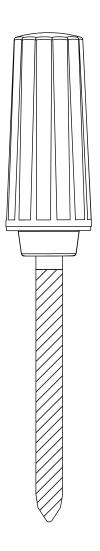
# **Smart Soil Moisture Sensor**

**User Manual** 







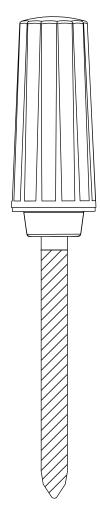
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### Introduction

Smart Soil Moisture Sensor is able to detect the environmental conditions of the soil in real time and transmit the data to your smart system through wireless communication capabilities.

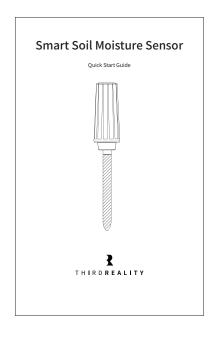
### What's in the Box







AA Battery

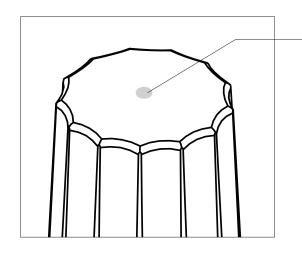


User Guide

# **Specifications**

Name	Smart Soil Moisture Sensor
Model	3RSM0147Z
Operating Voltage	DC 1.5V
Battery Type	1 x AA Alkaline Battery (included)
Wireless Connectivity	Zigbee 3.0
Working condition	-10°C~50°C(14°F~122°F)
	RH 0~100%
Temperature Range	-10°C~50°C(14°F~122°F)
Temperature Accuracy	±1.5°C
Humidity Range	0~100%
Humidity Accuracy	±3%

# **LED Status**

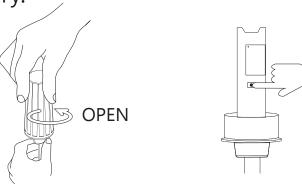


### **LED** Indicator

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.



- Press and hold the reset button for 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 hub to pair the sensor in the corresponding app.

#### How to Use

Set up your smart soil moisture sensor.

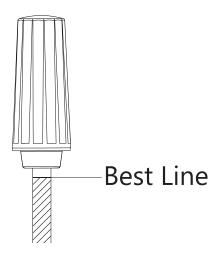
When inserting the sensor into the soil to be measured, align the sensor's marking line with the soil surface to ensure measurement accuracy. Create an automation or water the plant manually based on your observation of specific plant and soil situation, to start irrigation of certain period of time when soil moisture falls below certain value.

**Note:** Check multiple moisture values during certain period of time before and after irrigation, to ensure accurate soil moisture data when creating irrigation automation.

### **Installation**

Recomand: Use a suitable tool to dig a small hole in the soil and then insert the sensor.

\* When installing the sensor, make sure the marked best line is flush with the soil surface.

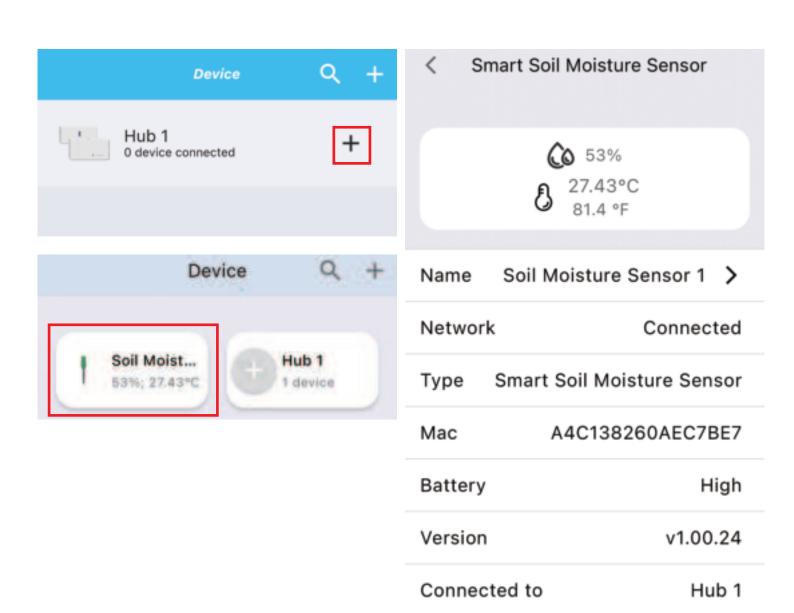


- Friction can damage the sensor and affect its accuracy. It is not recommended to insert the sensor directly into hard soil, which may damage the sensor.
- Designed to measure soil moisture ONLY.

