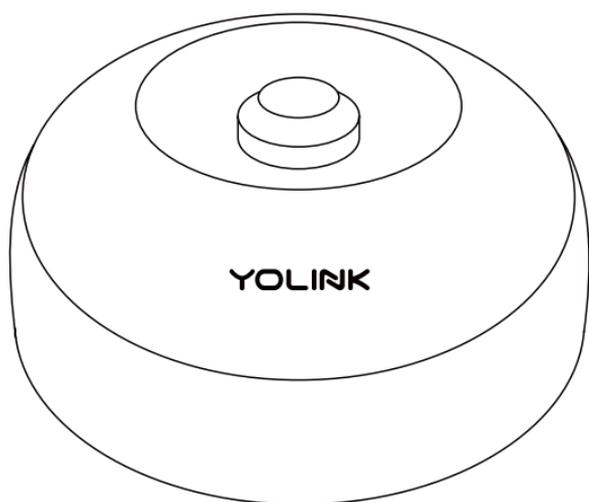


# YOLINK



## Motion Sensor

YS7804-UC



Installation & User Guide

Revision Oct. 31, 2024

# TABLE OF CONTENTS

A . Welcome!	01
B . Before You Begin	02
C . In the Box	04
D . Required Items	04
E . Get to Know Your Motion Sensor	05
<hr/>	
F . Install the App	06
G . Add Your Motion Sensor to the App	07
H . Power Up	09
I . Installation	10
J . App Functions: Device Screen	15
<hr/>	
K . App Functions: Device Details Screen	16
L . App Functions: Alarm Strategy Screen	18
M . App Functions: Smart – Automation	20
N . Control-D2D	21
O . App & 3rd-Party Services	24
<hr/>	
P . Battery Replacement	25
Q . Factory Reset	27
R . Firmware Update	28
S . Specifications	29
T . Troubleshooting	31
<hr/>	
U . Warnings	33
V . Warranty	35
W . FCC Statement	36
X . Contact Us	38

## A Welcome!

Thank you for purchasing YoLink products! We appreciate you trusting YoLink for your smart home & automation needs. Your 100% satisfaction is our goal. If you experience any problems with your installation, with our products or if you have any questions that this manual does not answer, please contact us right away. See the Contact Us section for more info.

Thank you!

YoLink Customer Support

---

## User Guide Conventions

The following icons are used in this guide to convey specific types of information:



Very important information  
(can save you time!)



Good to know info but may not  
apply to you

## B Before You Begin

Visit our Motion Sensor support page on our website, for the latest installation guides, additional resources, information and videos by visiting:

<https://www.yosmart.com/support/YS7804-UC>

Or by scanning the QR code:



Download the most current version of the user guide by scanning the QR code:



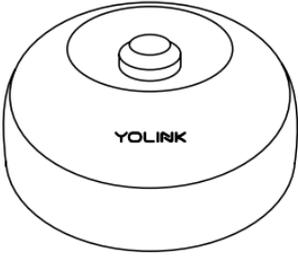
## B Before You Begin



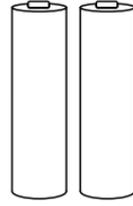
Your Motion Sensor connects to the internet via a YoLink hub, and it does not connect directly to your WiFi or local network. In order for remote access to the device from the app, and for full functionality, a hub is required.

This guide assumes the YoLink app has been installed on your smartphone, and a YoLink hub is installed and online (or your location, apartment, condo, etcetera, is already served by a YoLink wireless network).

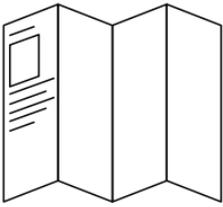
## C In the Box



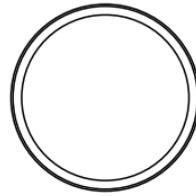
Motion Sensor



2 x AAA Batteries (Pre-Installed)



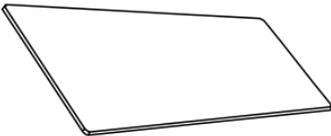
Quick Start Guide



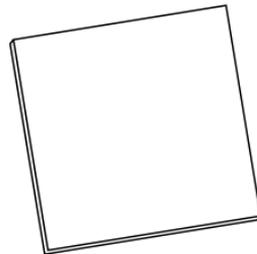
Mounting Plate

## D Required Items

The following items may be required:



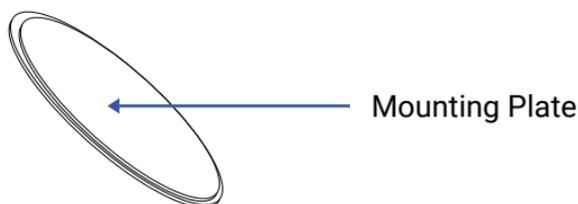
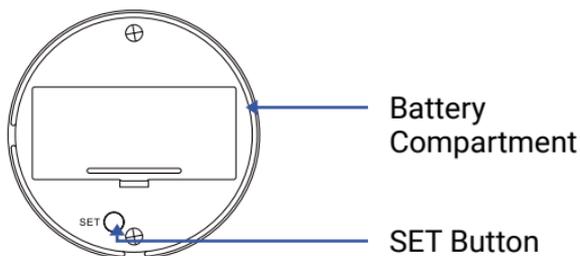
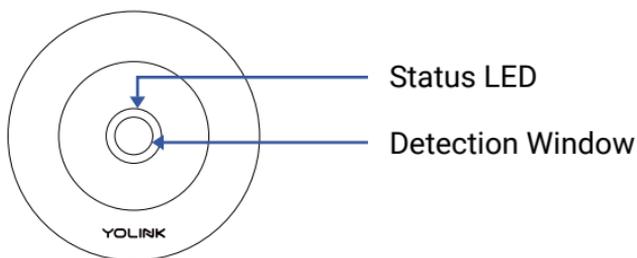
Double-Sided Mounting Tape



Rubbing Alcohol Pads

# E

## Get to Know Your Motion Sensor



### LED & Beep Behaviors

 **Blinking Red Once, then Green Once**  
Device turned on

 **Blinking Red And Green Alternately**  
Restoring to Factory Defaults

 **Blinking Green**  
Connecting to Cloud

 **Fast Blinking Green**  
Control-D2D Pairing in Progress

 **Slow Blinking Green**  
Updating

 **Blinking Red Once**  
Device alerts or device is connected to the cloud and is functioning normally

 **Fast Blinking Red**  
Control-D2D Unpairing in Progress

 **Fast Blinking Red Every 30 Seconds**  
Batteries are low; please replace the batteries

## F Install the App

If you are new to YoLink, please install the app on your phone or tablet, if you have not already. Otherwise, please proceed to the next section.

