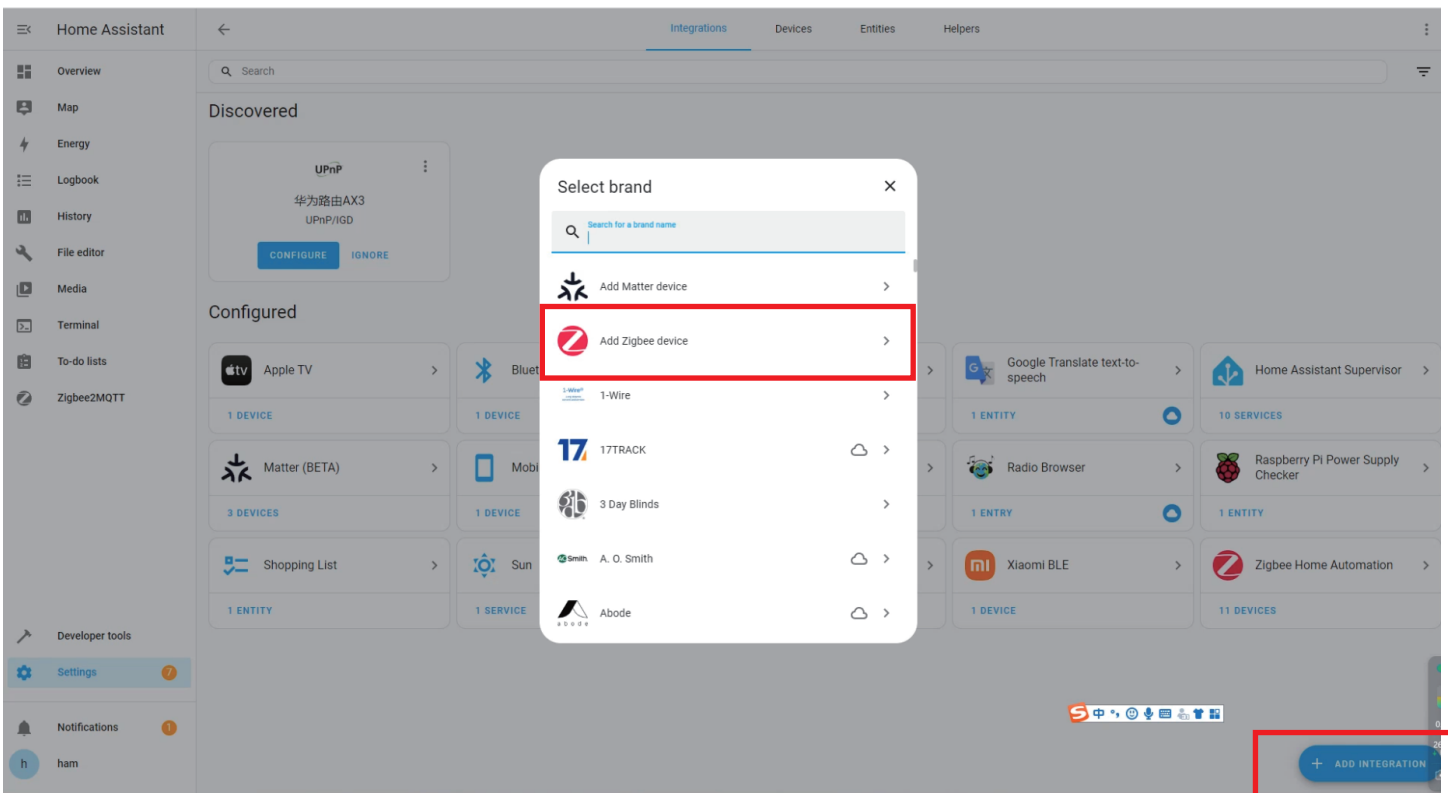