# Setup with Third Reality Hub and SKILL

The Third Reality Hub (sold separately) allows you to control your device remotely via the Third Reality APP, making it a great option for smart home beginners or those without a system from major providers. Additionally, the Third Reality Cloud supports SKILL integration with Google Home or Amazon Alexa, enabling you to connect your device to these platforms. However, due to the potential for slow and unreliable Cloud-to-Cloud connections, we recommend using the Bridge solution if Google Home or Alexa is your primary smart home platform.

- 1. Ensure your hub is properly set up with Third Reality App.
- 2. Open the battery cover, install the battery, press and hold the reset button for 5 seconds and release the hold; The blue blinking LED light indicates the sensor enters Zigbee pairing mode.
- 3. Open the Third Reality APP, press the "+" icon next to the hub, and select "Quick Pair."
- 4. The sensor will pair with your hub and appear in the Third Reality APP.
- 5. Optionally, you can enable the Third Reality SKILL in either the Alexa or Google Home app to enable Cloud-to-Cloud communication.

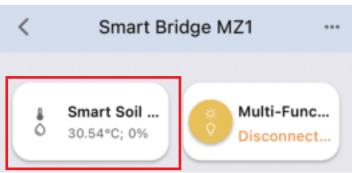


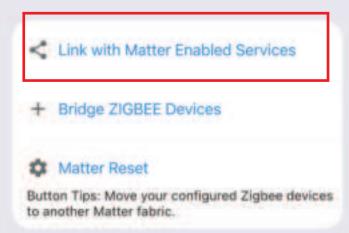
## Setup with Smart Bridge MZ1

The Smart Bridge (sold separately) enables your Zigbee device to become Matter-compatible, allowing seamless integration with major Matter ecosystems like Apple Home, Google Home, Amazon Alexa, Samsung Smart-Things, and Home Assistant. By setting up your Zigbee smart soil moisture sensor with the Smart Bridge, it transforms into a Matter compatible smart color bulb, enabling local control through Matter. Third Reality also offers the 3R-Installer APP, which lets you configure Zigbee smart soil moisture sensor attributes such as default-on behavior and perform firmware updates.

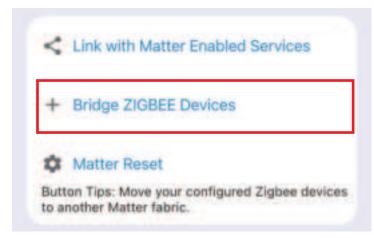
- 1. Ensure your bridge is already set up within your smart home system.
- 2. Open the battery cover, install the battery, press and hold the reset button for 5 seconds and release the hold; The blue blinking LED light indicates the sensor enters Zigbee pairing mode.
- 3. Press the pinhole button on the bridge to activate Zigbee pairing mode. The Zigbee blue LED should start blinking.
- 4. The sensor will pair with the bridge, and a new device will appear in your smart home app, such as Google Home or Alexa.
- 5. Optionally, you can install the 3R-Installer APP and use the multi-admin feature in your smart home app to share permissions with the 3R-Installer APP.













# Setup with Compatible Third-Party Zigbee Hubs

Third Reality supports integration with various open Zigbee platforms, including Amazon Echo with built-in Zigbee, Samsung SmartThings, Home Assistant (with ZHA or Z2M), Homey and Hubitat. If you own any of these devices, you can pair the smart soil moisture sensor directly without the need for an additional bridge or hub.

- 1. Ensure your Zigbee Hub is already set up within your smart home system.
- Open the battery cover, install the battery, press and hold the reset button for 5 seconds and release the hold; The blue blinking LED light indicates the sensor enters Zigbee pairing mode.
- 3. Open your smart home app and follow the on-screen instructions to begin the Zigbee pairing process.
- 4. The sensor will flash and then turn warm white, indicating it has successfully paired with the Zigbee hub.
- 5. You can now use your smart home app to turn the sensor on/off.