Scan the appropriate QR code below or find the “YoLink app” on the appropriate app store.



Apple phone/tablet  
iOS 9.0 or higher



Android phone/tablet  
6.0 or higher

Open the app and tap **Sign up for an account**. You will be required to provide a username and a password. Follow the instructions, to set up a new account. Allow notifications, when prompted.

You will immediately receive a welcome email from [no-reply@yosmart.com](mailto:no-reply@yosmart.com) with some helpful information. Please mark the [yosmart.com](https://yosmart.com) domain as safe, to ensure you receive important messages in the future.

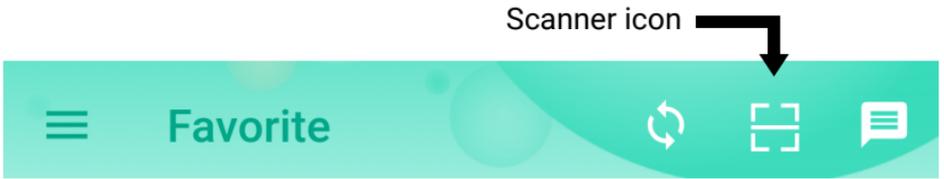
Log in to the app using your new username and password.

The app opens to the **Favorite** screen. This is where your favorite devices and scenes will be shown. You can organize your devices by room, in the **Rooms** screen, later.

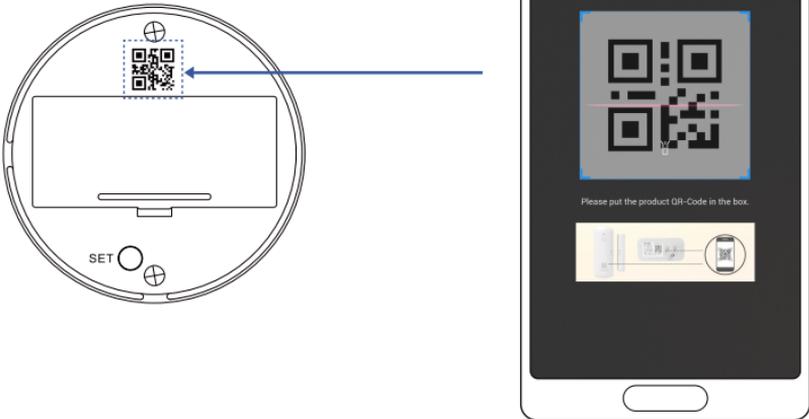


# Add Your Motion Sensor to the App

1. Tap **Add Device** (if shown) or tap the scanner icon:



2. Approve access to your phone's camera, if requested. A viewfinder will be shown on the app.



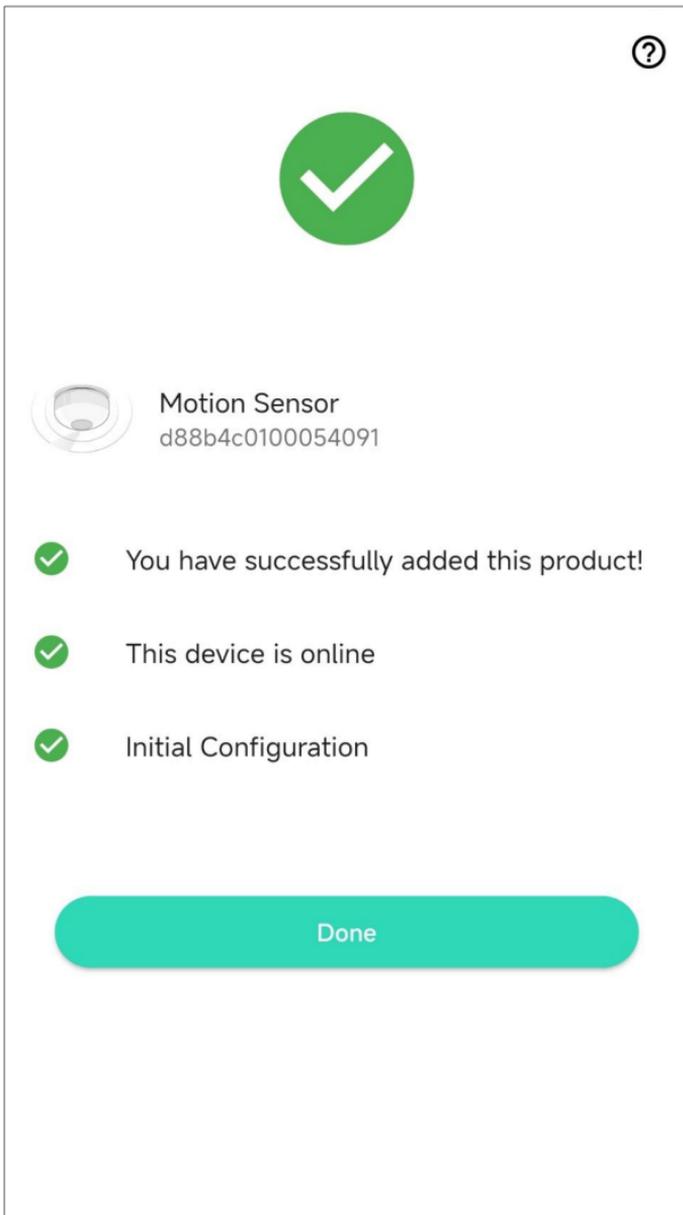
3. Hold the phone over the QR code so that the code appears in the viewfinder. If successful, the **Add Device** screen will be displayed.