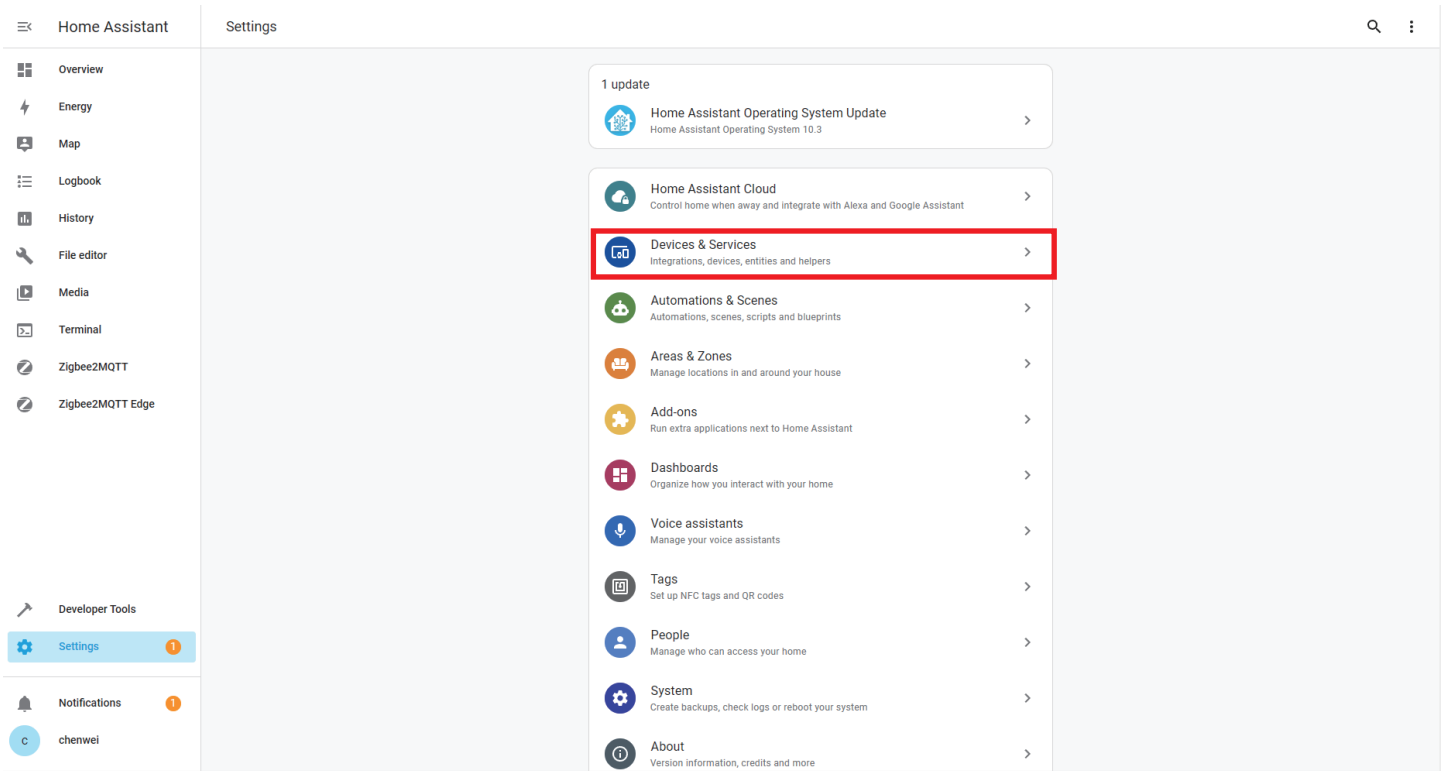
Pairing With Home Assistant

