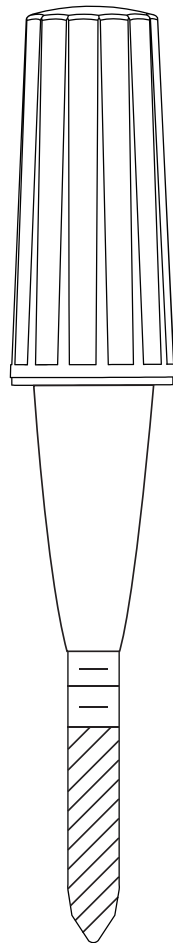


# Smart Soil Moisture Sensor Gen2

## User Manual



THIRD REALITY

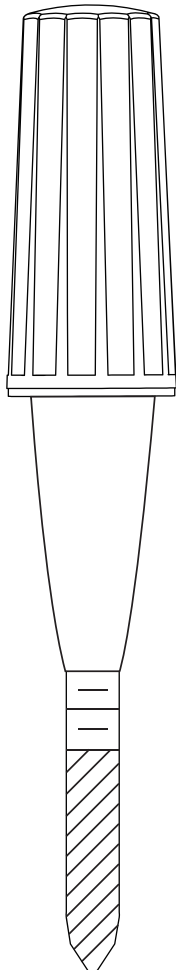
# Contents

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# Introduction

Smart Soil Moisture Sensor Gen2 is able to detect the soil moisture and surface air temperature of the soil in real time and transmit the data to your smart system through wireless communication capabilities.

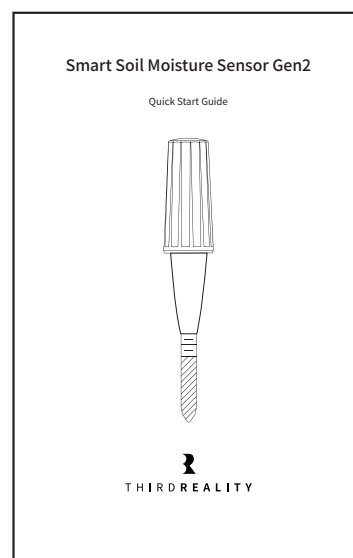
## What's in the Box



Smart Soil Moisture Sensor Gen2



AA Battery (Included)

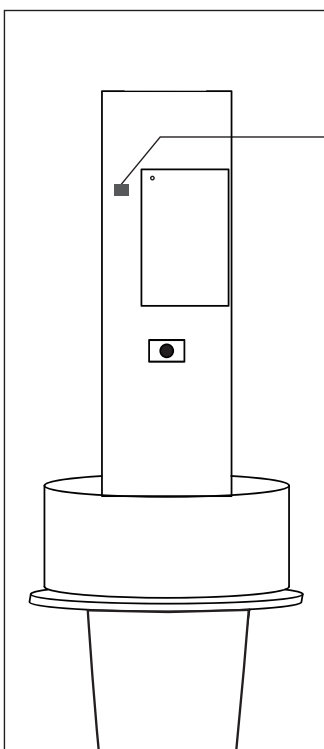


User Manual

# Specifications

Name	Smart Soil Moisture Sensor Gen2
Model	3RSM0347Z
Operating Voltage	DC 1.5V
Battery Type	1 x AA Alkaline Battery (included)
Wireless Connectivity	Zigbee 3.0
Temperature Range	-10°C~50°C(14°F~122°F)
Temperature Accuracy	±1.5°C
Humidity Range	0~100%
Humidity Accuracy	±3%
Frequency	2.4 GHz

## LED Status

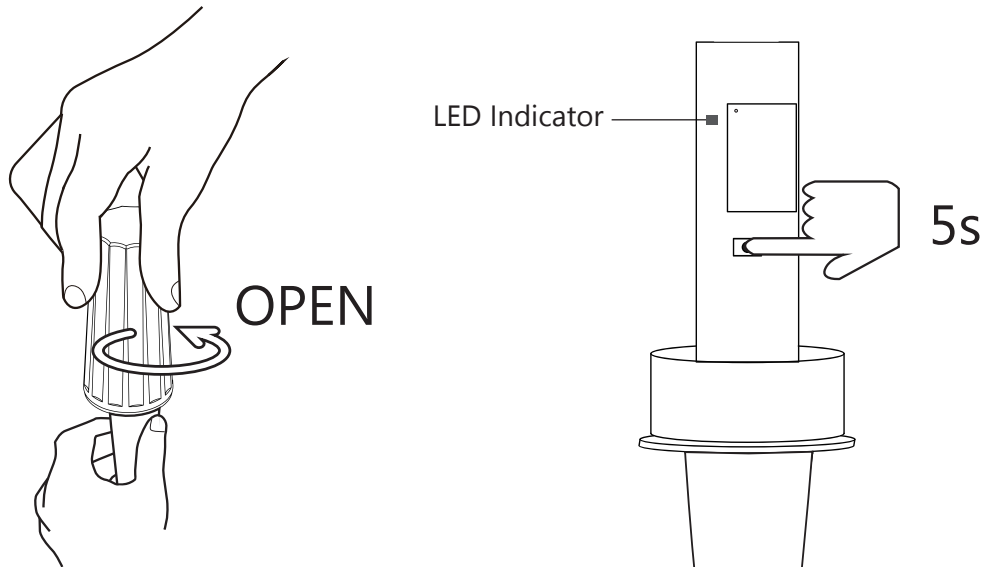


LED Indicator

LED Status	Description
Blue blinking	Pairing mode
Red slow blinking	Offline
Red double blinking	Low battery

# Setup

1. Open the battery cover. Remove the battery insulation tab and install the battery.

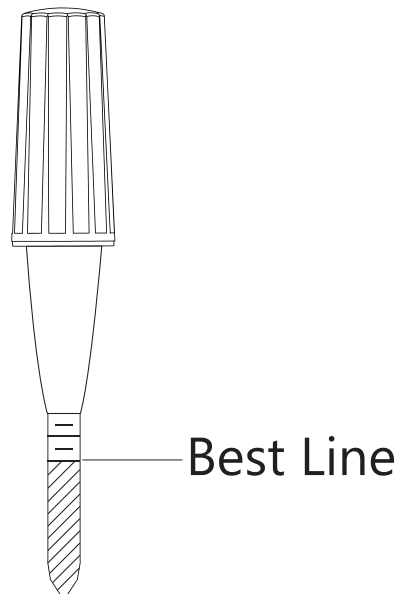


2. Press and hold the reset button for more than 5 seconds until the LED light turns red, release the reset button and the LED starts blue blinking, indicating it enters Zigbee pairing mode.
3. Follow the instructions of your smart home hub / smart speaker with built-in Zigbee radio to pair the sensor in the corresponding app.

# Installation

- \* Recommend: Use a suitable tool to dig a small hole in the soil and then insert the sensor.
- \* When installing the sensor, align the marked "Best Line" with the soil surface, which is suitable for most planting scenarios.

**Note:** The "Best Line" is a general reference for daily use. You may adjust the sensor insertion depth by inserting it shallower or deeper according to the root depth of different plants. Regardless of the insertion depth chosen, ensure the black sensing area is fully buried in soil for accurate measurement.



- \* Friction can damage the sensor and affect its accuracy. It is not recommended to insert the sensor directly into hard soil, which may damage the sensor.
- \* Designed to measure soil moisture ONLY.

