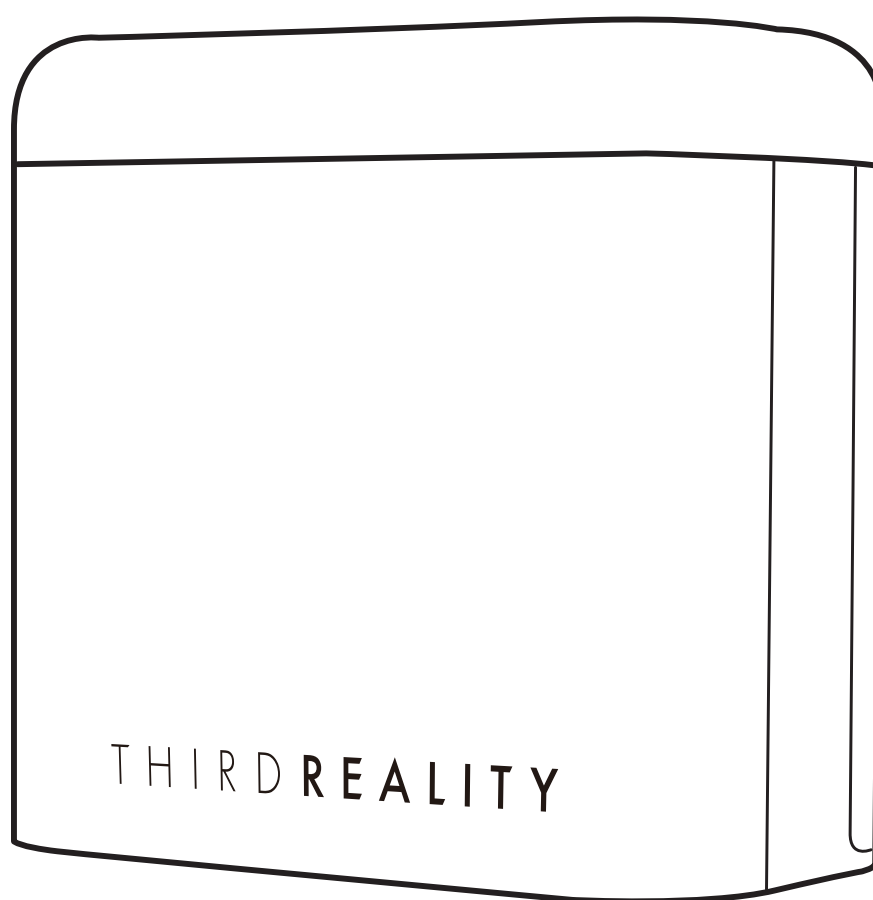


Multi-Function Smart Presence Sensor R3

User Manual



THIRDREALITY

Applicable to version 1.00.27 and above

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Product Description

The Multi-Function Smart Presence Sensor R3 integrates a 60 GHz mmWave human presence sensor, an RGB night light, an illuminance (lux) sensor, and a TVOC air quality sensor. The device is designed for indoor use in smart home and commercial environments, supporting presence detection, environmental data reporting, and automation-based control. It is powered via USB-C, providing a stable power supply for continuous operation.

Specifications

Model	3RPL01084Z
Radar Frequency	62025~63815.3MHz
Wireless Protocol	Zigbee 3.0 & BLE
Power Supply	DC5V / 500mA
Detection Level	6 levels adjustable (1-6m)
Placement	Desktop

Button Functions

Button	Function	Procedure
Level	View Sensitivity Level	Short press once
	Change Sensitivity Level	Press again while the indicator light is on to change the sensitivity level.
Reset	Factory Reset	Press and hold for more than 5 seconds until night light stays red and then release.

LED Status

- **Basic LED Operation Status**

LED Status	Description
Flashing in red.	Factory Reset
Yellow light breathing	Pairing
Warm white light breathing	Pairing success
Yellow light activated once and weak blue light illuminated 3 seconds.	Delete from hub

- **Sensitivity Level**

Level	LED Status
1m	Faint Green
2m	Bright Green
3m	Faint Blue
4m	Bright Blue
5m	Faint Red
6m	Bright Red

- **TVOC Measurement & LED Status**

1. **Before Network Configuration**

Before the device is successfully added to the network, the night light and presence sensor operate via offline behaviors:

When presence is detected, the night light will turn on automatically, and the light color reflects the current TVOC measurement value, indicating air quality.

When no presence is detected, the night light will remain off.

TVOC Measurement Value	LED Status	Air Quality
$0\text{ppb} \leq \text{TVOC} \leq 2000\text{ppb}$	Bright Green	Good
$2000\text{ppb} < \text{TVOC} \leq 4000\text{ppb}$	Bright Yellow	Ventilate
$4000\text{ppb} < \text{TVOC} \leq 6000\text{ppb}$	Bright Orange	Warning
$\text{TVOC} > 6000\text{ppb}$	Red light flashing continuously	Danger

Note: When the sensitivity level light is active, triggering the Presence Sensor will only activate the indicator light after the gear light effect ends.

2. After Network Configuration

After the device is successfully configured and connected to the network, the following behavior applies:

When the TVOC level exceeds 6000 ppb, regardless of the LED's state, the red LED will keep flashing continuously.

When the TVOC level is 6000 ppb or below, the red LED will stop flashing, the lighting behavior will be set as the default color or be controlled through the configured smart home automation system.

Note:

After network configuration successfully, detected and undetected state does not trigger the light ON/OFF. You can control the light's ON/OFF state via automation. When displaying the light corresponding to the sensitivity level, the light will be interrupted if you perform on/off operation from the smart home platform or app.

Setup

1. Use a USB-C-A data cable to power on the device.
2. Press and hold the Reset button for more than 5 seconds until the red light stays on. Release the button, and the device will enter pairing mode. The sensitivity level defaults to 3, with a faint blue light

Note: If the device is not successfully paired within 3 minutes, it will automatically exit pairing mode. To enter pairing mode again, repeat Step 2 to reset the device: press and hold the Down button for more than 5 seconds until the indicator turns red, then release. The device will reset and re-enter pairing mode.

3. Follow the instructions on the corresponding platform to add the device.

Placement Recommendations

For optimal detection performance, please observe the following guidelines:

- Avoid installing the device behind metal objects or thick walls, as these may affect radar performance.
- Keep the sensor away from strong electromagnetic interference sources.
- Ensure the detection area is not obstructed by large furniture or objects.
- When installing multiple radar sensors, avoid positioning their detection surfaces directly facing each other.