G

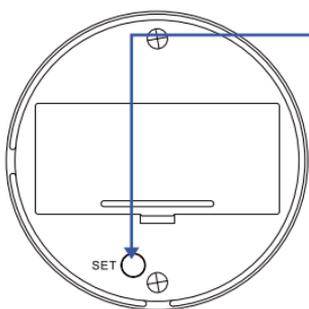
## Add Your Motion Sensor to the App, Continued

4. You can change the device name and assign it to a room later. Tap **Bind device**.

5. If successful, the screen will appear as shown. Tap **Done**.



## H Power Up



Turn on the Motion Sensor by briefly pressing the SET button, until you see the LED flash red then green.

# I Installation

## **Sensor Location Considerations:**

Before installing your Motion Sensor, please consider the following:

- 1.** Passive-Infrared (PIR) motion sensors such as your YoLink Motion Sensor detect movement within a specific area by sensing the infrared energy emitted from a body, causing a temperature change, as it moves across the sensor's field of view.
- 2.** The Motion Sensor is intended for indoor use. As the sensor uses infrared sensing technology, ambient temperature and the temperature of the detection target (such as people) is a factor. Hot, outdoor environments, even if under cover (such as a car port) will result in undesired behaviors such as false alarms or failure to detect motion. Consider our Outdoor Motion Sensor for outdoor applications.
- 3.** Do not use the sensor in extremely hot or steamy environments, such as in a boiler room or near a sauna or hot tub.
- 4.** Do not aim your Motion Sensor at, or place the sensor near sources of heat, such as space heaters, or near sources of rapid temperature change, such as heating or cooling grilles or registers.



## Installation, Continued

- 5.** Do not aim your Motion Sensor at windows, fireplaces, or other sources of light. For example, at night, lights from a vehicle shining through a window directly into the motion sensor may cause a false alert.
- 6.** Mount the Motion Sensor to a rigid surface, free of vibration.
- 7.** Placement of the Motion Sensor in high traffic areas will reduce the life of the batteries.
- 8.** Pets such as cats and dogs can set off the Motion Sensor. If you have pets and are using the sensor for security applications, consider wall-mounting your sensor, which provides more control over the detection region.
- 9.** The Motion Sensor best detects motion moving across its field of view, as opposed to moving directly towards it.
- 10.** The Motion Sensor has a 360° cone of coverage (viewed from directly below, sensor facing down), with a 120° coverage profile (viewed from the side of the sensor). Detection range is approximately 20 feet (about 6 meters).
- 11.** If mounting your Motion Sensor on the ceiling, the ceiling height should be no more than 13 feet (about 4 meters).

## I Installation, Continued

**12.** If wall-mounting your Motion Sensor, the suggested mounting height is approximately 5 feet (about 1.5 meters).

**13.** The Motion Sensor has an integral magnet that allows for mounting to the metal mounting plate or to a metal surface. The metal plate has mounting tape, that allows it to be secured to a suitable surface. Additional mounting plates with pre-installed mounting tape are available for purchase on our website.

**14.** We recommend you test the proposed location of your Motion Sensor before permanently installing it. This can be easily done with painter's tape, by taping the mounting plate to the proposed location, allowing for testing the sensor, as explained later.

**15.** The YoLink Motion Sensor does not have pet immunity features. One method to prevent false alerts caused by pets includes avoiding the use of this sensor in areas the pets may occupy while the sensor is armed. Wall-mounting your sensor higher on the wall, so that the coverage 'cone' does not include the floor of the room, is another method. Adjusting the Motion Sensor's sensitivity to low may help (but it may slow response time, or prevent operation entirely). Large dogs and/or pets that climb up on furniture will likely cause a false alert, if in the coverage region of your Motion Sensor. A trial & error process of testing the proposed sensor location and settings, with your pet, is recommended.

## I Installation, Continued



The mounting tape is extremely adhesive and can be very difficult to remove later without damage to the surface (removing paint, even drywall). Use care when installing the mounting plate on delicate surfaces.

### **Install and test the Motion Sensor:**

**1.** If mounting the Motion Sensor to a metal surface, you can do so at this time. Otherwise, you may either secure the mounting plate to the surface, using painter's tape (to test the location first), or you can secure the mounting plate to the surface. Do so by first cleaning the installation area, using rubbing alcohol or similar to remove all dirt, oil or grease from the mounting surface. Remove the backing from the mounting tape, then place the mounting plate at the desired location, tape side to the mounting surface. Press and hold for at least 5 seconds.

**2.** Place the Motion Sensor on the mounting plate. Ensure it has a good magnetic connection to the plate.

## I Installation, Continued

**3.** Next, test the sensor. It is very important that you test the sensor, as realistically as possible, to ensure it works as required for your application. With your phone in-hand, using the app, refer to the Motion Sensor status as you walk through the coverage area. You may need to adjust the location of the sensor and/or sensitivity.