# Pairing with 3R-Installer App

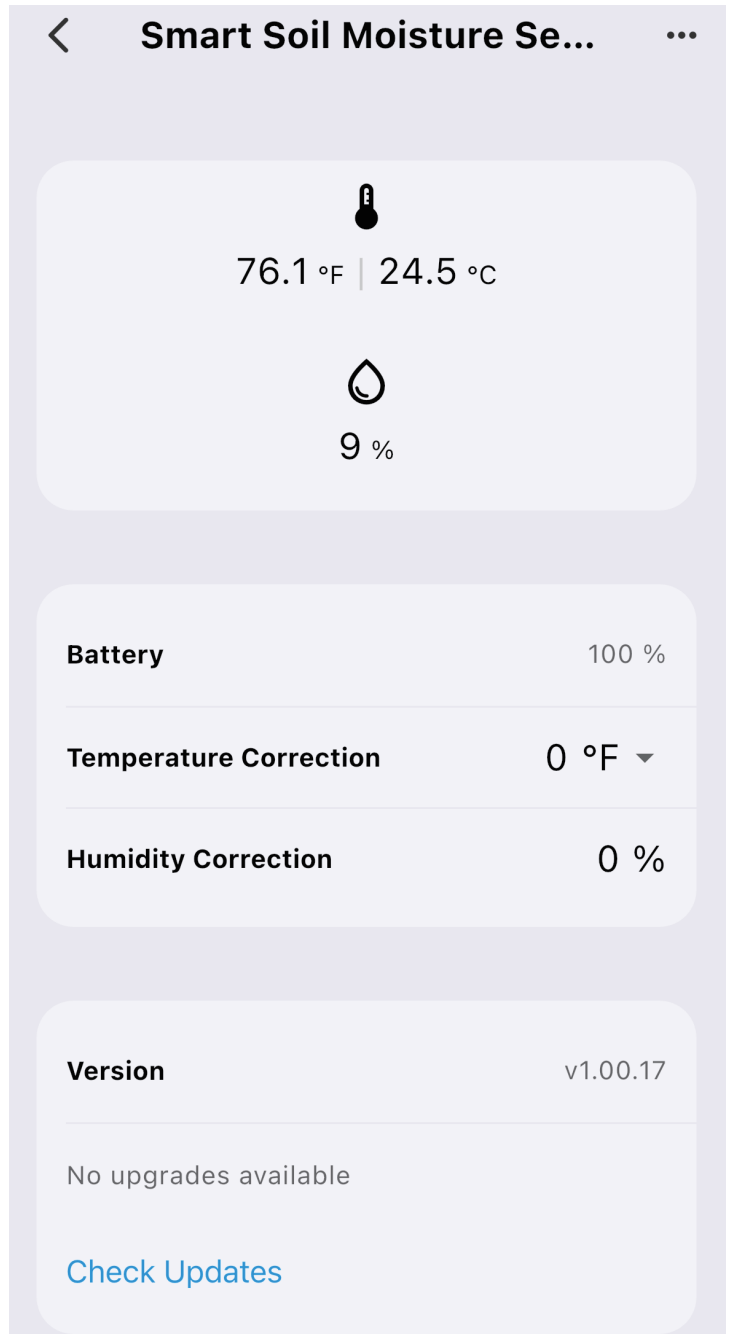
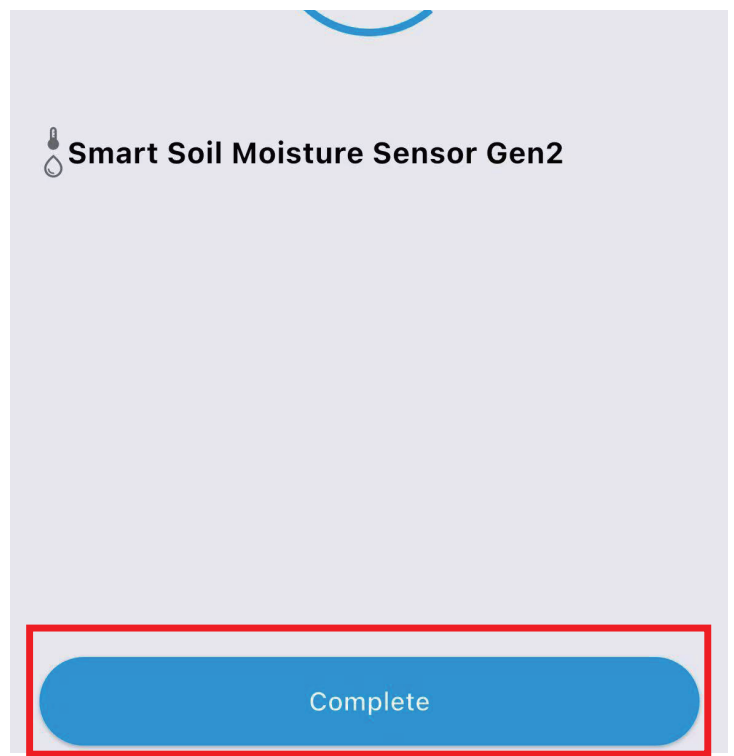
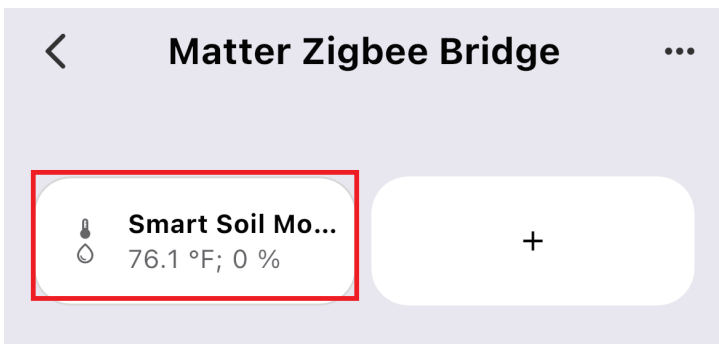
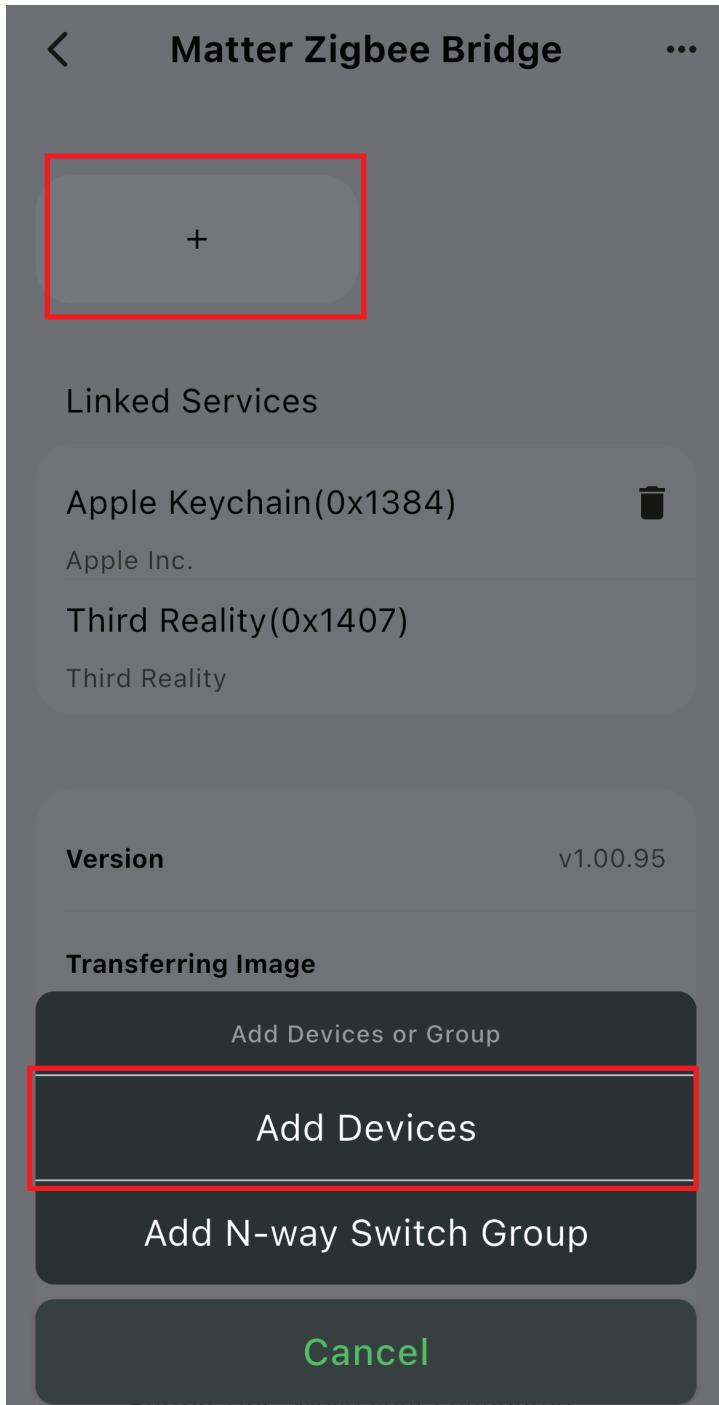
Device: Smart Bridge MZ1

App: 3R-Installer App



## Pairing steps:

1. Open 3R-Installer App, Ensure your bridge is already set up within your smart home system.
2. Long press the internal reset button for 5 seconds until the red light is on, indicating that the device is in 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 "Smart Soil Moisture Sensor Gen2" icon on device page, you can see the details. Follow the instructions to control Smart Soil Moisture Sensor Gen2.