Pairing with 3R-Installer App

Device: Smart Bridge MZ1

App: 3R-Installer App

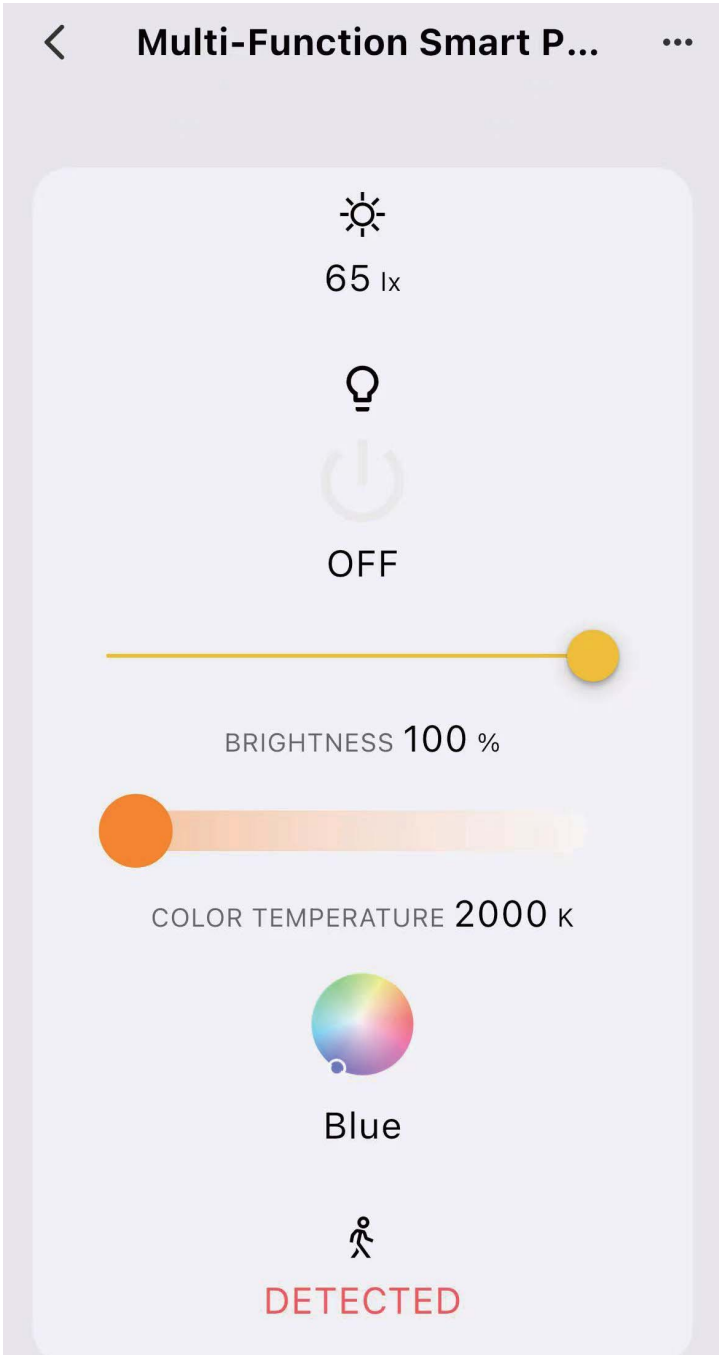
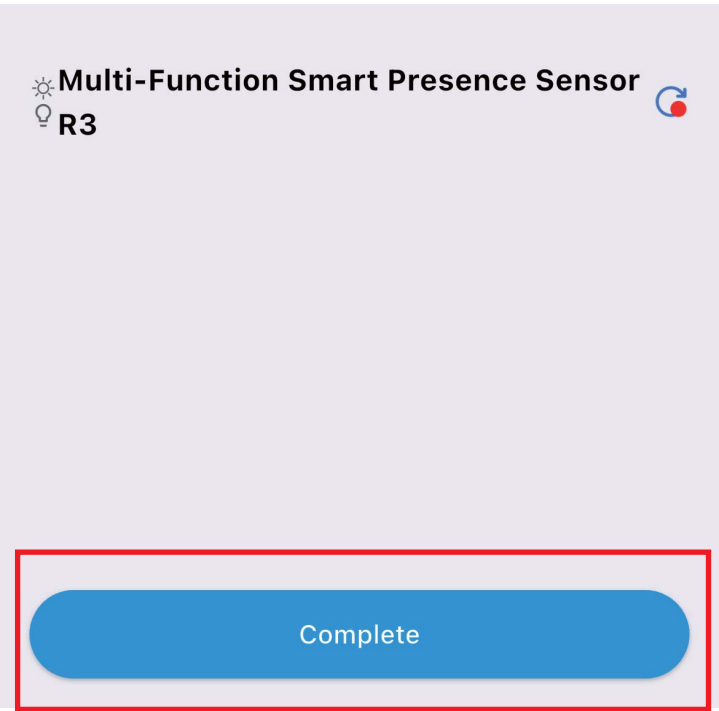
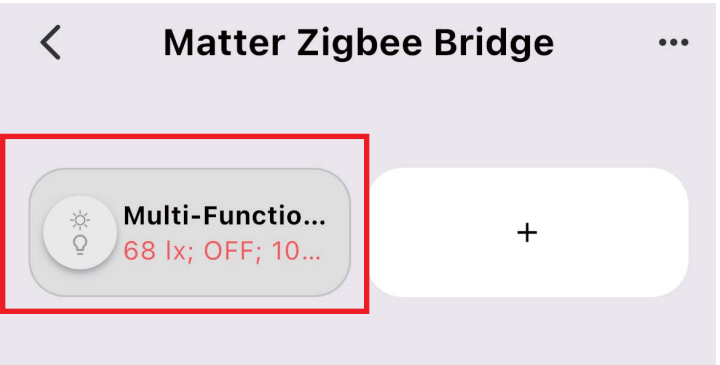
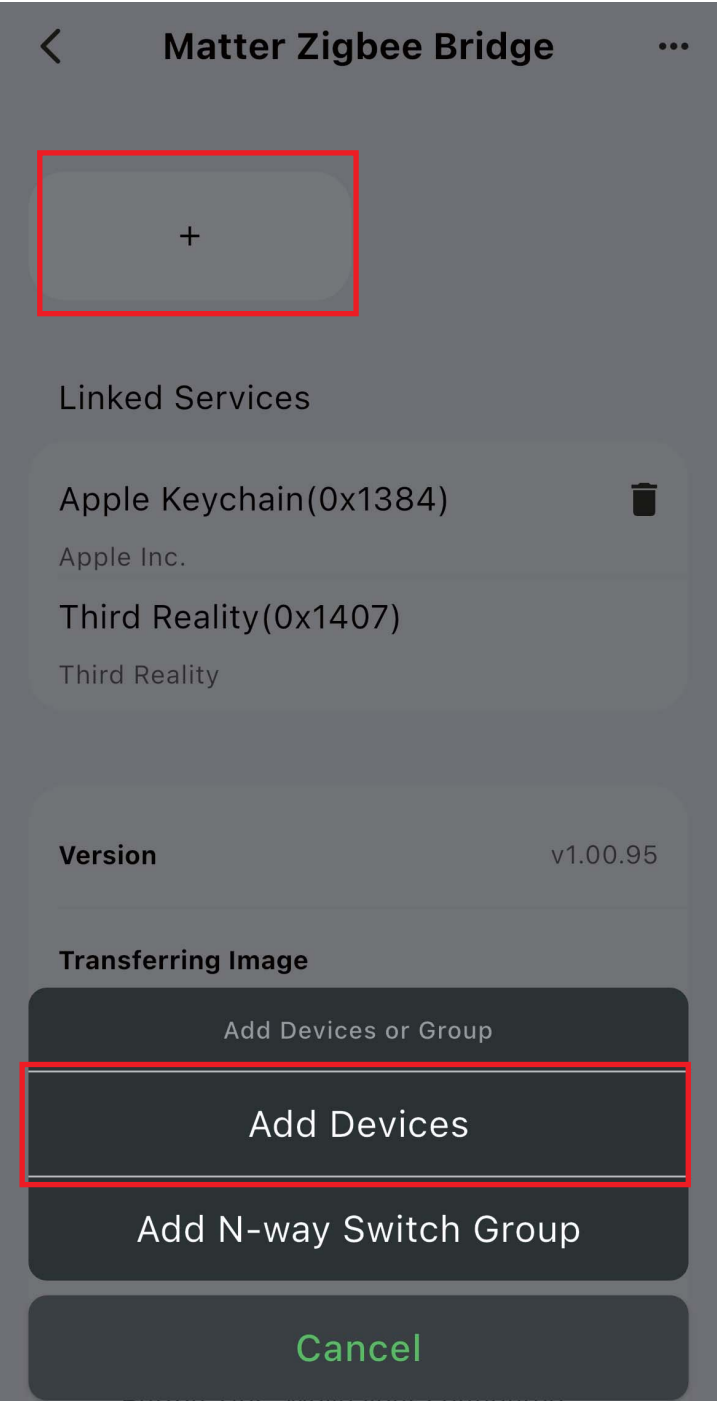