# Pairing with SmartThings

App: SmartThings App

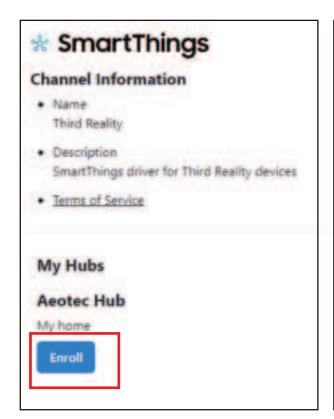
Devices: SmartThings Hub 2nd Gen(2015) and 3rd Gen(2018), Aeotec

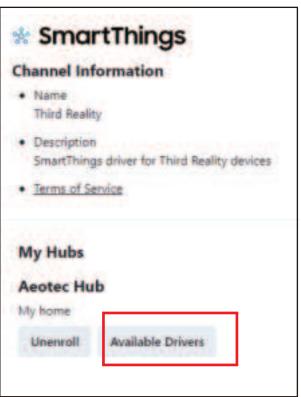
Smart Home Hub.

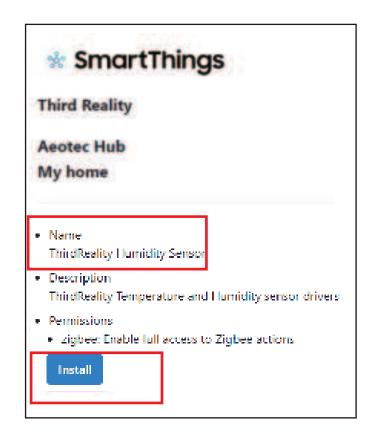


### Pairing steps:

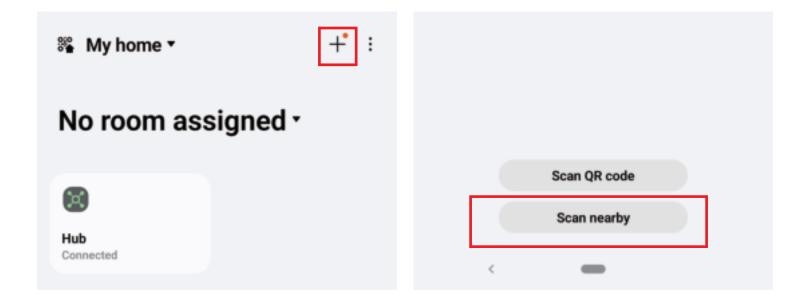
- Before pairing, check for updates to make sure the SmartThings Hub firmware is up to date.
- Add SmartThings drivers for Third Reality Temperature and Humidity Sensor
- Open this link in your PC browser. Log in your SmartThings Account.
  - https://bestow-regional.api.smartthings.com/invite/adMKr50EXzj9
- Click "Enroll" --"Available Drivers" -- "Install" to install the device driver.



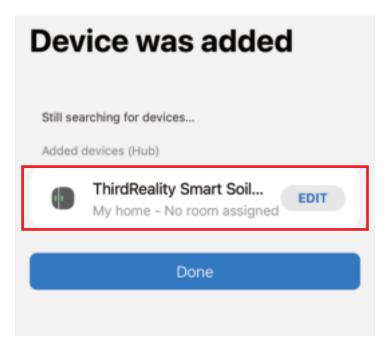


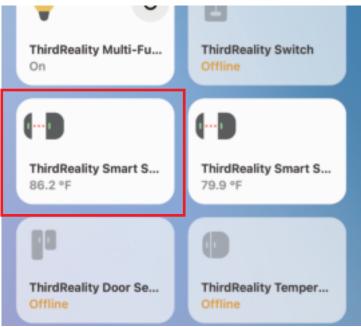


- 3. Open the battery cover and install the batteries, press and hold the reset button for 5 seconds and release the hold; The LED light turns blue blinking, indicating it enters pairing mode.
- 4. Open your SmartThings App, tap "+" on the up right corner to "Add device" and then tap "Scan nearby".