# Pairing with Amazon Echo

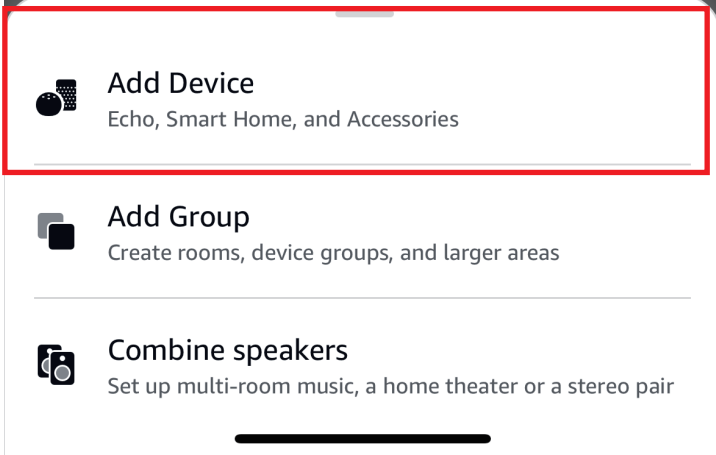
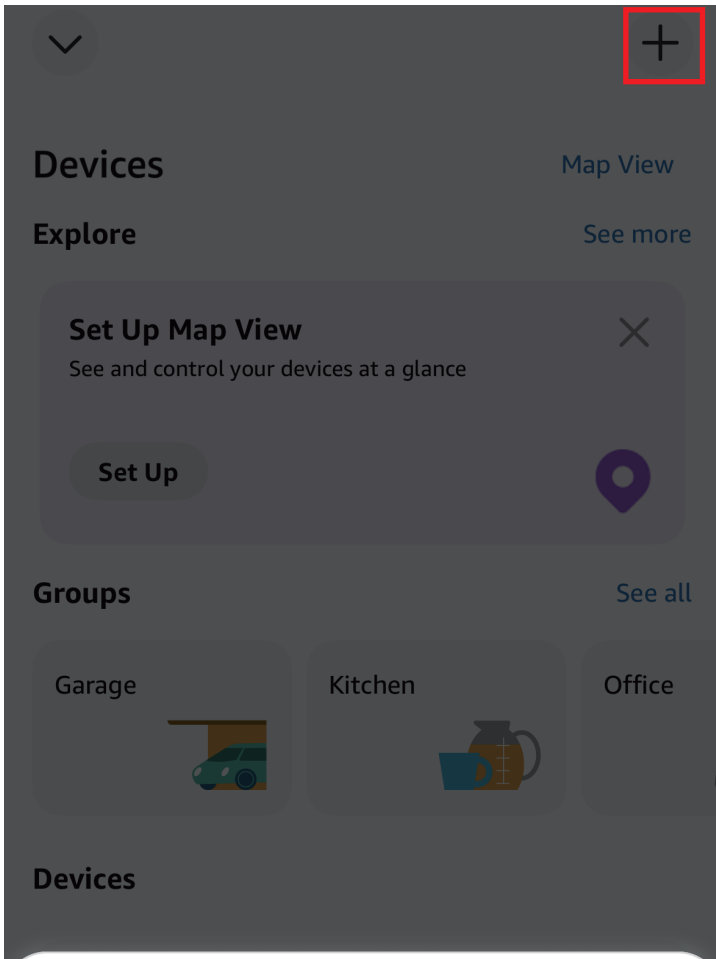
Compatible Device: Echo V4, Echo Plus V1 & V2,  
Echo Studio, Echo Show 10 Gen2 & Gen3

App: Amazon Alexa App

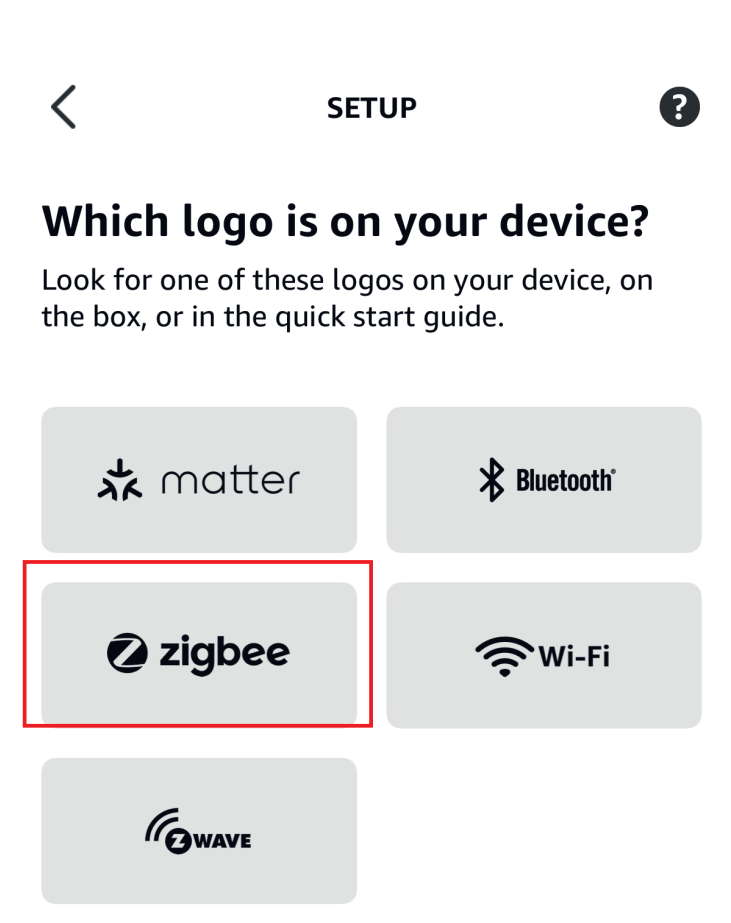
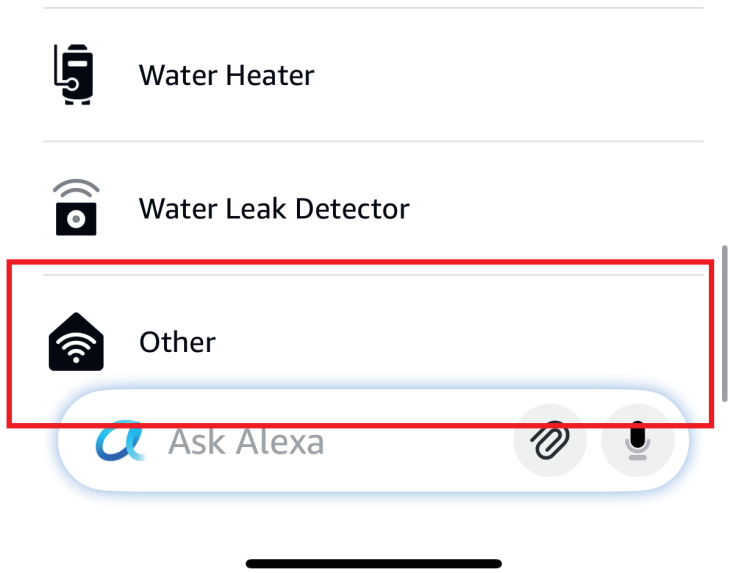
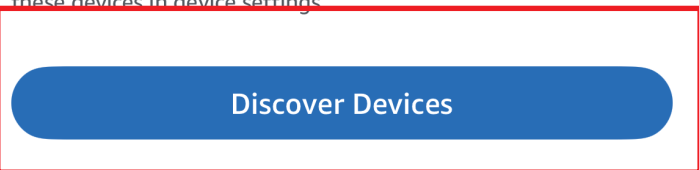


## Pairing steps:

1. Make sure your Alexa App and Echo device are up to date. You can check if there are any updates available for the Echo device by saying "Alexa, check for software updates".
2. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters 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.



When you discover devices, Alexa may connect additional compatible devices in your home. You can learn about or delete these devices in device settings.





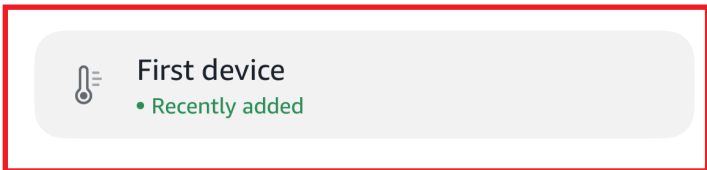
## 1 Other temperature sensor found and connected

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



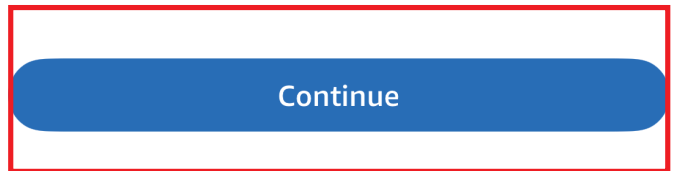
### Devices

Search icon | Device Type ▾ | Sort By ▾



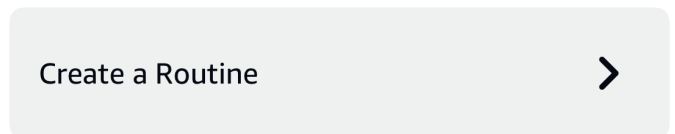
## First device added to Living room

Now you can refer to this device using room name and device type instead of remembering the device name.



< First device ⚙️

Current temperature	2°
Humidity	2.16%



# Pairing with SmartThings

App: SmartThings App

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



1. Before pairing, check for updates to make sure the SmartThings Hub firmware is up to date.
2. Add SmartThings drivers for Third Reality Smart Soil Moisture Sensor Gen2
  - Open this link in your PC browser. Log in your SmartThings Account.  
**<https://bestow-regional.api.smarthings.com/invite/adMKr50EXzj9>**
  - Click "Enroll" -- "Available Drivers" -- "Install" to install the device driver.