Pairing steps:

1. Open 3R-Installer App, Ensure your bridge is already set up within your smart home system.
2. Press and hold the down button for more than 5 seconds until the red light stays on. Release the button, and the device will enter pairing mode.
3. The sensor will pair with the bridge, and a new device will appear in your smart home app.
4. After the pairing is successful, tap "Complete", then back to main interface.
5. Tap "Muti-Function Smart Presence Sensor R3" icon on device page, you can see the details. Follow the instructions to control Muti-Function Smart Presence Sensor R3.

Supported Devices:

- Motion Sensor
- Illuminance (lux) Detection
- RGB Night Light



Pairing with Amazon Echo

Compatible Device: Echo V4, Echo Plus V1 & V2,
Echo Studio, Echo Show 10 Gen2 & Gen3

App: Amazon Alexa App

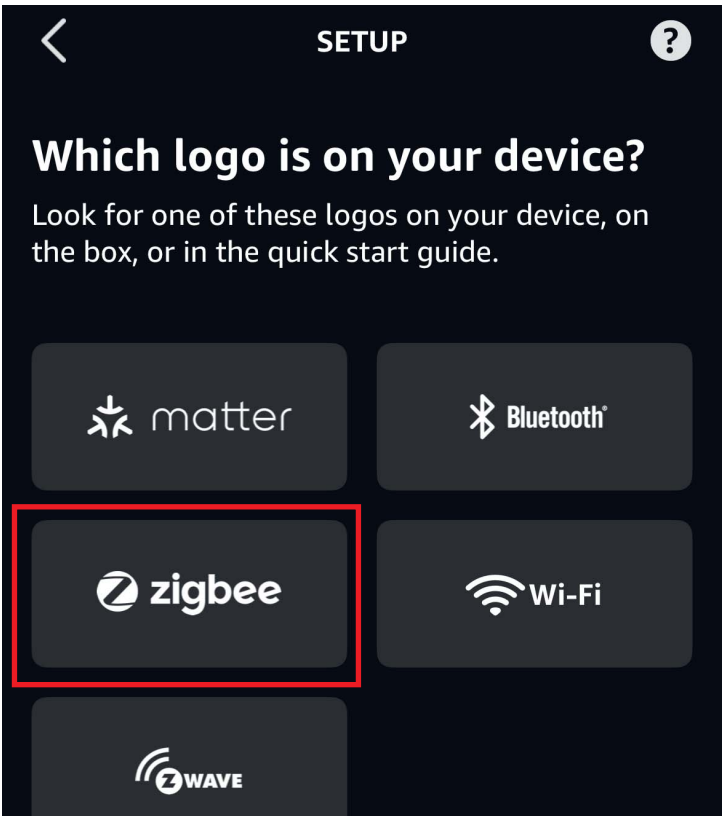
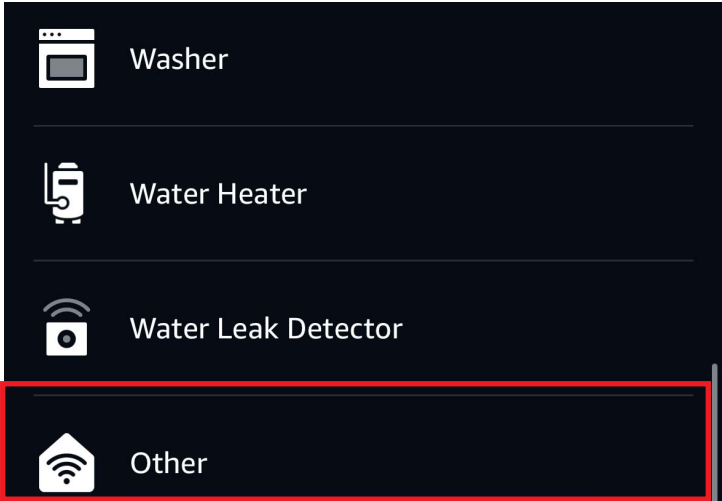
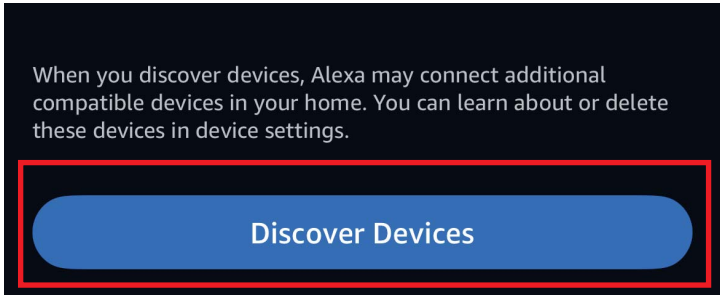
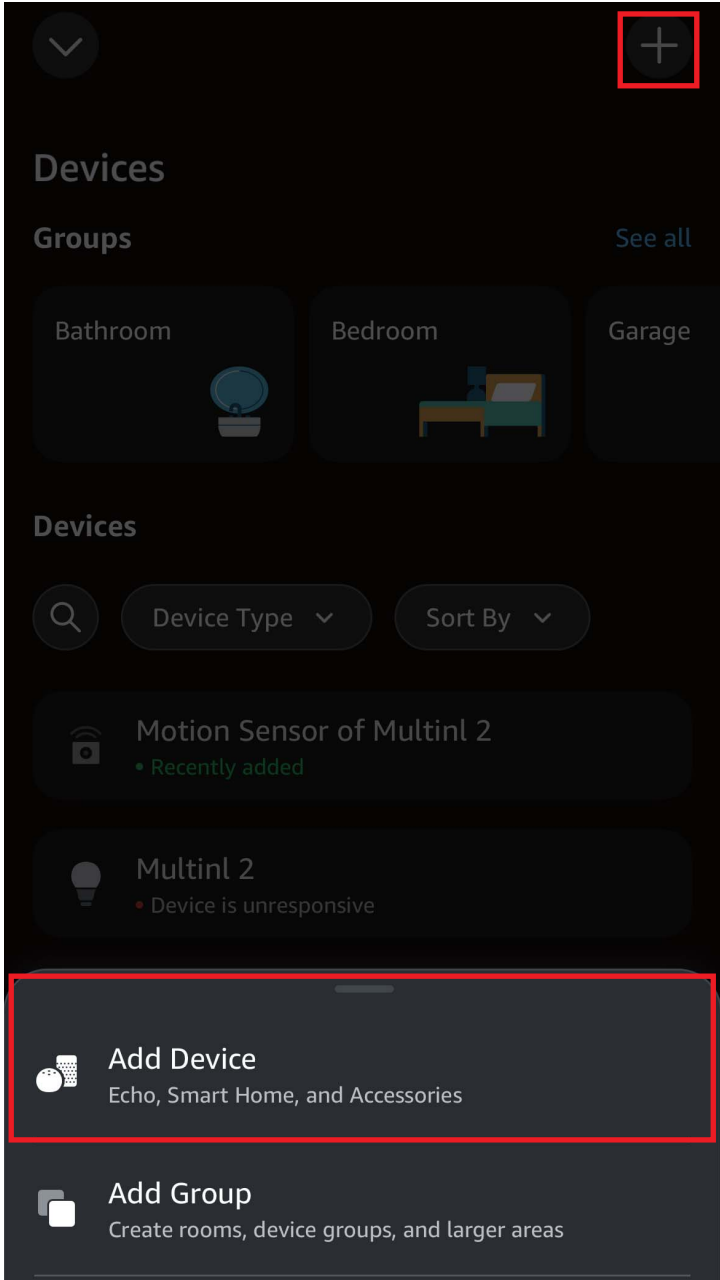