**4.** When the sensor responds as desired, if temporarily installed, you may permanently install it as noted in step 1.

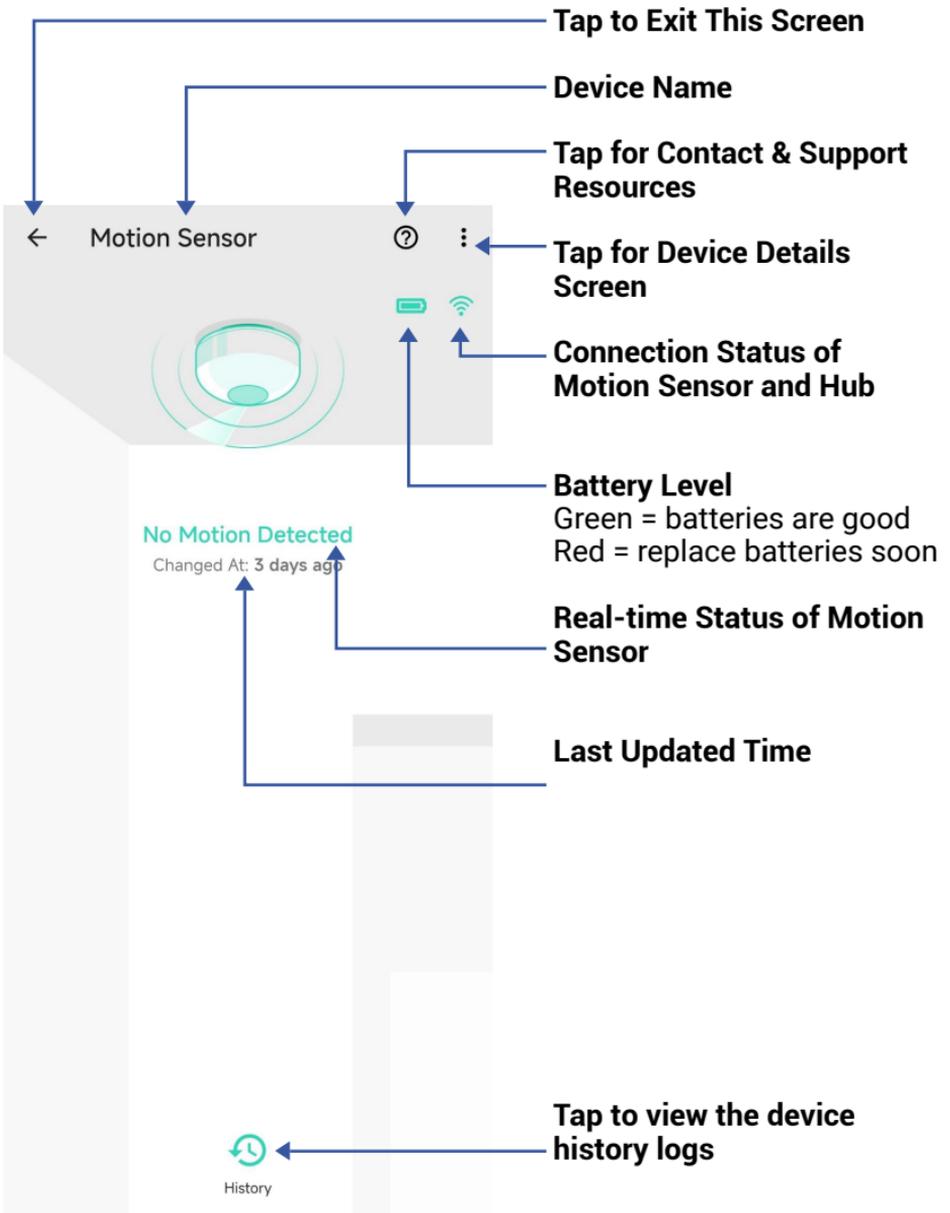


Please note! A motion sensor is not a guarantee of security or protection against intrusion into your home or business. As noted, motion sensors can be prone to false alarms under certain conditions, and they may also not respond as desired under certain conditions. Consider adding additional motion sensors, as well as door sensors and/or vibration sensors, to enhance your security system and make it more responsive to intrusion.

# J

## App Functions: Device Screen

In the app, tap on your Motion Sensor icon. Your Motion Sensor main screen should be similar to the one shown below.





# App Functions: Device Details Screen

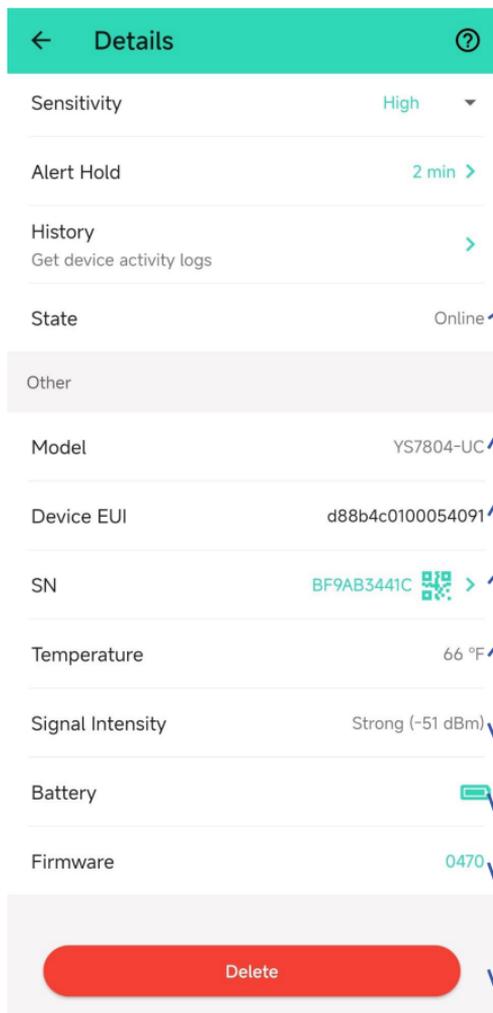
Tap the three dots (in the upper right corner) to open the Motion Sensor **Details** screen. Your Motion Sensor's screen should be similar to the one shown below.