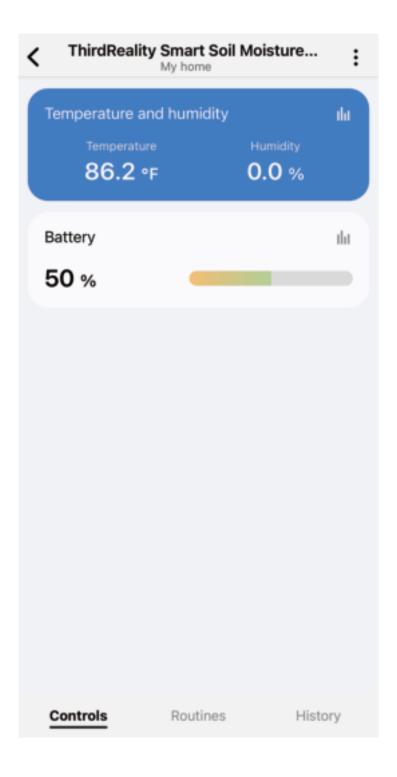


5. The sensor will be added to your SmartThings hub in a few seconds.





6. Create routines to control connected devices.



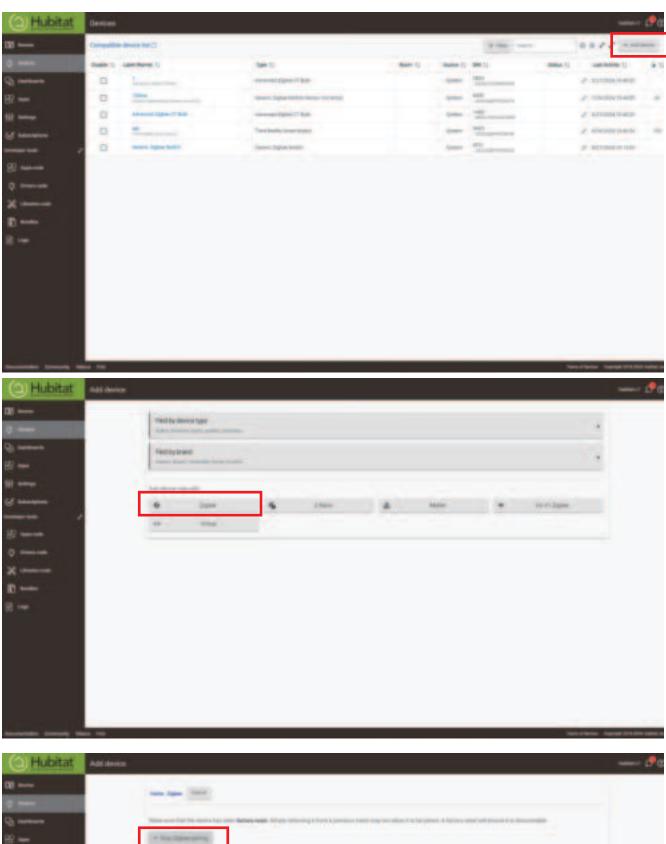
# **Pairing with Hubitat**

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

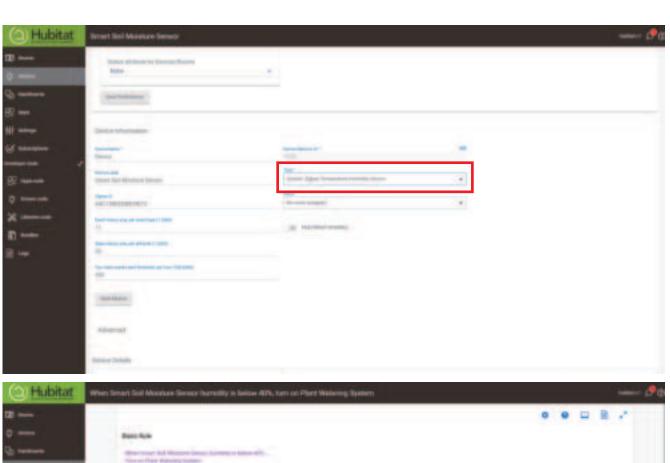


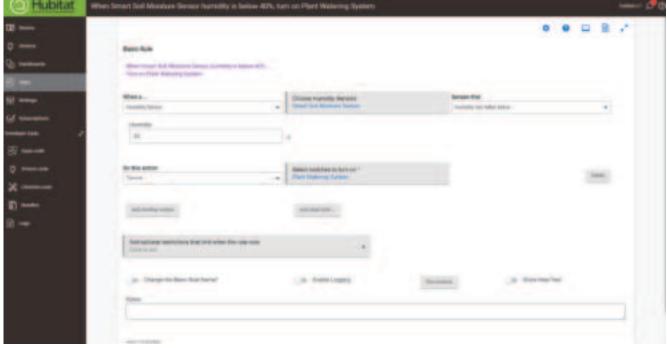
### Pairing steps:

- 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.