Pairing steps:

1. Make sure the app and the firmware of your Echo devices has been updated to the latest version.
2. Press and hold the down button for more than 5 seconds until the red light stays on. Release the button, and the device will enter pairing mode.
3. Start adding devices by saying "Alexa, discover my devices", or open Alexa App, go to device page, tap "+" on top right, choose "Add Device", then click "other" by sliding down, tap "DISCOVER DEVICES", the sensor will be paired to Alexa within seconds.
4. After the pairing is successful, you can control the sensor by voice and App.

Supported Devices:

- Motion Sensor (support Routines)
- RGB Night Light (support Routines)



1 Other light found and connected

Your light has been added to your Alexa account. Next, we'll help you finish setting up your device.

Next

Devices



Device Type ▾

Sort By ▾



Living room Light

Off



Motion Sensor of Multinl 2



Living room Light



On

Brightness

100%



Color • Blue



Motion detected



Ask Alexa

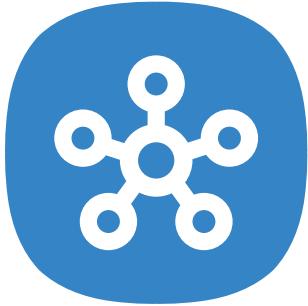


Duration: 4 minutes

Pairing with SmartThings

Compatible Devices: SmartThings Hub 2015 & 2018, Aeotec

App: SmartThings App



Pairing steps:

1. Before pairing, check for updates to make sure the SmartThings Hub firmware is up to date.
2. Add SmartThings drivers for Third Reality Muti-Function Smart Presence Sensor R3
 - 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.



Channel Information

- Name
Third Reality
- Description
SmartThings driver for Third Reality devices
- [Terms of Service](#)

My Hubs

Aeotec Hub

My home

Enroll



Channel Information

- Name
Third Reality
- Description
SmartThings driver for Third Reality devices
- [Terms of Service](#)

My Hubs

Aeotec Hub

My home

Unenroll

Available Drivers

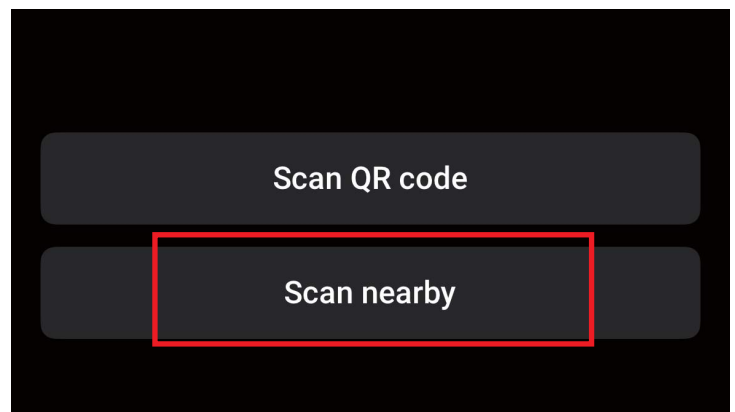
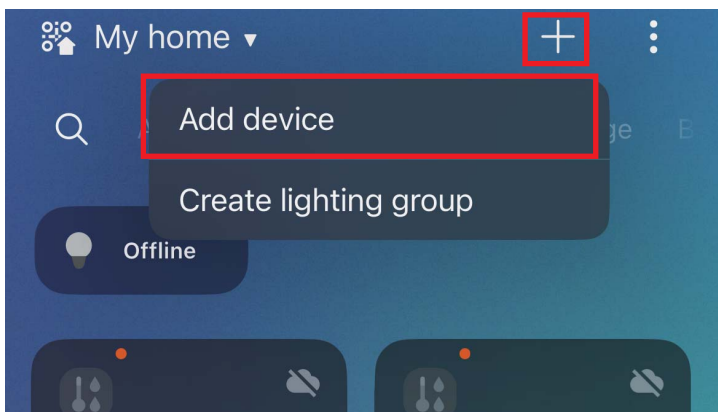
- Name
Zigbee Switch
- Description
SmartThings driver for Zigbee switch devices
- Permissions
 - zigbee: Enable full access to Zigbee actions