The screenshot shows the 'Details' screen for a Motion Sensor. The header is green with a back arrow, the word 'Details', and a help icon. The settings are listed as follows:

- Device Type:** Motion Sensor
- Device Name:** Motion Sensor (Tap to Edit)
- Room:** 1.27 (Tap to Edit)
- Alarm Strategy:** Disabled (Tap to edit the sensor's Alarm Strategy)
- Alert LED:** Enabled (Tap to enable or disable the LED when alert)
- Favorite:** Red heart icon (Red if Favorite, Tap to Edit)
- Time to enter No-Motion state:** 1 min (After it detects motion, the motion sensor will update its status to "no motion detected" once the pre-set "time to enter no motion state" has passed without any further motion being detected)
- Sensitivity:** High (Higher sensitivity may lead to more false alarms, while lower one may reduce detection range)
- Alert Hold:** 2 min (It won't send new alerts for the set time after it first detects motion)
- Device history:** Tap to view device history
- State:** Online



# App Functions: Device Details Screen, Continued



**State**

**Model Number**

**Device EUI**

Unique Identifier Number

**Device Serial Number**

**Temperature**

It is an auxiliary function and the temperature updates are not frequent, it will only update when the sensor sends an alert, heartbeat signal, or the SET button is pressed

**Signal Intensity**  
(From YoLink Hub)

**Battery**

**Firmware Revision**  
(Refer to page 28)

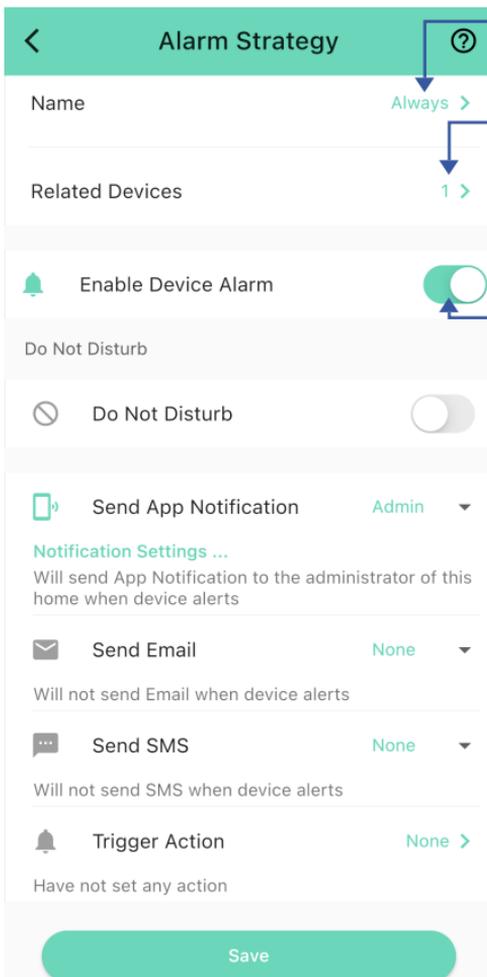
**Remove Device from Current Account**

Tap to delete the device from your YoLink account



# App Functions: Alarm Strategy Screen

You can set up notifications in Alarm Strategy settings, make sure you have enabled App, Email, SMS notification from the app->Menu->Settings->Account Settings->Advanced Settings, and verified your email address and added your phone number in the app.



### Strategy Name

Tap to edit the name

### Related Devices

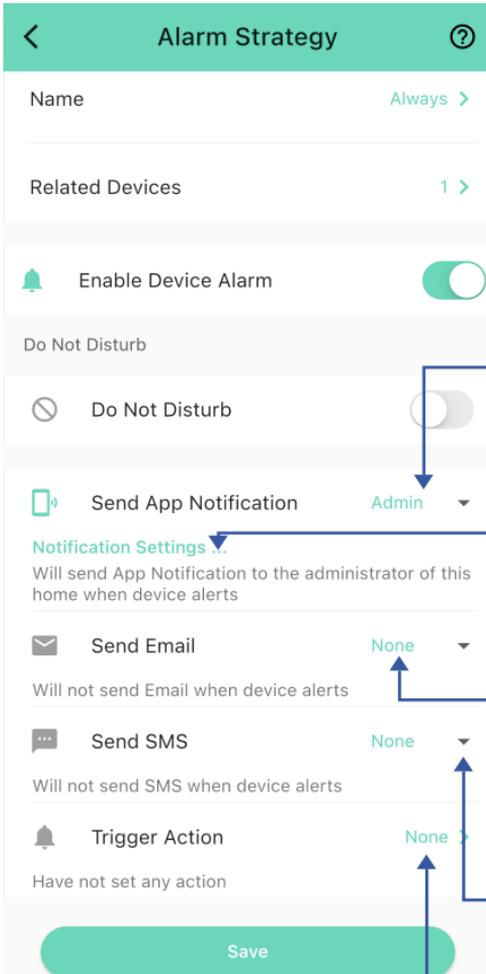
Tap to add more devices (that can alert) to this strategy, a device can be related to only one strategy

### Tap to Enable or Disable The Strategy

### Tap to Set Up Dnd (Do Not Disturb)



# App Functions: Alarm Strategy Screen, Continued



### Send App Notification

Tap to select Admin to enable App push, select All, if desired for all members

### Notification Settings (iOS only)

Tap to change notification tone, if desired

### Send Email

Tap to select Admin to enable email notification, select All, if desired to send to all members

### Send SMS

Tap to select Admin to enable limited text messages, select All (subscribe required-starter or standard plan), if desired to send to all members

### Trigger Action

Tap to choose trigger actions (YoLink sirens, YoLink SpeakerHubs, scene)



# App Functions: Smart - Automation

The Motion Sensor can be set up as a condition in automation.

The screenshot shows the 'Automation' settings screen. At the top, there is a green header with a back arrow, the title 'Automation', and a checkmark icon. Below this, the 'Name' field is set to 'motion turn on and turn plug'. The 'When' section is set to 'Motion Sensor' with the condition 'Motion Detected'. The 'Then' section contains a list of behaviors: '6602 Energy Plug Turn ON' and '6602 Energy Plug Turn off after 30 minutes'. The 'Working Time' is set to 'Always Working'. At the bottom, there is an 'Advanced Settings' section with a dropdown arrow.