## SmartThings

### Channel Information

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

### My Hubs

#### Aeotec Hub

My home

**Enroll**

## SmartThings

### Channel Information

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

### My Hubs

#### Aeotec Hub

My home

Unenroll

Available Drivers

## SmartThings

### Third Reality

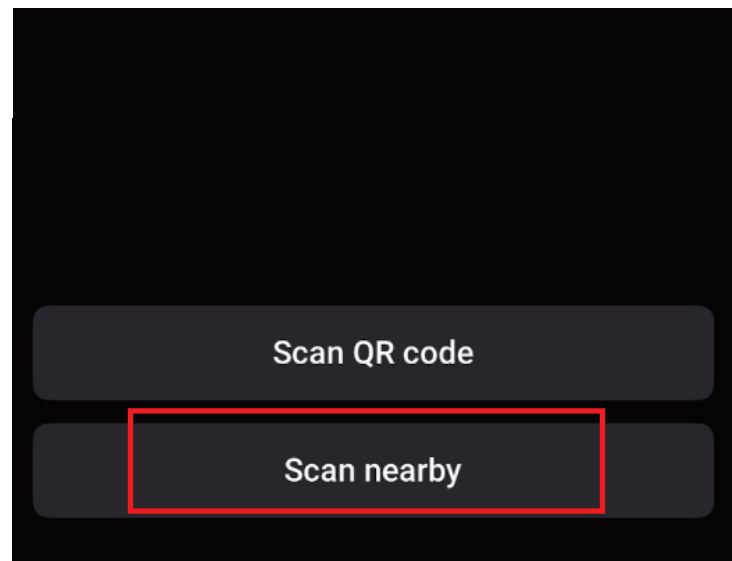
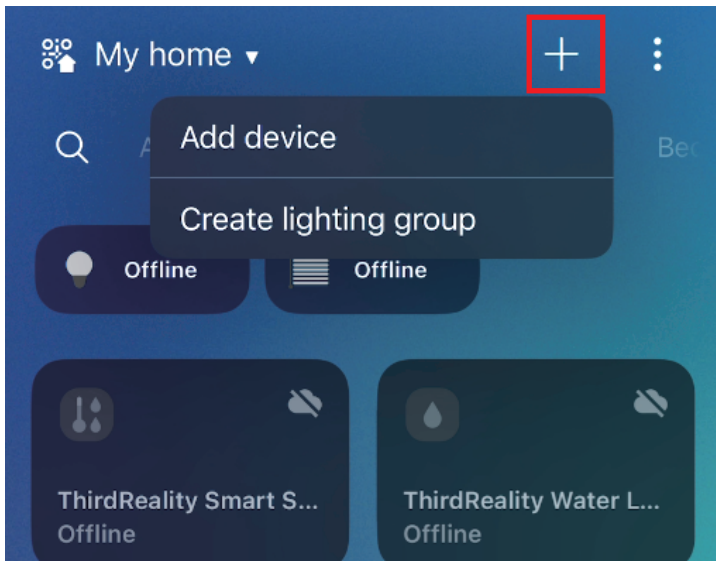
#### Aeotec Hub

#### My home

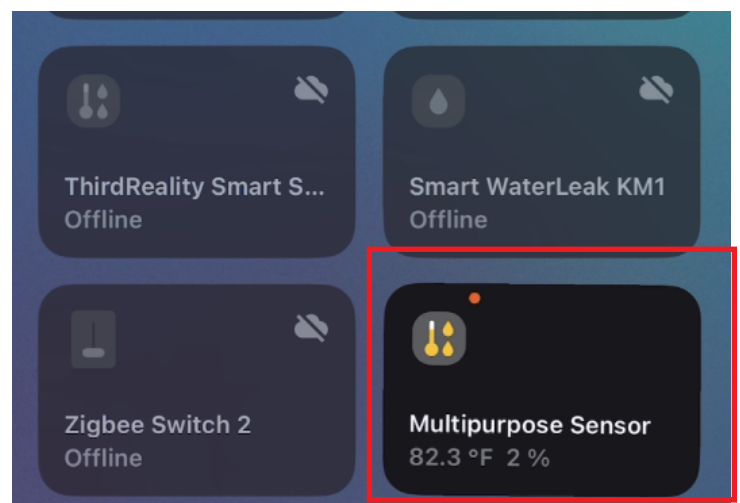
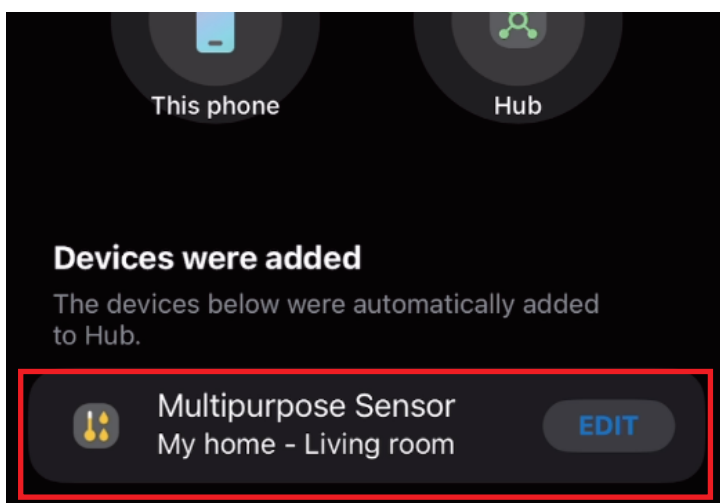
- Name  
ThirdReality Humidity Sensor
- Description  
ThirdReality Temperature and Humidity sensor drivers
- Permissions
  - zigbee: Enable full access to Zigbee actions

**Install**

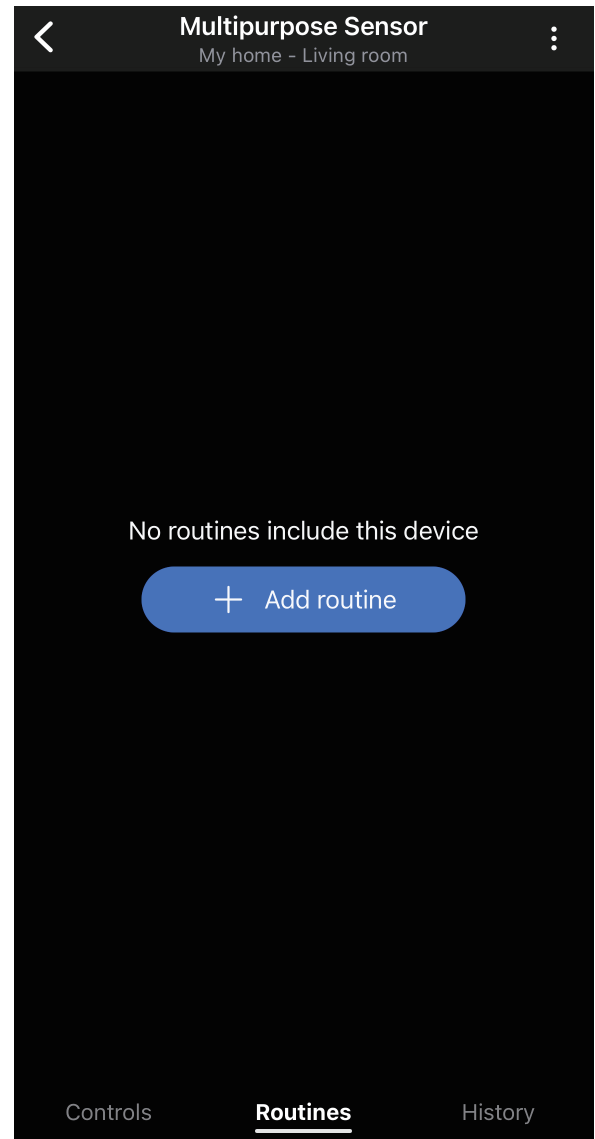
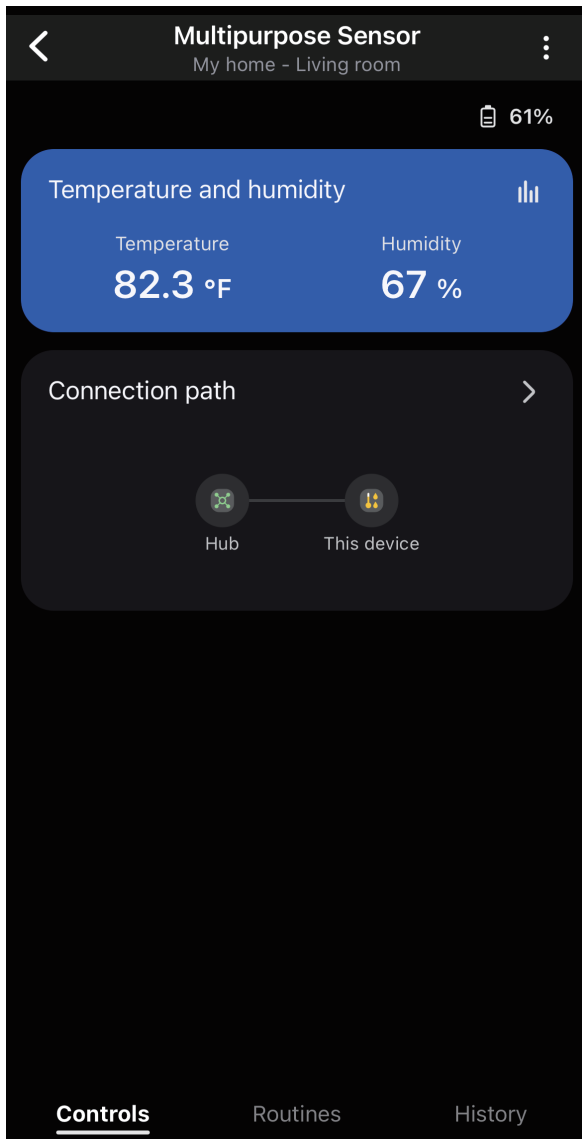
3. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
4. Open your SmartThings App, tap “+” on the up right corner to ”Add device” and then tap “Scan nearby”.



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



6. Create routines to control connected devices.



# Pairing with Hubitat

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



## Pairing steps:

1. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
2. 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.
3. 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.
4. Pairing is completed.
5. Set device type to generic Zigbee Temperature/Humidity sensor, Save Device.
6. Tap Apps, and Create New Basic Rules, select Humidity Sensor - smart soil moisture sensor, turn on your plant watering system when humidity changes.