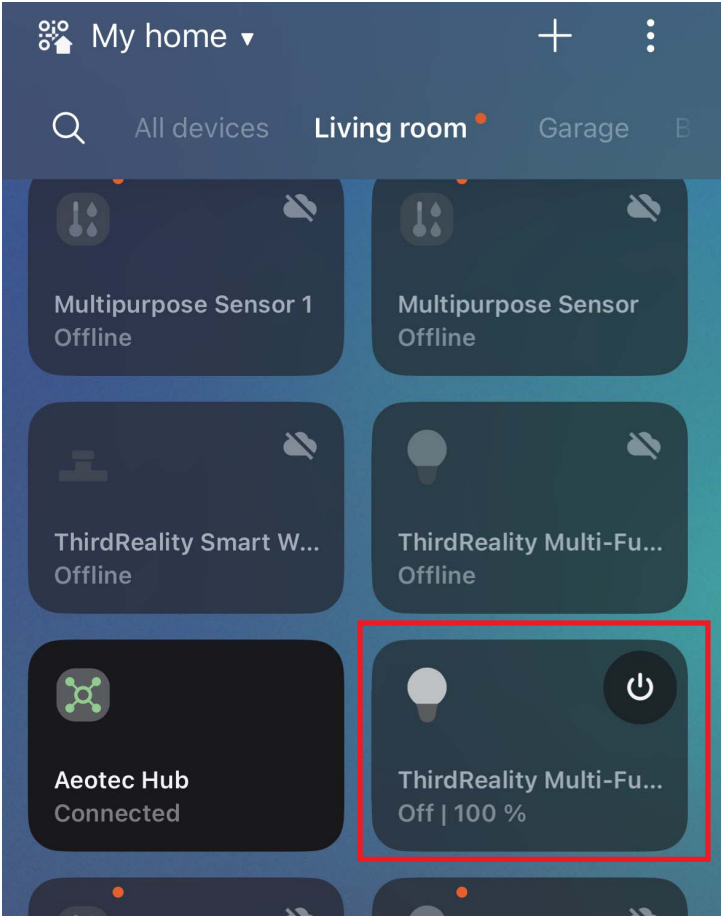
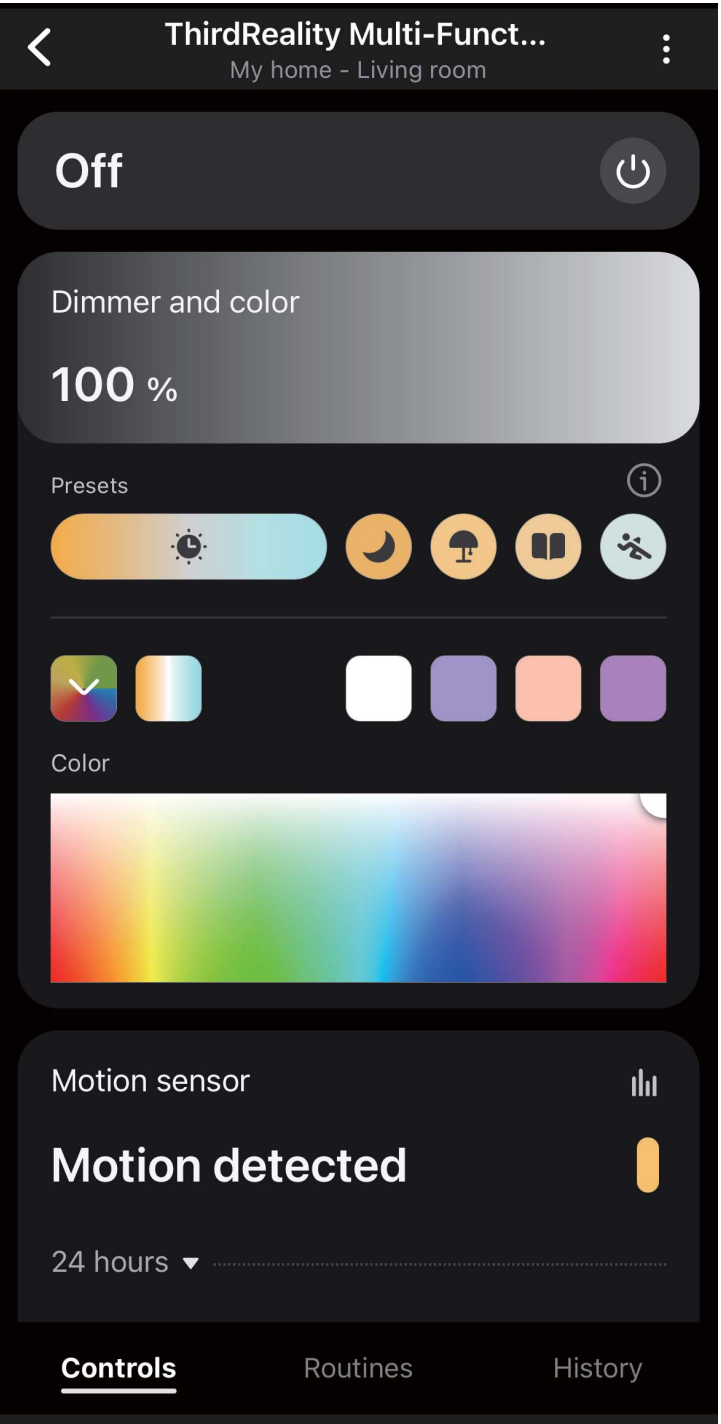
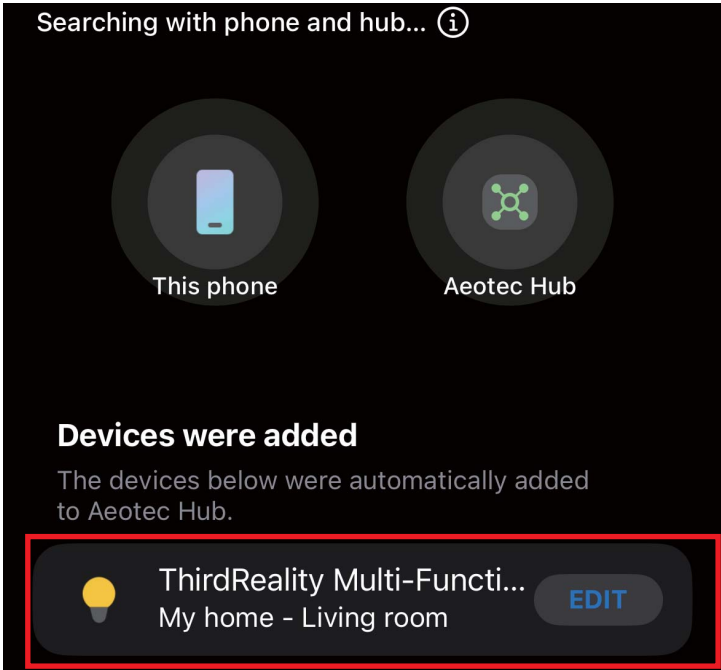
Install

3. Press and hold the down button for more than 5 seconds until the red light stays on. Release the button, and the device will enter pairing mode.
4. Open your SmartThings App, tap “+” on the up right corner to ”Add device” and then tap “Scan nearby”.
5. The sensor will be added to your SmartThings hub in a few seconds.
6. Create routines to control connected devices.