- Tap to save the settings** (points to the checkmark icon)
- Edit the name of the automation** (points to the Name field)
- Tap to set a condition for the automation** (points to the 'When' section)
- Add behavior** (points to the plus icon) Tap to add a behavior
- Delete the behavior** (points to the trash icon)
- Tap to sort behaviors** (points to the sort icon)
- Always Working** Tap to set when the automation can be activated
- Advanced Settings** Tap to edit advanced automation and logging settings

The Automation settings are saved in the cloud.

You can edit the Advanced Settings, including save the log, retry if action fails, notify if action fails, etc.

## N Control D2D

YoLink Control-D2D (device-to-device) pairing is a feature unique to YoLink products. One device can be paired to one (or more) devices. When two or more devices are paired, a link is created, “locking-in” the behavior, so that the device(s) will carry out their paired behavior when required, regardless of a connection to the internet or cloud, and even without AC power (in the case of battery-powered or battery backed-up devices). For example, a Door Sensor can be paired to a Siren Alarm, so that when the door is opened, the siren is activated.

### **Several important points:**

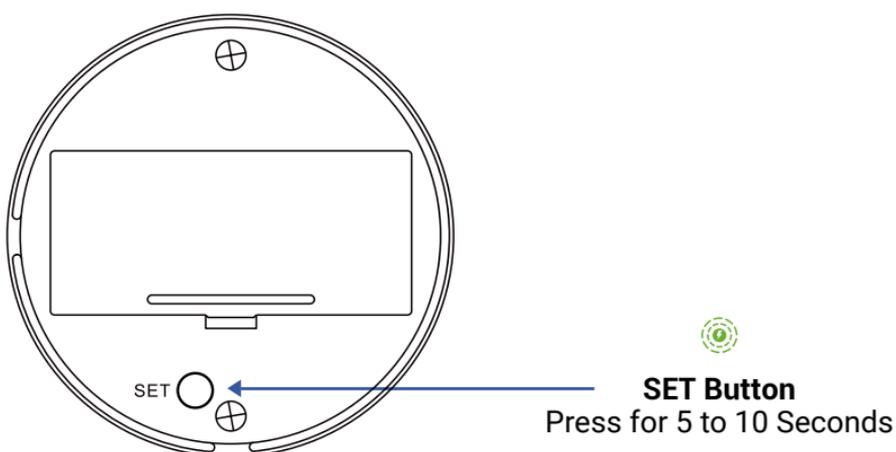
- The use of Control-D2D is entirely optional. It is more common to use the app’s automation and scene settings to create desired behaviors, such as motion sensors turning on the lights automatically. Your application may require functionality during the loss of internet/WiFi, in which case Control-D2D pairing may be preferred.
- A device that controls another device is referred to as a Controller. The device that is controlled is referred to as a Responder.

## N Control D2D, Continued

- While online, any paired behaviors as well as automation and scene settings (desired siren behaviors set in advance by you, such as the door sensor/siren example) will both be carried out. Paired behaviors and app settings can coexist, but use care to not create conflicting actions between the two, as the device may not operate as desired.
- A device can have up to 128 pairings.

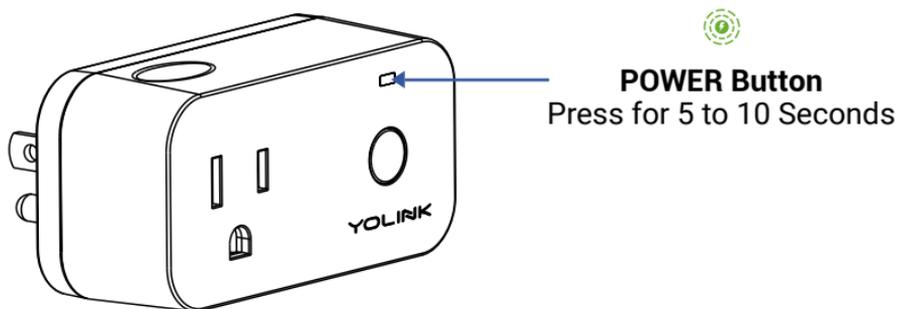
The following instructions use pairing your Motion Sensor with a YoLink Plug as an example, when the motion is detected, then turn on the plug.

1. To configure your Motion Sensor as a controller, press and hold the SET button for 5-10 seconds until the LED quickly blinks green, then, release the button.



## N Control D2D, Continued

2. To configure a YoLink Plug as the responder, turn on the plug, press and hold the POWER button for 5-10 seconds until the LED quickly blinks green, then, release the button.



3. Upon pairing, the LED will stop blinking (this may happen after only blinking two or three times).

When the motion is detected, the plug will turn on.

### Unpair your Motion Sensor:

1. On the Motion Sensor, press the hold the SET button for 10 to 15 seconds, until the LED quickly blinks red, then release the button.

2. On the Plug, press and hold the POWER button for 10 to 15 seconds, until the LED quickly blinks red, then release the button.

## N Control D2D, Continued



The LED will flash green prior to the 10 second mark, going into pairing mode, but keep pressing until the LED flashes red. The Controller's pairing is now removed. This motion sensor will no longer control the plug.

## O App & 3rd-Party Services

The YoLink Motion Sensor works with several voice assistants like Alexa, and it works with other automation platforms such as IFTTT and Home Assistant.

To set up 3rd-party integrations (Alexa and IFTTT), in the app, go to Settings, Third-Party Services, and follow the instructions.

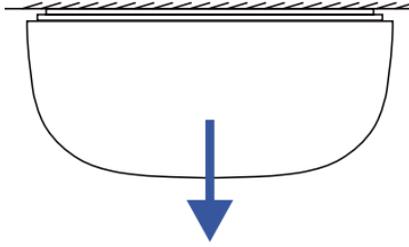
Refer to the Home Assistant website and the YoLink integration page for instructions.