Hubitat < Hubitat-C7 > Devices

**+ Add device** [Compatible devices](#)  List Grid

Label (Name) ↑↓	Disabled	Type ↑↓	Room ↑↓	DNI ↑↓	Status ↑↓	Last Activity ↑↓	⌵ ↑↓
> 3RSP0186Z <small>(Third Reality dual plug)</small>	<input type="checkbox"/>	Third Reality dual plug		70E1 <small>4CE17552215D0000</small>		1/14/2026 2:14:37 pm	
3RSP02064Z <small>(Third Reality plug)</small>	<input type="checkbox"/>	Third Reality plug		F9DE <small>4CE1755268DC0000</small>		1/14/2026 2:49:12 pm	
3RSP02065Z <small>(Third Reality plug)</small>	<input type="checkbox"/>	Third Reality plug		3338 <small>4CE1755225080000</small>		1/14/2026 1:32:17 pm	
> 3RSPJ0187Z <small>(Third Reality dual plug)</small>	<input type="checkbox"/>	Third Reality dual plug		5A67 <small>4CE1755225810000</small>		1/14/2026 2:16:12 pm	
> Third Reality dual plug	<input type="checkbox"/>	Third Reality dual plug		3876 <small>4CE1754CD7770000</small>		1/15/2026 1:41:24 pm	

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Hubitat < Hubitat-C7 > Devices > Add device

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

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

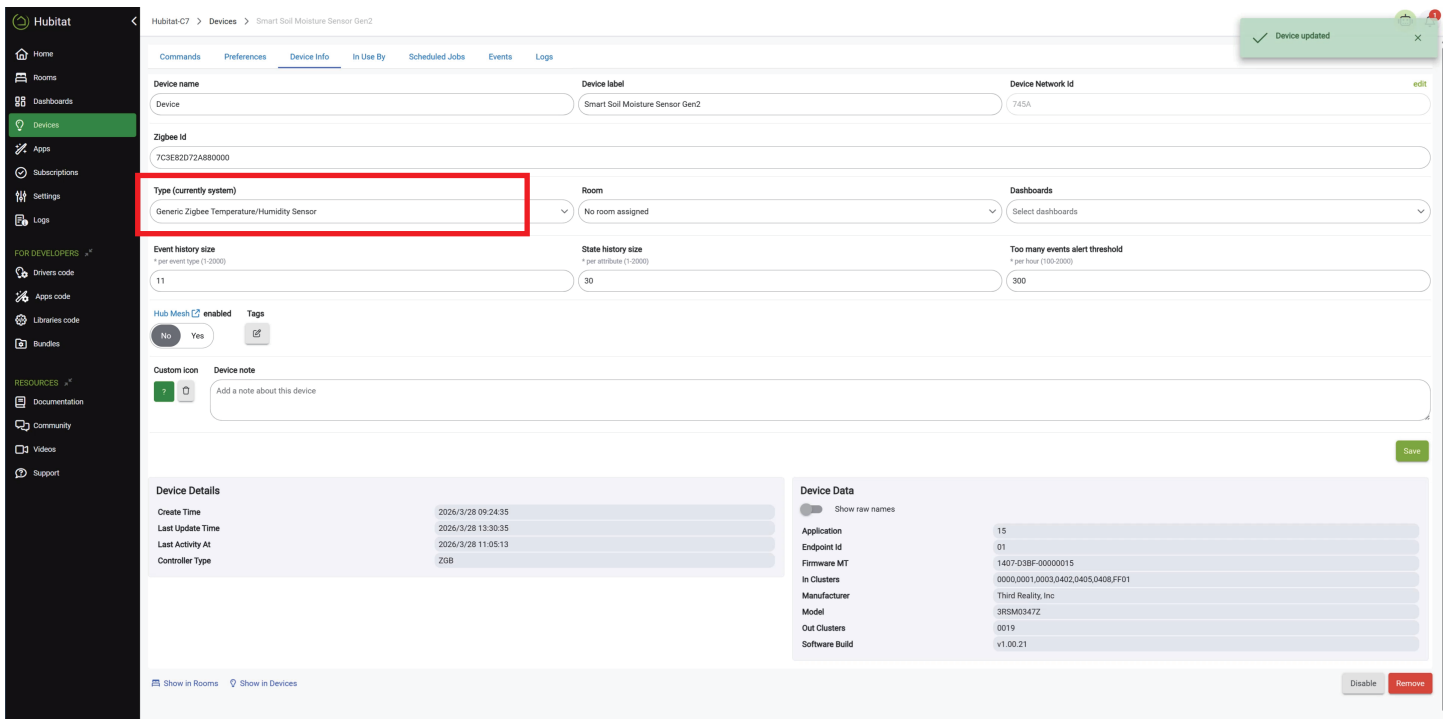
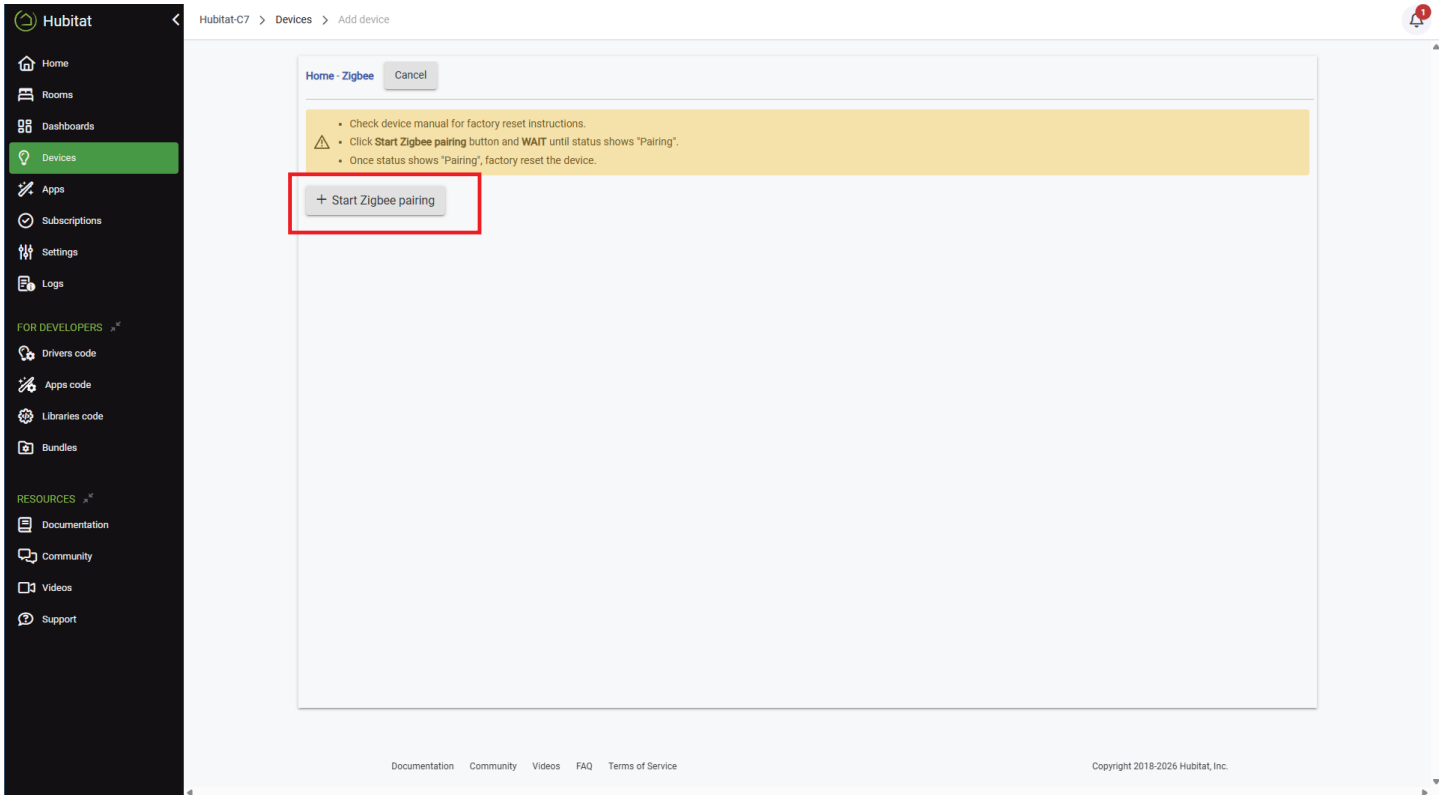
Add device manually:

Zigbee  Z-Wave  Matter  Iris V1 Zigbee

Matter is disabled. [Enable now.](#)