Supported Devices:

- Motion Sensor (support Routines)
- Illuminance (lux) Sensor (support Routines)
- RGB Night Light (support Routines)





Pairing with Home Assistant

Device: Zigbee dongle



Zigbee Home Automation

1. Press and hold the down button for more than 5 seconds until the red light stays on. Release the button, and the device will enter pairing mode.
2. In Zigbee Home Automation, go to “Configuration” page, click “integration”. Then click the “Devices” on the Zigbee item, then click “Add Devices”.
3. After the pairing is successful, it will be shown as "Third Reality, Inc 3RPL01084Z" on the page.
4. Back to "Devices & Services" page, click the device list under the "Hub Smart Home Controller" button, then you can find the Multi-Function Smart Presence Sensor R3 added before. Click to enter in the control interface to operate the Multi-Function Smart Presence Sensor R3.
5. You can add "Automated Actions" and check device status on the "Device" page.

Supported Devices:

- Motion Sensor (support Routines)
- Illuminance (lux) sensor (support Routines)
- RGB Night Light (support Routines)
- TVOC Air Quality Sensor (support Routines)

Manual Script Addition Guide:

1. Install the Samba Share add-on in Home Assistant: Open the Home Assistant homepage, click "Settings" → "Add-ons" → "Samba share" → "ADD-ON STORE" → search "Samba" → click "Samba share" → click "START".

If you cannot find the samba share, please click the Personal Information page to check if advanced settings are enabled.

2. Open the folder and enter the IP address of the Home assistant. You need to enter your account and password(Account password in Samba share configuration).

3. Afterwards, enter the "config" file and create a new file to store the script.

Please download the relevant scripts (.py format) from Github:

[https://github.com/thirdreality/homeassistant/tree/main/ZHA\(quirks%20v2\)](https://github.com/thirdreality/homeassistant/tree/main/ZHA(quirks%20v2))