<https://www.home-assistant.io/integrations/yolink/>

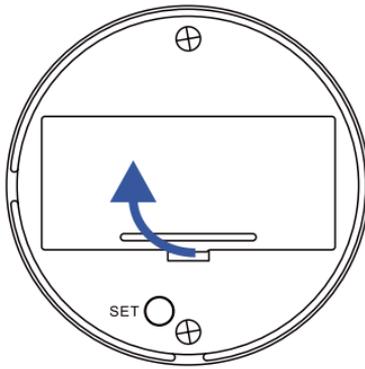
P

# Battery Replacement

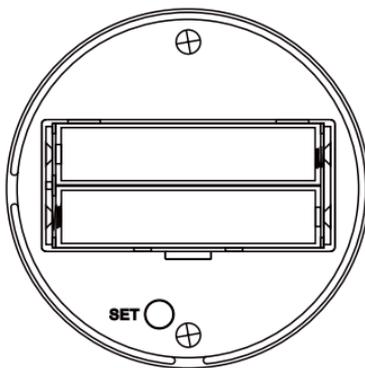
- 1 Remove the sensor from its mounting location.



- 2 Open the battery cover.



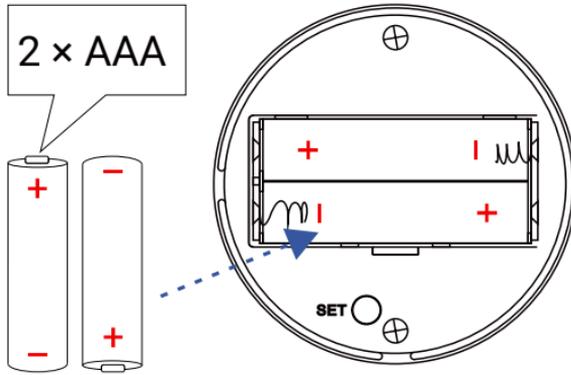
- 3 Remove the old batteries, and then press the SET button several times.



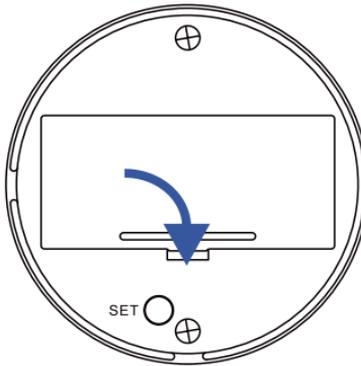
# P

## Battery Replacement

- 4 Observe polarity, and insert two new AAA batteries.



- 5 Close the battery cover.



- 6 Using the app, press the SET button, verify the sensor is online and the battery with full charge.



Do not mix old and new batteries

## Q Factory Reset

Factory reset will erase device settings and restore it to factory default settings. Doing a factory reset will not remove the device from your account and it will not harm the device, or lose any data or require you to redo your automations, etc.

### **Instructions:**

Hold the SET button down for 20-30 seconds, until the LED blinks red and green alternately. Then, release the button. (Holding the button down longer than 30 seconds will abort the factory reset operation)

Factory reset will be complete when the LED stops blinking.

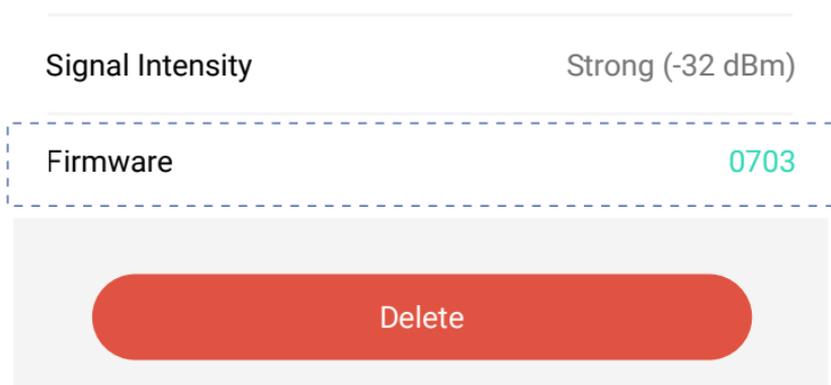


**PLEASE NOTE:** Only deleting a device from the app will remove it from your account. Factory reset will not delete the device from the app.

## R Firmware Update

Your YoLink products are constantly being improved, with new features added. It is periodically necessary to make changes to your device's firmware. For optimal performance of your system, and to give you access to all available features for your devices, these firmware updates should be installed when they become available.

In the Detail screen of each device, at the bottom, you will see the Firmware section, as shown in the image below. A firmware update is available for your device if it says “#### ready now”



Tap in this area to start the update.

The device will update automatically, indicating progress by percentage-complete. You may use your device during the update, as the update is performed "in the background". The LED will slowly blink green during the update, and the update may continue for several minutes beyond the LED turning off.