Device: Zigbee dongle



Zigbee Home Automation

1. Open the battery cover on the device and remove the insulation strip to power the device.
2. When the device is powered on, the sensitivity indicator will flash rapidly and the device will enter the Zigbee pairing mode. If the sensor is not in the pairing mode, press and hold the + button for 10 seconds to factory reset the sensor.
3. In Zigbee Home Automation, go to “Configuration” page, click “integration”.
4. Then click the “Devices” on the Zigbee item, then click “Add Devices”.
5. Pairing completed.
6. Back to “Devices” page to find the sensor added.
7. Click “+” belongs to Automation and add trigger and actions.



Home Assistant

Integrations **Devices** Entities Helpers

Filters Search 85 devices Group by Sort by Device

Device	Manufacturer	Model	Area	Integration	Battery
_TZE200_l0cansqn TS0601	_TZE200_l0cansqn	TS0601	-	Zigbee Home Automation	-
BITUO TECHNIK SDM02X	BITUO TECHNIK	SDM02X	-	Zigbee Home Automation	-
blue button	Third Reality, Inc	3RSB22BZ	Living Room	Zigbee Home Automation	-
bulb1	Thirdeality	3RCB01057Z	Living Room	Zigbee Home Automation	-
Bulb2	Thirdeality	3RCB01057Z	Living Room	Zigbee Home Automation	-
Bulb3	Thirdeality	3RCB01057Z	Living Room	Zigbee Home Automation	-
Bulb4	Thirdeality	3RCB01057Z	Living Room	Zigbee Home Automation	-
button	Third Reality, Inc	3RSB22BZ	Living Room	Zigbee Home Automation	-
Dummy night light	Third Reality, Inc	3RSNL02043Z	office	Zigbee Home Automation	-
Dummy night light2	Third Reality, Inc	3RSNL02043Z	office	Zigbee Home Automation	-
Garage Door Tilt Sensor	Third Reality, Inc	3RDT01056Z	-	Zigbee Home Automation	100%
red button	Third Reality, Inc	3RSB22BZ	Living Room	Zigbee Home Automation	-
Silicon Labs EZSP	Silicon Labs	EZSP	-	Zigbee Home Automation	-
Smart Motion Sensor R1	Third Reality, Inc	3RSMR01067Z	-	Zigbee Home Automation	-

[+ ADD DEVICE](#)

Home Assistant

Smart Motion Sensor R1

90% zigbee

Device info

3RSMR01067Z
by Third Reality, Inc

Zigbee info

- Zigbee Home Automation

[RECONFIGURE](#)

Sensors

Motion Detected

[ADD TO DASHBOARD](#)

Logbook

January 16, 2025

- Smart Motion Sensor R1 Motion detected motion
11:09:53 AM - 23 seconds ago
- Smart Motion Sensor R1 Motion cleared (no motion detected)
11:09:53 AM - 23 seconds ago
- Smart Motion Sensor R1 Motion detected motion
10:03:11 AM - 1 hour ago
- Smart Motion Sensor R1 Firmware turned off
10:03:11 AM - 1 hour ago
- Smart Motion Sensor R1 Motion became unavailable

Automations

No automations have been added using this device yet. You can add one by clicking the + button above.

Configuration

Firmware Up-to-date

[ADD TO DASHBOARD](#)

Diagnostic

Battery 90%

+2 entities not shown

[ADD TO DASHBOARD](#)