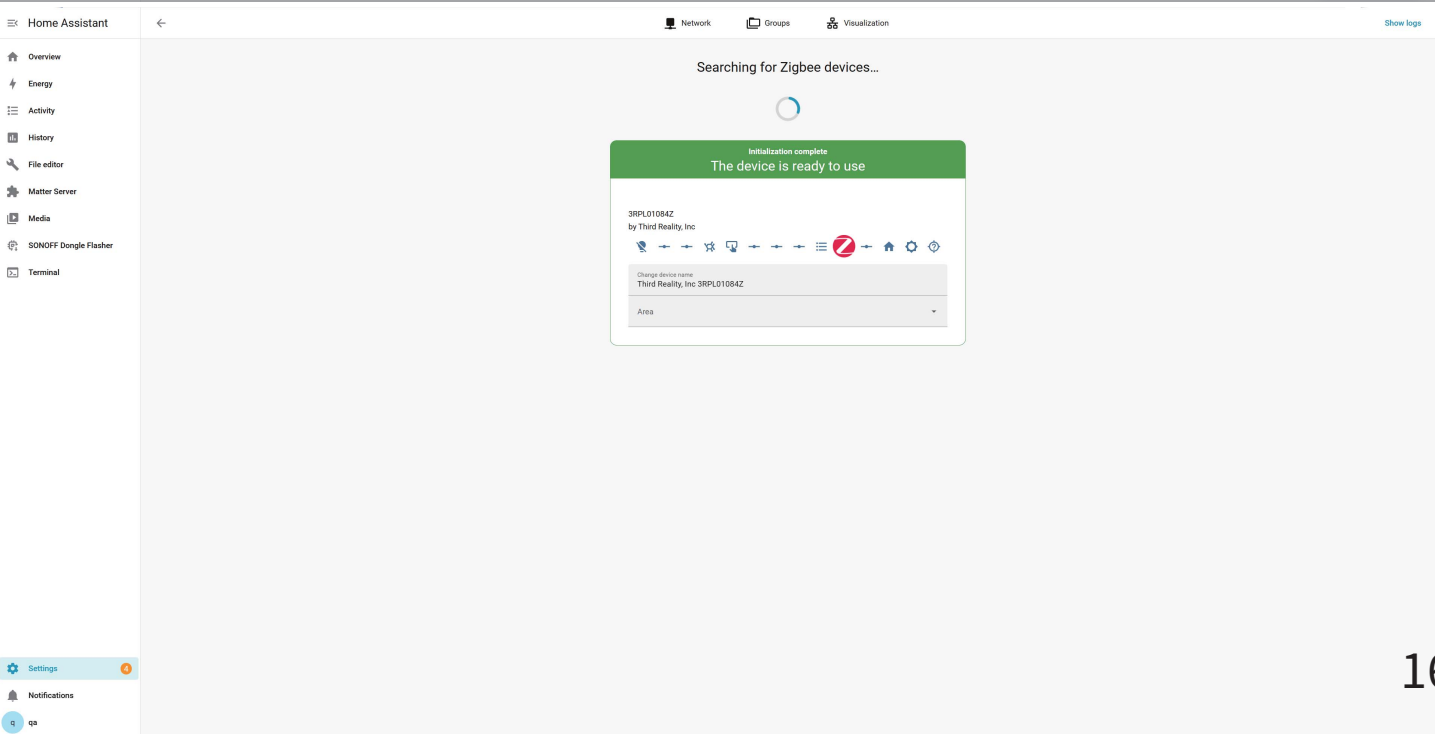
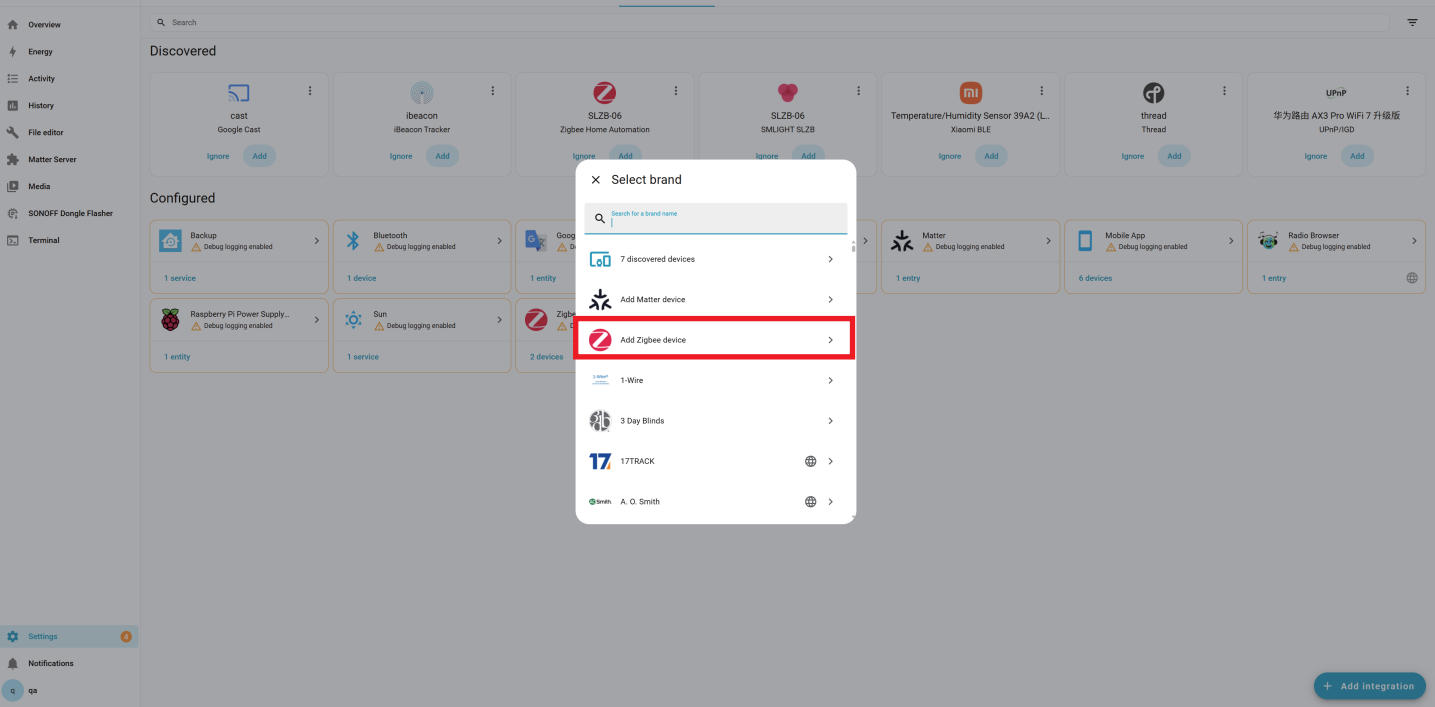
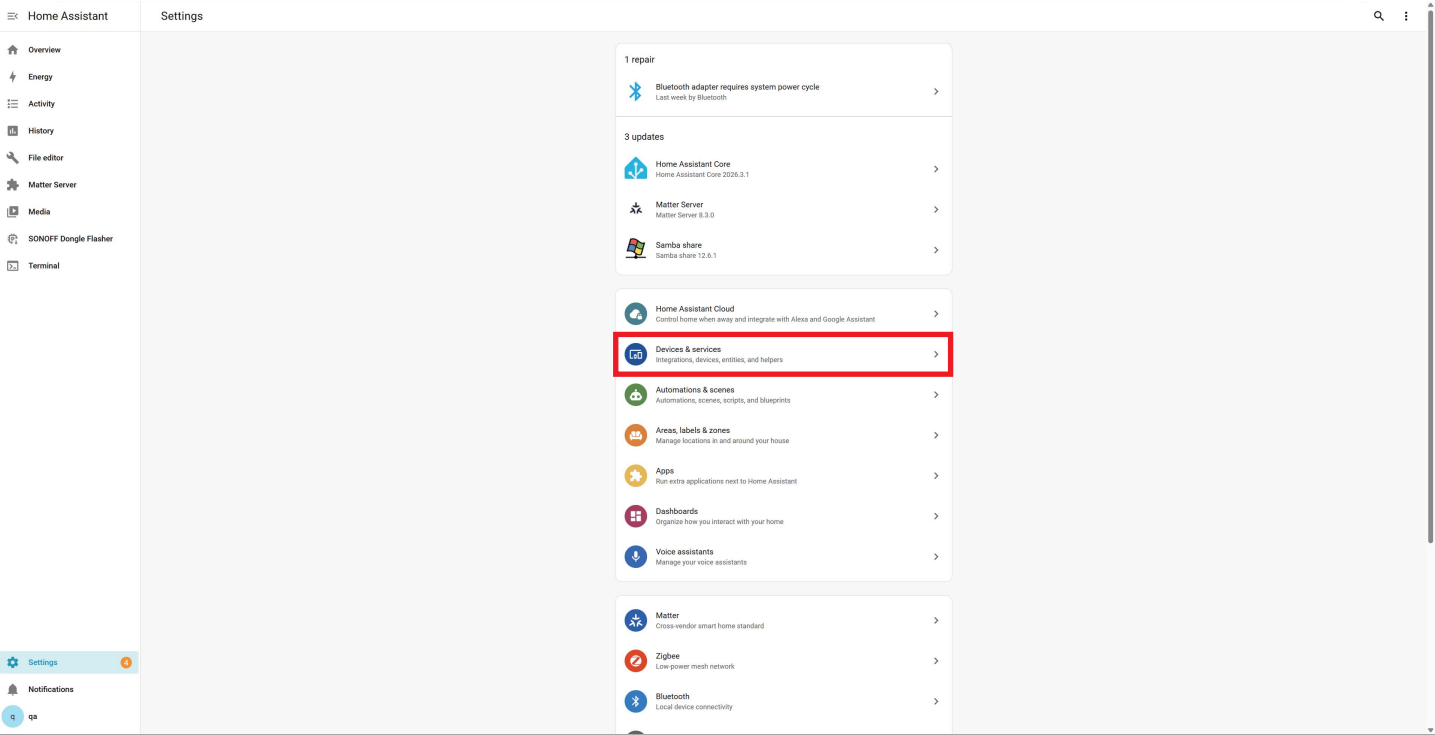
Enter "configuration.yaml" file, add the following two lines of code,

4. and the path will be the location where you store the plug script.

`enable_quirks: true`

`custom_quirks_path:/config/zha_quirks/`

- Restart Home Assistant to apply the configuration changes.
- After each script is released, it needs to be reloaded



Home Assistant

IntegrationsDevicesEntitiesHelpers

Filter 0Search 3 devices

Device

Area

Integration

Manufacturer

Model

Battery

2 EB02

JY

Zigbee Home Automation

Third Reality, Inc

3RPL01084Z

—

Texas Instruments CC2652

—

Zigbee Home Automation

Texas Instruments

CC2652

—

Third Reality, Inc 3RPL01084Z

—

Zigbee Home Automation

Third Reality, Inc

3RPL01084Z

—

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+ Add device

Home Assistant

←Third Reality, Inc 3RPL01084Z

zigbee

Device info

3RPL01084Z
by Third Reality, Inc
Connected via [Texas Instruments CC2652](#)
Firmware: 0x00000014
Zigbee: 7C:3E:82:D7:66:60:00:00
Zigbee info

Zigbee Home Automation

Reconfigure

Automations

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

Scenes

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

Scripts

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

Controls

Third Reality, Inc 3RPL010...
[Add to dashboard](#)

Sensors

Illuminance56 lx

MotionDetected

Total volatile organic com...0.0 ppb

[Add to dashboard](#)

Configuration

Air threshold

FirmwareUpdate available

Located at level

On/Off Gradu...0

Presence sen...