<> Virtual

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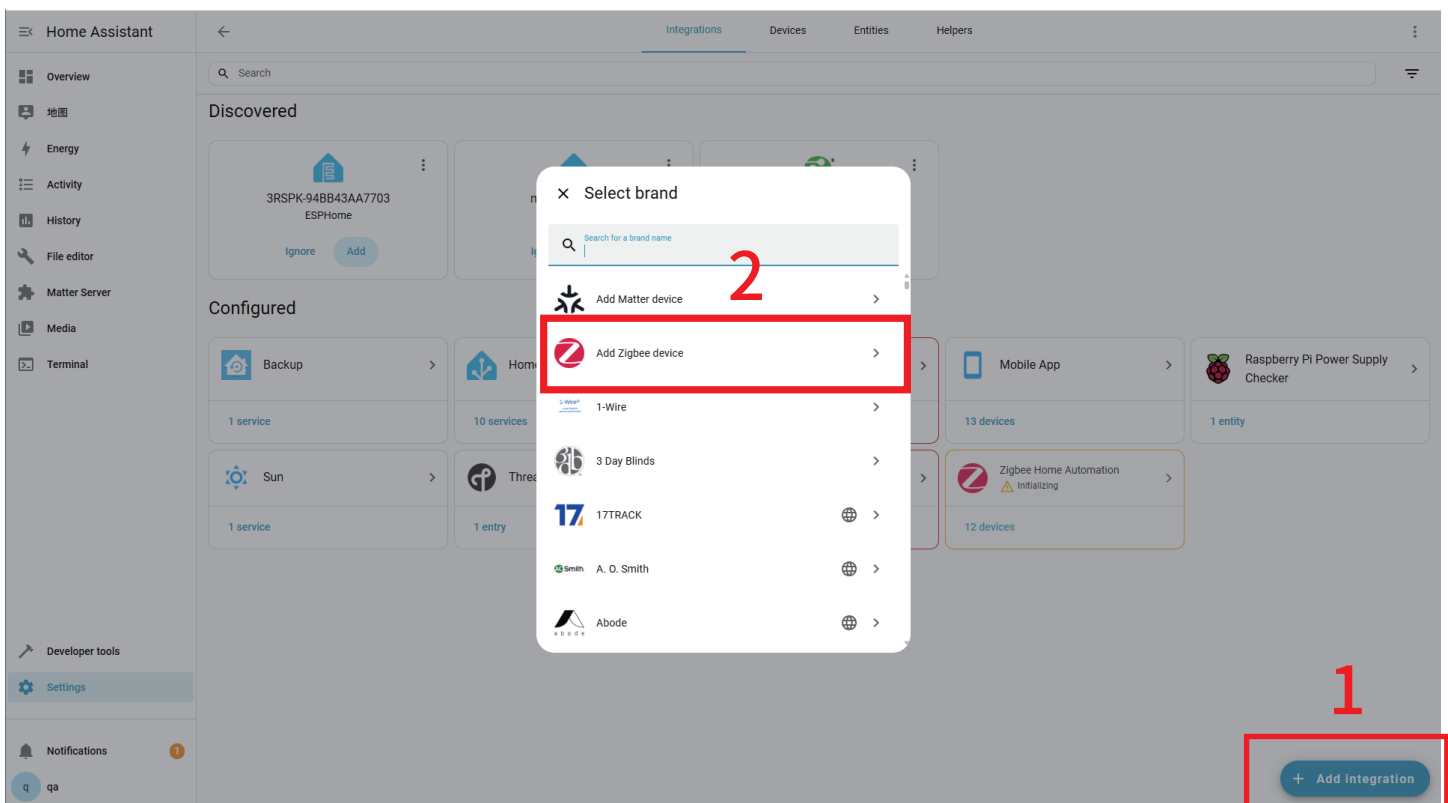
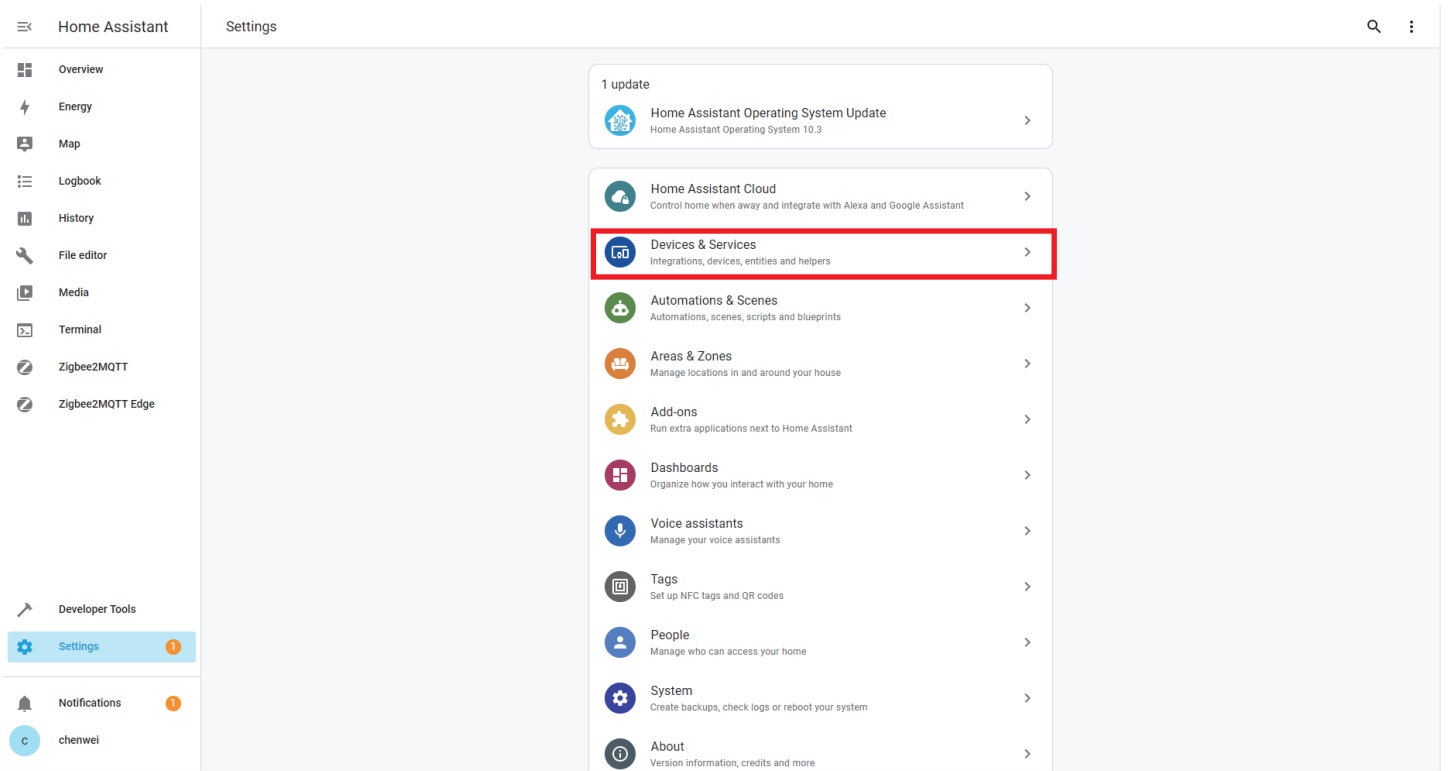
# Pairing with Home Assistant

Device: Zigbee dongle



## Zigbee Home Automation

1. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
2. In Zigbee Home Automation, go to “Settings” page, click “Devices&Services”. Then click the “Add integration” on the “Integrations” page, click “Add Zigbee Device”.
3. Pairing completed.
4. Back to “Devices” page to find the sensor added.
5. Click to enter in the control interface to set the sensor.
6. Click “+” belongs to Automation and add trigger and actions.



Filters Search 12 devices

Device	Area	Integration	Manufacturer	Model	Battery
Conbee II	-	Zigbee Home Automation	dresden elektronik	Conbee II	-
Third Reality, Inc 3RSB22BZ	-	Zigbee Home Automation	Third Reality, Inc	3RSB22BZ	-
Third Reality, Inc 3RSM0147Z	-	Zigbee Home Automation	Third Reality, Inc	3RSM0147Z	-
Third Reality, Inc 3RSM0347Z	-	Zigbee Home Automation	Third Reality, Inc	3RSM0347Z	-
Third Reality, Inc 3RSM0347Z	-	Zigbee Home Automation	Third Reality, Inc	3RSM0347Z	60%
Third Reality, Inc 3RSMR01067Z	-	Zigbee Home Automation	Third Reality, Inc	3RSMR01067Z	-
Third Reality, Inc 3RSMR01067Z	-	Zigbee Home Automation	Third Reality, Inc	3RSMR01067Z	-
Third Reality, Inc 3RSP0186Z	-	Zigbee Home Automation	Third Reality, Inc	3RSP0186Z	-
Third Reality, Inc 3RSPE02065Z	-	Zigbee Home Automation	Third Reality, Inc	3RSPE02065Z	-
zzx-60G	-	Zigbee Home Automation	Third Reality, Inc	3RPL01084Z	-
zzx-ota	-	Zigbee Home Automation	Third Reality, Inc	3RPL01084Z	-
zzx-water2	HN	Zigbee Home Automation	Third Reality, Inc	3RWS0218Z	-

+ Add device

- Overview
- 地图
- Energy
- Activity
- History
- File editor
- Matter Server
- Media
- Terminal
- Developer tools
- Settings 2
- Notifications 1
- qa

60%

### Device info

3RSM0347Z  
by Third Reality, Inc  
Connected via [Conbee II](#)  
Firmware: 0x00000010  
Zigbee: 7C:3E:82:D6:D4:01:00:00

Zigbee info

- Zigbee Home Automation
- Reconfigure

### Sensors

- Humidity 68.38%
- Soil moisture 68.38%
- Temperature 21.7 °C

[Add to dashboard](#)