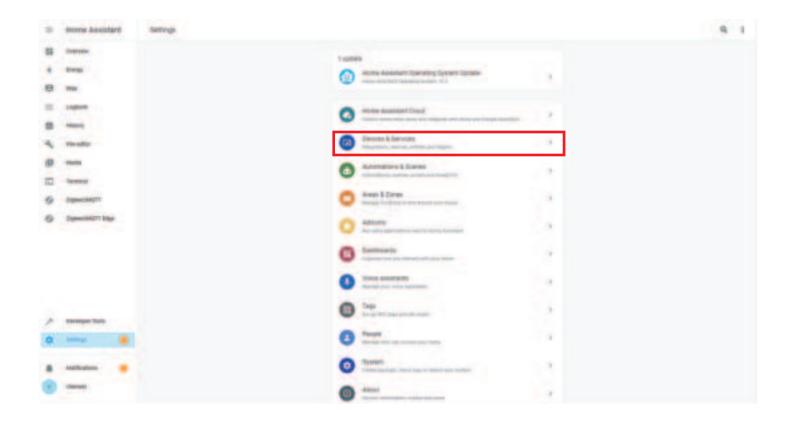
# Pairing With Home Assistant

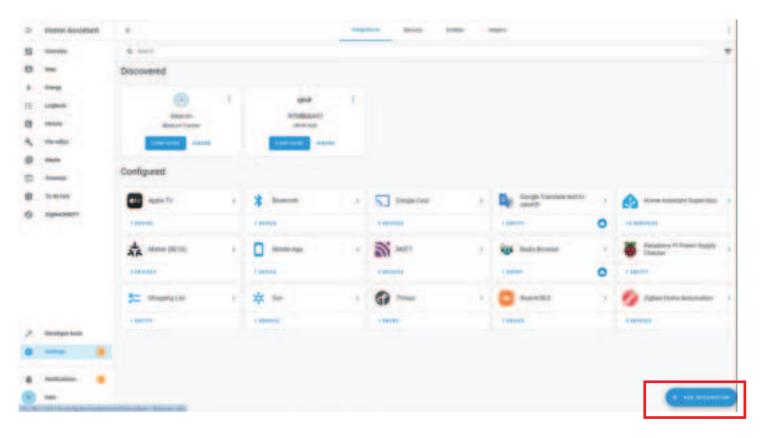
Device: Zigbee dongle

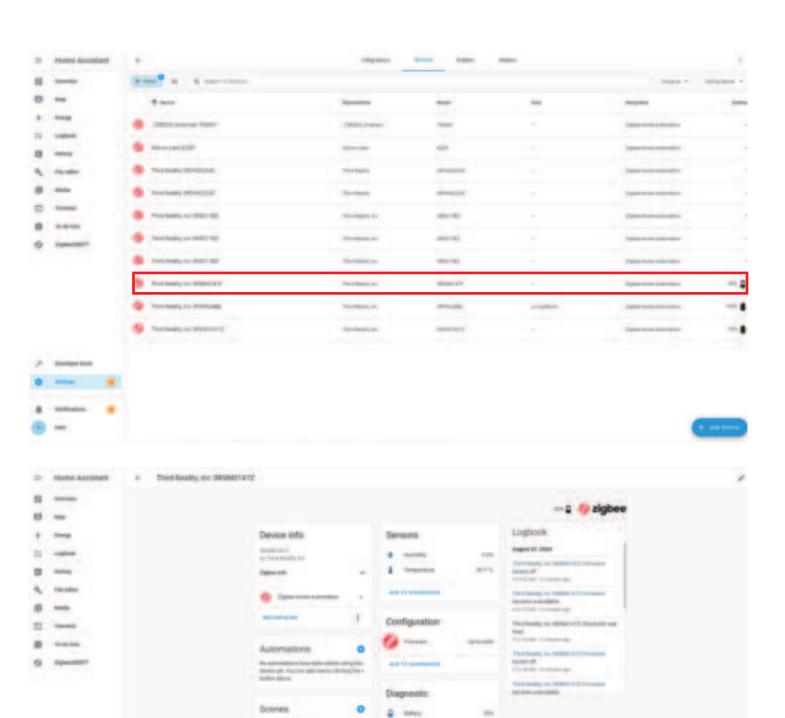


### **Zigbee Home Automation**

- 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 "Configuration" page, click "integration".
- 3. Then click the "Devices" on the Zigbee item, the click "Add Devices".
- 4. Pairing completed.
- 5. Back to "Devices" page to find the sensor added.
- 6. Click to enter in the control interface to set the sensor.