Start color tem...65535

Start-up curre...

TVOC sensor calibrationPress

高级行为PreviousValue

[Add to dashboard](#)

Diagnostic

Activity

March 16, 2026

Third Reality, Inc 3RPL01084Z turned off triggered by action Light: Turn off 11:35:00 AM - Now - on

Third Reality, Inc 3RPL01084Z turned on 11:35:00 AM - Now - on

Firmware turned on 11:35:46 AM - 4 minutes ago

Zigbee2MQTT

1. Press and hold the down button for more than 5 seconds until the red light stays on. Release the button, and the device will enter pairing mode.
2. Permit join to start Zigbee pairing in Zigbee2MQTT.
3. After the pairing is successful, it will be shown as "Third Reality, Inc 3RPL01084Z" on the page.
4. Back to "Devices & Services" page, click the device list under the "Hub Smart Home Controller" button, then you can find the Multi-Function Smart Presence Sensor R3 added before. Click to enter in the control interface to operate the Multi-Function Smart Presence Sensor R3.
5. You can add "Automated Actions" and check device status on the "Device" page.

Supported Devices:

- Motion Sensor (support Routines)
- Illuminance (lux) sensor (support Routines)
- RGB Night Light (support Routines)
- TVOC Air Quality Sensor (support Routines)

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Search

Advanced search

Entries: 19

Columns: Source Friendly name IEEE Address OUI Model Type LQI Last seen Availability Power source Battery level Battery low Disabled Actions

Friendly name 1	IEEE Address	OUI	Model	LQI	Last seen	Availability	
089886demsu3中, 传感器1	04c6c175521560000 0406c6c17552156000	?	3RSP0186Z Third Reality	208	Disabled	Disabled	  
089886demsu3中, 传感器2	04c6c175521560000 0406c6c17552156000	?	3RSP0186Z Third Reality	229	Disabled	Disabled	  
04c6c175526b650000	04c6c175526b650000 0404c6c175526b650000	?	3RTHS0324Z Third Reality, Inc.	180	Disabled	Disabled	  
04c6c1755279220000	04c6c1755279220000 0404c6c1755279220000	?	3RSP01083Z Third Reality	164	Disabled	Disabled	  
04c6c1755279c30000	04c6c1755279c30000 0404c6c1755279c30000	?	3RSP01083Z Third Reality	228	Disabled	Disabled	  
04c6c1755279c30000	04c6c1755279c30000 0404c6c1755279c30000	?	3RSP01083Z Third Reality	156	Disabled	Disabled	  
04c6c1755279c30000	04c6c1755279c30000 0404c6c1755279c30000	?	3RSP01083Z Third Reality	204	Disabled	Disabled	  
60G 3-1	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	140	Disabled	Disabled	  
60G 3-10	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	208	Disabled	Disabled	  
60G 3-2	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	184	Disabled	Disabled	  
60G 3-3	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	228	Disabled	Disabled	  
60G 3-4	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	212	Disabled	Disabled	  
60G 3-5	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	164	Disabled	Disabled	  
60G 3-6	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	180	Disabled	Disabled	  
60G 3-7	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	208	Disabled	Disabled	  

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Entries: 20

Columns: Source Friendly name IEEE Address OUI Model Type LQI Last seen Availability Power source Battery level Battery low Disabled Actions

089886demsu3中, 传感器1	04c6c175521560000 0406c6c175521560000	?	3RSP0186Z Third Reality	192	Disabled	Disabled	  
089886demsu3中, 传感器2	04c6c175521560000 0406c6c175521560000	?	3RSP0186Z Third Reality	229	Disabled	Disabled	  
04c6c175526b650000	04c6c175526b650000 0404c6c175526b650000	?	3RTHS0324Z Third Reality, Inc.	176	Disabled	Disabled	  
04c6c1755279220000	04c6c1755279220000 0404c6c1755279220000	?	3RSP01083Z Third Reality	164	Disabled	Disabled	  
04c6c1755279c30000	04c6c1755279c30000 0404c6c1755279c30000	?	3RSP01083Z Third Reality	228	Disabled	Disabled	  
04c6c1755279c30000	04c6c1755279c30000 0404c6c1755279c30000	?	3RSP01083Z Third Reality	156	Disabled	Disabled	  
04c6c1755279c30000	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	132	Disabled	Disabled	  
60G 3-1	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	180	Disabled	Disabled	  
60G 3-10	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	208	Disabled	Disabled	  
60G 3-2	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	188	Disabled	Disabled	  
60G 3-3	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	216	Disabled	Disabled	  
60G 3-4	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	200	Disabled	Disabled	  
60G 3-5	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	156	Disabled	Disabled	  
60G 3-6	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	164	Disabled	Disabled	  
60G 3-7	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	204	Disabled	Disabled	  
60G 3-8	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	200	Disabled	Disabled	  
60G 3-9	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	232	Disabled	Disabled	  
22z 60G-3	04c6c1755279c30000 0404c6c1755279c30000	?	3RPL01084Z Third Reality	255	Disabled	Disabled	  

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04c6c1755279c30000

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Occupancy

Indicates whether the device detected occupancy

Occupied

illuminance

Measured illuminance

56 lx

Volatle organic compounds

Measured VOC value

417 ppb

Voc sensor calibration

VOC sensor calibration

Reset

Presence sensor sensitivity

Presence sensor sensitivity

1 6

State

On/off state of this light

OFF ON

Brightness

Brightness of this light

0% 25% 50% 75% 100%

0 254

Color (X/Y)

Color of this light in the CIE 1931 color space (x/y)

hex #ffff

rgb 255, 255, 255

hsv 0.00°, 0.00%, 100.00%

xyY 0.000, 0.000, 1.000

Effect

Triggers an effect on the light (e.g. make light blink for a few seconds)

Select value

Power-on behavior

Controls the behavior when the device is powered on after power loss

off on toggle previous

Pairing with Homey

Device: Zigbee dongle



Pairing steps:

1. Install the Third Reality App in your Homey App.
2. Press and hold the down button for more than 5 seconds until the red light stays on. Release the button, and the device will enter pairing mode.
3. Tap "+" in the Devices, tap → "New Device" → "Third Reality" → "Muti-Function Smart Presence Sensor R3" → "Connect" and follow the instruction to add device.
4. After the pairing is successful, you can see details and create routines on the "Device" page.

Supported Devices:

- Motion Sensor (support Routines)
- Illuminance (lux) sensor (support Routines)
- RGB Night Light (support Routines)

Troubleshooting

1. **Detection range or sensitivity is not suitable**
Adjust the detection level with the button and change the installation angle.
2. **Light turns on at night before pairing, but not after pairing**
Before pairing, the device uses built-in local automation. After pairing, set automation in the platform/app.

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.

RF Exposure

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.

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 questions on other platforms, visit the corresponding platform's application/support platform.