### Activity

**January 16, 2026**

- Third Reality, Inc 3RSM0347Z Firmware became unknown 11:04:18 AM - 9 minutes ago
- Third Reality, Inc 3RSM0347Z Identify became unknown 11:04:18 AM - 9 minutes ago
- Third Reality, Inc 3RSM0347Z Firmware became unavailable 11:04:09 AM - 9 minutes ago
- Third Reality, Inc 3RSM0347Z Identify became unavailable 11:04:09 AM - 9 minutes ago
- Third Reality, Inc 3RSM0347Z Firmware

### Configuration

- Firmware Unknown

[Add to dashboard](#)

### Diagnostic

- Battery 60%
- Identify [Press](#)

+2 disabled entities

[Add to dashboard](#)

### Automations

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

### Scenes

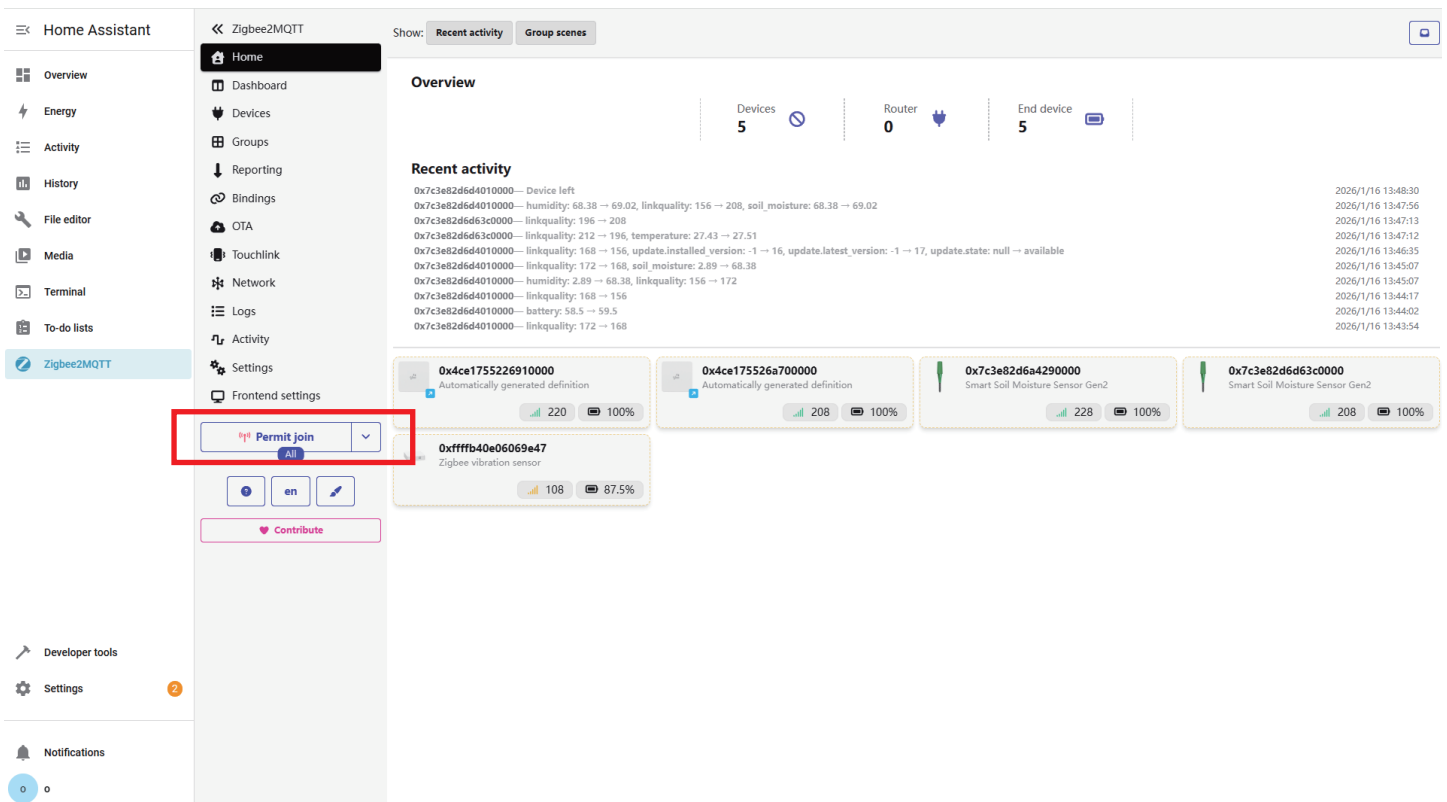
No scenes have been added using this device yet. You can add one by pressing the + button above.

### Scripts

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

# Zigbee2MQTT

1. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
2. Permit join to start Zigbee pairing in Zigbee2MQTT.
3. Pairing completed, the sensor will be displayed in the device list  
Go to Settings page, create automation.



- Overview
  - Energy
  - Activity
  - History
  - File editor
  - Media
  - Terminal
  - To-do lists
  - Zigbee2MQTT
- 
- Developer tools
  - Settings 3
- 
- Notifications 0

- Home
  - Dashboard
  - Devices
  - Groups
  - Reporting
  - Bindings
  - OTA
  - Touchlink
  - Network
  - Logs
  - Activity
  - Settings
  - Frontend settings
- Permit join All
- en
- Contribute

Search Advanced search Entries: 6

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

Friendly name ↑	IEEE Address	Model	LQI	Last seen	Availability	Actions		
0x4ce1755226910000	0x4ce1755226910000 0x9C8C 40876	3RAP0149BZ Third Reality, Inc	220	Disabled	Disabled			
0x4ce175526a700000	0x4ce175526a700000 0x0111 273	3RAP0149BZ Third Reality, Inc	208	Disabled	Disabled			
0x7c3e82d6d4010000	0x7c3e82d6d4010000 0x4EBA 20154	3RSM0347Z Third Reality	156	Disabled	Disabled			
0x7c3e82d6d63c0000	0x7c3e82d6d63c0000 0x8616 46614	3RSM0347Z Third Reality	212	Disabled	Disabled			
0xffffb40e06069e47	0xffffb40e06069e47 0x7F33 32563	3RV501031Z Third Reality	108	Disabled	Disabled			

- Overview
  - Energy
  - Activity
  - History
  - File editor
  - Media
  - Terminal
  - To-do lists
  - Zigbee2MQTT
- 
- Developer tools
  - Settings 2
- 
- Notifications 0

- Home
  - Dashboard
  - Devices
  - Groups
  - Reporting
  - Bindings
  - OTA
  - Touchlink
  - Network
  - Logs
  - Activity
  - Settings
  - Frontend settings
- Permit join All
- en
- Contribute

0x7c3e82d6d4010000

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

- Temperature  
Measured temperature value  
**23.06 °C**
- Humidity  
Measured relative humidity  
**68.38 %**
- Soil moisture  
Measured soil moisture value  
**68.38 %**
- Battery  
Remaining battery in %  
**59.5 %**
- Linkquality  
Link quality (signal strength)  
**168 lqi**