Scenes

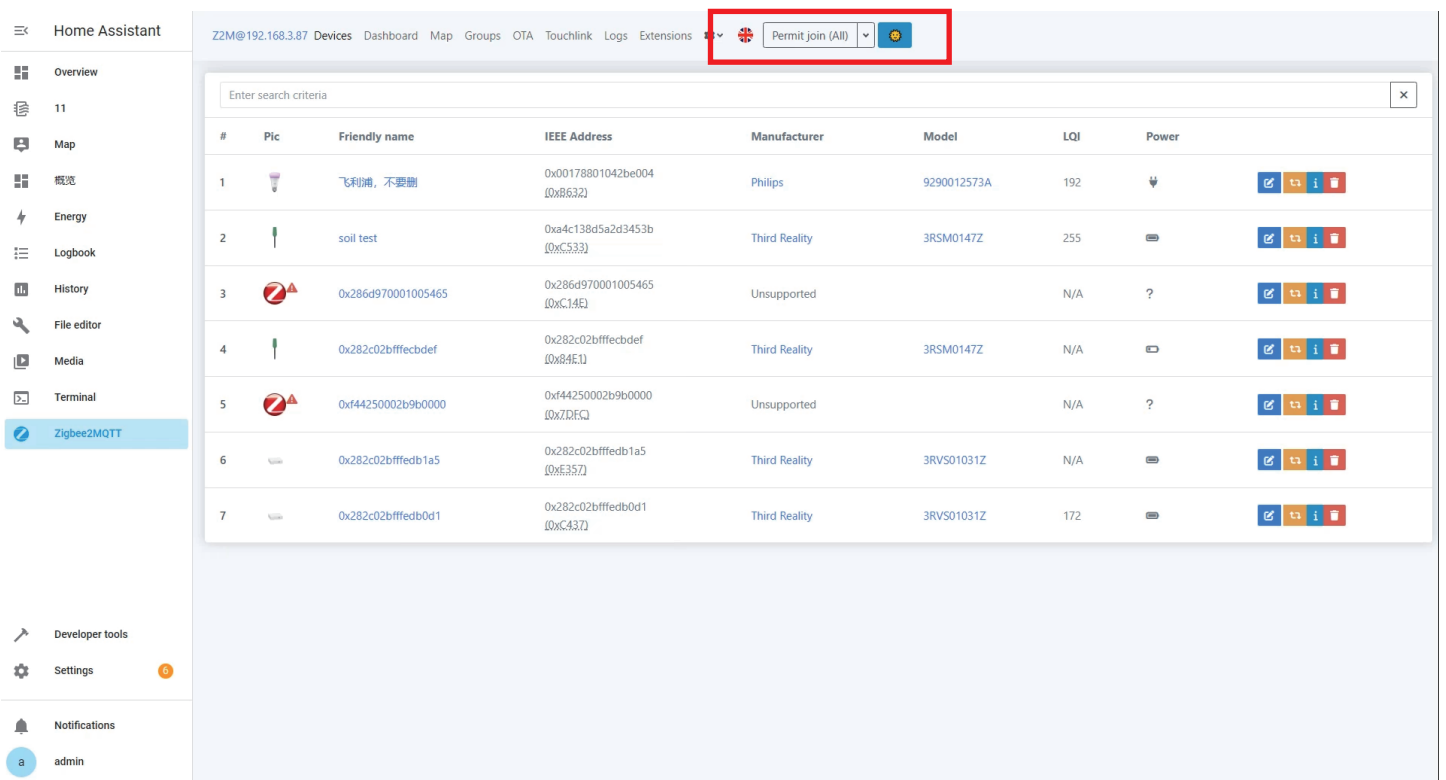
No scenes have been added using this device yet. You can add one by clicking the + button above.

Scripts

No scripts have been added using this device yet. You can add one by clicking the + button above.

Zigbee2MQTT

1. Open the battery cover on the device and remove the insulation strip to power the device.
2. When the device is powered on, the sensitivity indicator will flash rapidly and the device will enter the Zigbee pairing mode. If the sensor is not in the pairing mode, press and hold the + button for 10 seconds to factory reset the sensor.
3. Permit join to start Zigbee pairing in Zigbee2MQTT.
4. Pairing completed, the sensor will be displayed in the device list
Go to Settings page, create automation.



The screenshot shows the Home Assistant interface for Zigbee2MQTT. The top navigation bar includes 'Zigbee2MQTT' and a 'Permit join (All)' button, which is highlighted with a red box. Below the navigation bar is a search input field and a table of devices. The table has columns for '#', 'Pic', 'Friendly name', 'IEEE Address', 'Manufacturer', 'Model', 'LQI', and 'Power'. The devices listed are:

#	Pic	Friendly name	IEEE Address	Manufacturer	Model	LQI	Power
1		飞利浦, 不要删	0x00178801042be004 (0x8632)	Philips	9290012573A	192	
2		soil test	0xa4c138d5a2d3453b (0xc533)	Third Reality	3RSM0147Z	255	
3		0x286d970001005465	0x286d970001005465 (0xc14e)	Unsupported		N/A	?
4		0x282c02bfffecbdef	0x282c02bfffecbdef (0x84e1)	Third Reality	3RSM0147Z	N/A	
5		0xf44250002b9b0000	0xf44250002b9b0000 (0x7def)	Unsupported		N/A	?
6		0x282c02bfffed1a5	0x282c02bfffed1a5 (0xe357)	Third Reality	3RVS01031Z	N/A	
7		0x282c02bfffed0d1	0x282c02bfffed0d1 (0xc437)	Third Reality	3RVS01031Z	172	