- 7. Click "+" belongs to Automation and add trigger and actions.







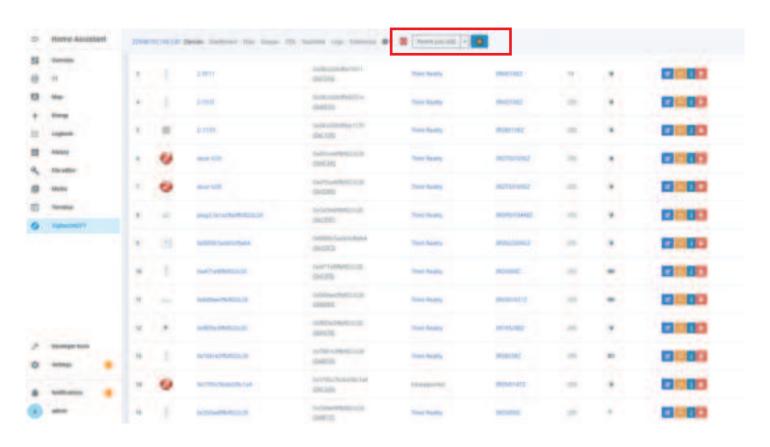
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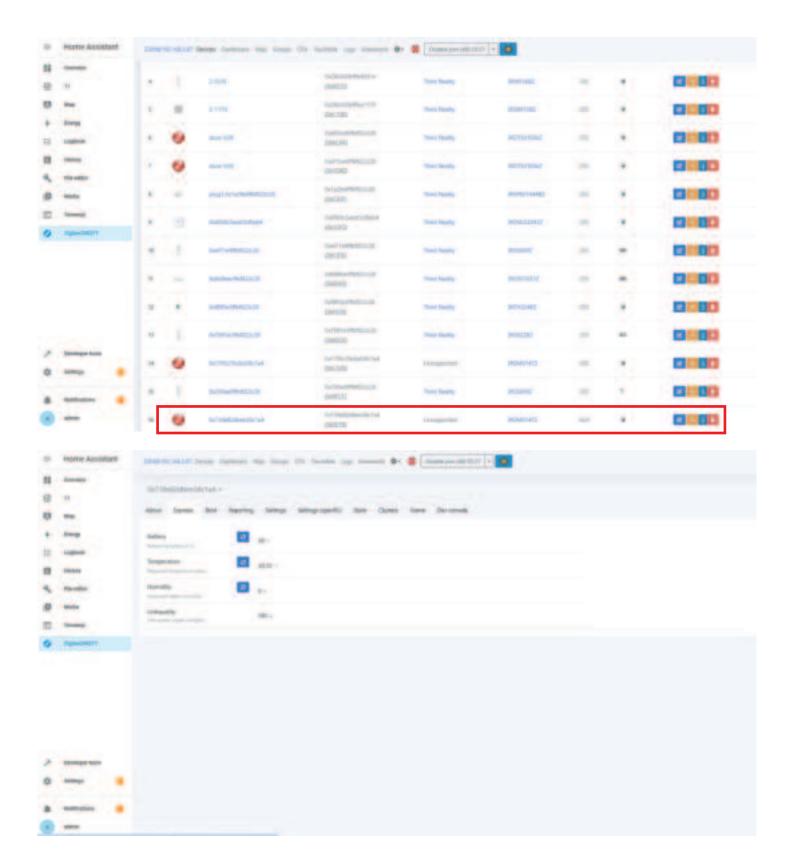
Scripts

A Descript Nation

### 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.





# **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 www.3reality.com/devicesupport. For customer support, please contact us at info@3reality.com or visit www.3reality.com.

For help and troubleshooting related to Amazon Alexa, visit the Alexa app.