# Pairing with Homey

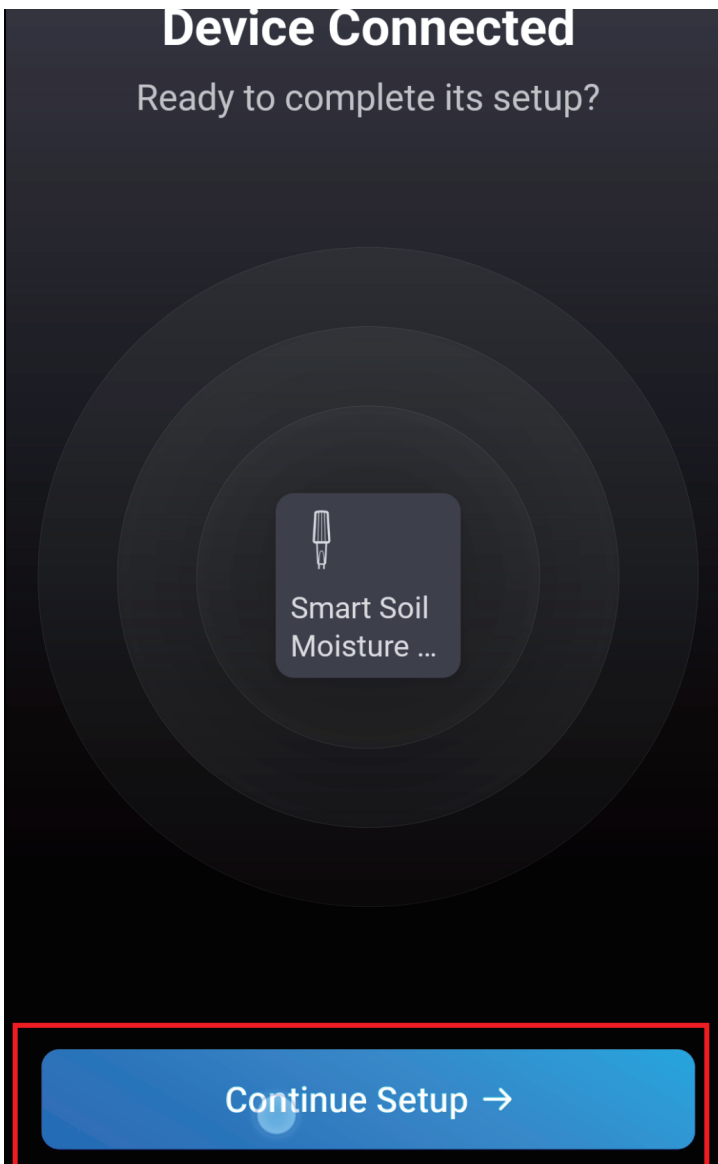
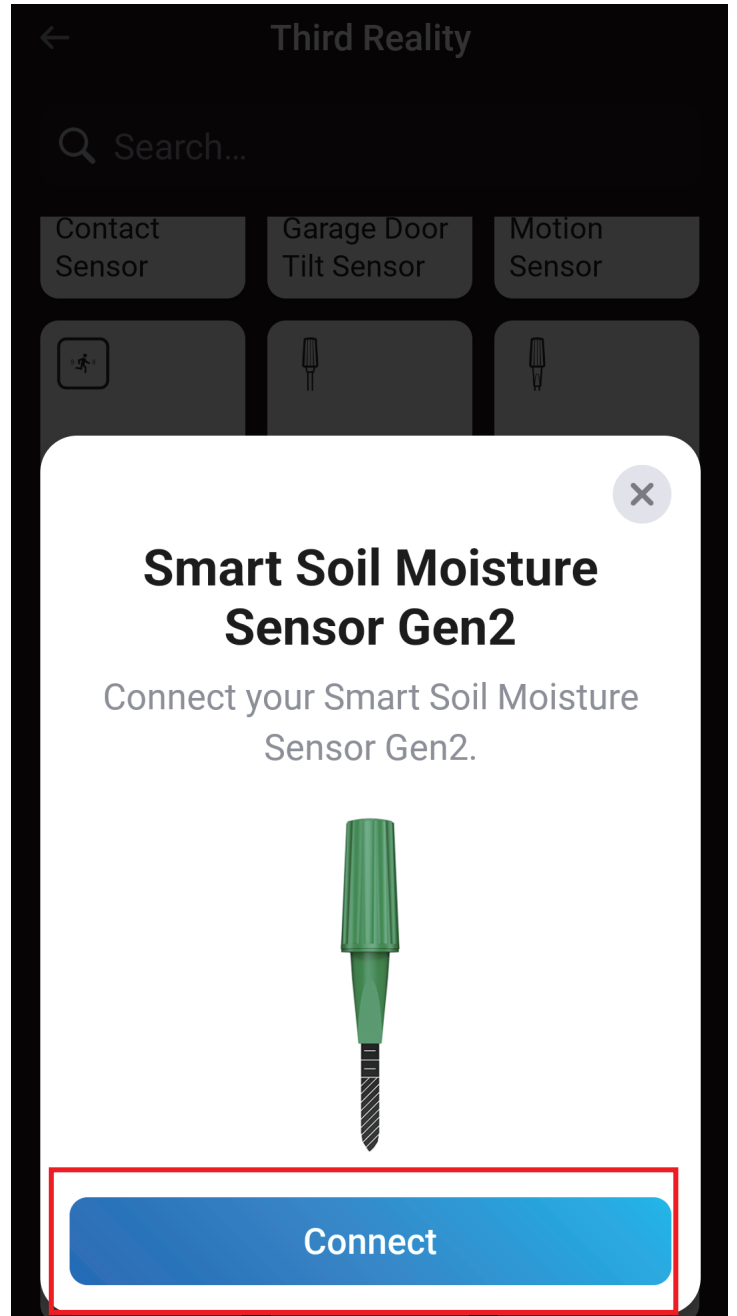
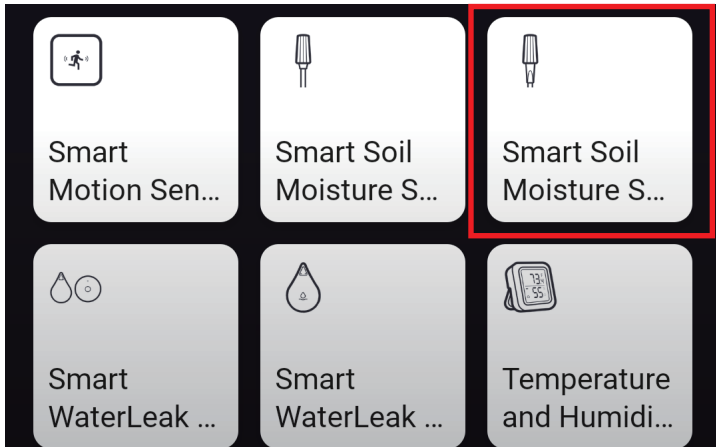
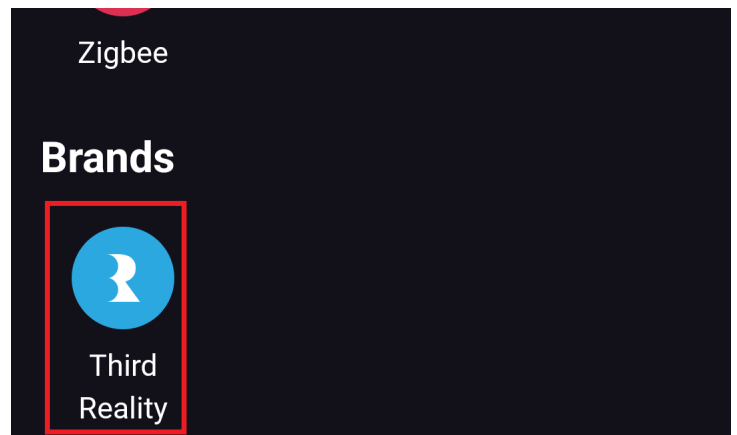
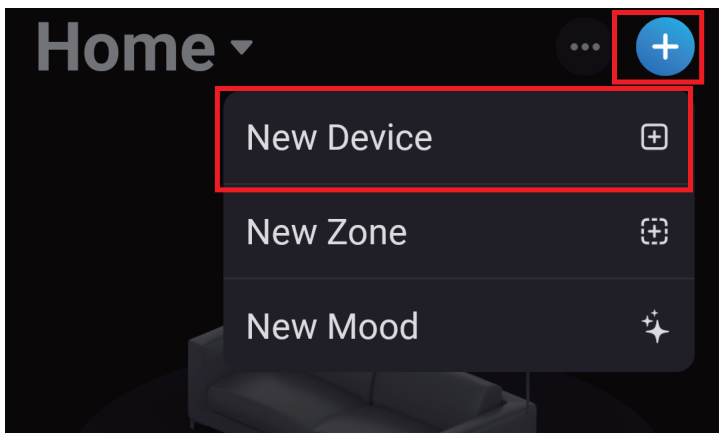
App: Homey

Devices: Homey Pro, Homey Bridge



## Pairing steps:

1. Install the Third Reality App in your Homey App.
2. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
3. Tap "+" in the Devices, tap → "New Device" → "Third Reality" → "Smart Soil Moisture Sensor Gen2" → "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.



# Make It Your Own

Personalize your device.



Smart Soil  
Moisture S...

Name Soil Moisture Sensor Gen2

Icon

Zone Office Buildings

Status Indicator °C

Finish

## Devices



24.4 °C

Smart Soil  
Moisture S...



Smart  
WaterLeak ...



Smart  
WaterLeak ...

Smart Soil Moisture Senso...



24.4 °C  
Temperature



47.6 %  
Moisture



# Troubleshooting

## 1. Why does Alexa display soil moisture as 'temperature (F)'?

This is because Alexa does not natively support the “soil moisture” sensor type. To ensure data can be recognized, displayed, and used for automation rules by Alexa, we report soil moisture values through the “Temperature” property, which Alexa already supports.

In other words, the numerical value itself represents the “percentage humidity”, but is displayed in the 'temperature' field. You only need to look at the temperature to know the soil moisture.

## 2. What does the displayed F / C mean? Isn't this the temperature?

The F (Fahrenheit) or C (Celsius) displayed on the interface are merely Alexa's default unit labels for the 'temperature attribute,' and do not reflect actual temperature readings.

In this product:

The displayed "F value" = the soil moisture value.

The displayed "C value" needs to be converted to "F value".

For example, if the interface displays "68 F", understand that the soil moisture value is 68 (%), not a temperature of 68 degrees Fahrenheit. The table takes 68 and 32 degrees Fahrenheit as examples to make it easier to understand.

Actual Humidity(%)	Fahrenheit(°F)	Celsius(°C)
68	68	20
32	32	0

3. **My Soil Moisture Sensor Gen2 does not power on after inserting the batteries. What should I check?**

Please check the battery installation and contact points carefully:

**Verify battery orientation**

- Make sure the batteries are installed correctly according to the polarity markings (+ / -).

**Check the spring contacts**

- Ensure the battery is making firm contact with the metal spring terminals inside the compartment.

**Adjust the spring contact if needed**

- In some cases, the spring contact may not fully touch the battery.
- You can gently use a screwdriver to slightly pull the spring outward to improve contact.

**Reinsert the batteries**

- After adjustment, reinstall the batteries and check if the device powers on.

# 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.

## 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](mailto:info@3reality.com) or visit

[www.thirdreality.com](http://www.thirdreality.com)

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