Home Assistant Z2M@192.168.3.87 Devices Dashboard Map Groups OTA Touchlink Logs Extensions Permit join (All)

Enter search criteria

#	Pic	Friendly name	IEEE Address	Manufacturer	Model	LQI	Power	
1		飞利浦, 不要删	0x00178801042be004 (0x8632)	Philips	9290012573A	192		
2		soil test	0xa4c138d5a2d3453b (0xc533)	Third Reality	3RSM0147Z	255		
3		0x286d970001005465	0x286d970001005465 (0xc14f)	Unsupported		N/A	?	
4		0x282c02bfffecbdef	0x282c02bfffecbdef (0x84f1)	Third Reality	3RSM0147Z	N/A		
5		0xf44250002b9b0000	0xf44250002b9b0000 (0x7d7c)	Unsupported		N/A	?	
6		0x282c02bfffed1a5	0x282c02bfffed1a5 (0xe357)	Third Reality	3RVS01031Z	N/A		
7		0x282c02bfffed0d1	0x282c02bfffed0d1 (0xc437)	Third Reality	3RVS01031Z	200		
8		0xa4c138b7ae821d95	0xa4c138b7ae821d95 (0xe33b)	Unsupported	3RSMR01067Z	N/A	?	

Developer tools Settings Notifications admin

Home Assistant Z2M@192.168.3.87 Devices Dashboard Map Groups OTA Touchlink Logs Extensions Permit join (All)

Oxa4c138b7ae821d95 ▾

About Exposes Bind Reporting Settings Settings (specific) State Clusters Scene Dev console

Friendly name [Oxa4c138b7ae821d95](#)

Description

Last seen N/A

Availability Disabled

Device type EndDevice

Zigbee Model 3RSMR01067Z

Zigbee Manufacturer Third Reality, Inc

Support status **Not supported (how_to_add_support)**

IEEE Address Oxa4c138b7ae821d95

Network address 0xe33b / 58171

Firmware version v1.00.05

Power Battery ?

Interview completed True

Developer tools Settings Notifications admin

Troubleshooting

To achieve the desired detection accuracy:

- Do not install the sensor on a metal surface, If you need to install it, please place a non-metallic insulating layer (e.g. plastic or rubber pad, >5mm thick) between the radar and the metal surface.
- When installing the sensor, please keep it at least 1m away from other wireless devices that will create a strong signal field (e.g, Wireless router).
- When installing multiple radar sensors, do not place the detection-surfaces opposite each other.
- To prevent multiple radars from causing device misfires or reduced detection range due to same-frequency interference, you can adjust the spacing between devices.
- In cases of strong wind, rain, snow, or interference from vehicles, which may shorten the detection range and lead to false alarms or misjudgment of targets, it is recommended to avoid direct exposure to easily movable objects or adjust the installation angle and detection range threshold for optimization.

FCC Regulatory Conformance

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.

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

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 important announcement.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

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 and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

ISED Statement

- English: This device complies with Industry Canada license - exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) This device must accept any interference, including interference that may cause undesired operation of the device. The digital apparatus complies with Canadian CAN ICES - 3 (B)/NMB - 3(B).

- French:Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This radio transmitter has been approved by Industry Canada to operate with the antenna types listed with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Radiation Exposure Statement

This equipment complies with Canada 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.

Déclaration d'exposition aux radiations

Cet équipement est conforme Canada limites d'exposition aux radiations dans un environnement non contrôlé. Cet équipement doit être installé et utilisé à distance minimum de 20cm entre le radiateur et votre corps.

Caution:

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

Avertissement:

les dispositifs fonctionnant dans la bande de 5150 à 5250MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

Limited Warranty

For limited warranty, please visit

<https://thirdreality.com/faq-help-center/>.

For customer support, please contact us at

info@3reality.com or visit www.thirdreality.com

For question on other platforms, visit for corresponding platform's application/support platforms.