## S Specifications

Controller: Semtech® LoRa® RF Module YL09 microcontroller with 32-Bit RISC processor

---

Voltage: 3V DC (2 - alkaline non-rechargeable AAA batteries)

---

Coverage Angle: 360° (from below or above),  
120° (side profile)

---

Optimal Installatn Hegt: 9-13 feet (ceiling),  
5 feet (wall)

---

Dimensions, Imperial (L x W x D):  $\Phi$ 2.44 x 1.10 inches

---

Dimensions, Metric (L x W x D): 62.0 x 27.8 mm

---

Environment: Temperature:  
32°F - 122°F  
(0°C - 50°C), standard alkaline batteries

S

# Specifications, Continued

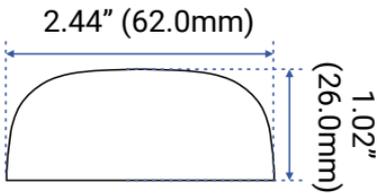
Temperature:

-4°F - 122°F

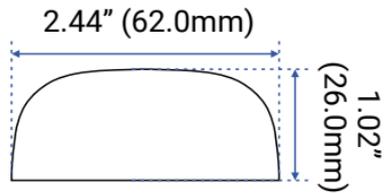
(-20°C -50°C), lithium batteries (not included, customer-supplied)

Humidity: 0%-95%

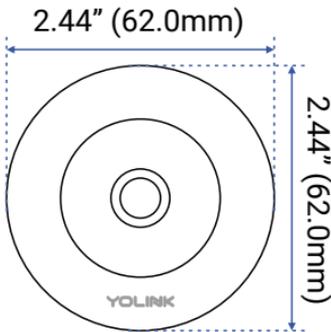
non-condensing



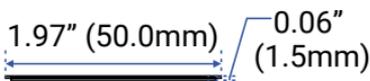
FRONT



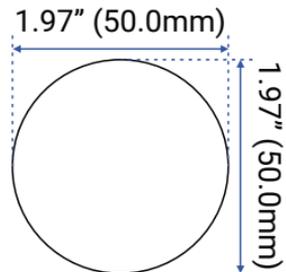
SIDE



TOP



MOUNTING  
PLATE (FRONT)



MOUNTING  
PLATE (TOP)

## T Troubleshooting

These troubleshooting suggestions assume the device has been successfully added to the app. If the device is not working correctly and it is not in the app, return to the Add the Motion Sensor to the App section and double-check or re-do these steps.

### **A. Device can not be operated at all, and can not be operated manually via the SET button:**

- 1) Ensure the device is turned on (See Power Up section, if needed).
- 2) Check batteries, verify proper installation.
- 3) Replace the batteries.

### **B. Device can be operated manually, but it is offline**

- 1) Ensure the device is connected to the cloud, by pressing the SET button until the LED illuminates briefly.
- 2) Ensure the device is within range of the hub. If you are installing the device remotely from the hub, first place it near the hub to ensure it connects to the cloud via the hub. (Press the SET button briefly to force the device to attempt to reconnect with the cloud). If it is now online, the original location was out of range of the hub. Relocating the device, the hub, or adding an additional hub may be solutions. Contact us as needed for additional guidance.

### **C. If a Control-D2D-paired functionality is not working:**

- 1) Review and re-do the pairing steps, as needed. You can unpair the devices and re-pair them.

**D.** Performing a factory reset can clear up some issues. Refer to page 27 for instructions. If the device remains non-operational, it may be defective. **Please contact us for assistance with replacing your YoLink product.**

**E. Other issues, please contact us via the info on the last page of this guide.**

## U Warnings

- Please install, operate and maintain the Motion Sensor only as outlined in this manual. Improper use may damage the unit and/or void the warranty
- Use only new, name brand, alkaline non-rechargeable AAA batteries
- Do not use rechargeable batteries
- Do not use zinc blend batteries
- Do not mix new and old batteries
- Do not puncture or damage batteries. Leakage can cause harm on skin contact, and is toxic if ingested
- Do not dispose of batteries in fire as they may explode! Please follow local battery disposal procedures
- Do not install or use the sensor outside of the temperature and humidity range listed in the Environmental section in Specifications, on page 29
- If your Motion Sensor gets dirty, please clean it by wiping it down with a clean, dry cloth. Do not use strong chemicals or detergents, which may discolor or damage the exterior and/or damage the electronics, voiding the warranty



## Warnings, Continued

- The sensor is not waterproof and is not designed for outdoor use, avoid wet locations and do not install outside
- Please try to install the sensor in an open area, walls and other factors may affect the inductive distance and range of the sensor
- If two motion sensors are installed in one detection area, adjust the position to prevent the sensors from interfering with each other to avoid false alerts
- Do not install or use this device where it will be subjected to physical impacts and/or strong vibration. Physical damage is not covered by the warranty
- To avoid damaging the device, if storing the device for an extended period, remove the batteries
- Please contact Customer Service before attempting to repair, disassemble or modify the device, any of which can void the warranty and permanently damage the device

### **2 Year Limited Electrical Warranty**

YoSmart Inc. warrants to the original user (“customer”) of this product that it will be free from defects in materials and workmanship, under normal use, for 2 years from the date of purchase. This warranty does not apply to devices that have been improperly installed, modified, put to a use other than designed, or subjected to acts of God (such as floods, lightning, earthquakes, etc.). This warranty does not cover neglected or abused products. This warranty is limited to the repair or replacement of the device, only, at YoSmart's sole discretion. YoSmart will NOT be liable for the cost of installing, removing, nor reinstalling this product, nor direct, indirect, or consequential damages to persons or property resulting from the use of this product. This warranty only covers the cost of replacement parts or replacement units, it does not cover shipping & handling fees. The customer must provide proof of purchase, in the form of the original purchase invoice or order number. The purchase must have been made from an authorized seller.

To implement this warranty please contact us by one of the methods listed on the Contact Us page of this user guide.

## FCC Statement

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. Any 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.



## FCC Statement, Continued

- Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

PRODUCT NAME:  
MOTION SENSOR

---

PARTY:  
YOSMART, INC.

---

TELEPHONE:  
831-292-4831

---

MODEL NUMBER:  
YS7804-UC

---

ADDRESS:  
25172 ARCTIC OCEAN DRIVE, SUITE 106  
LAKE FOREST, CA 92630 USA

---

EMAIL:  
SERVICE@YOSMART.COM

---



## Contact Us

We are here for you, if you ever need any assistance installing, setting up or using a YoLink app or product!

Need help? For fastest service, please email us 24/7 at [service@yosmart.com](mailto:service@yosmart.com)

Or call us at **831-292-4831** (US phone support hours: **Monday - Friday, 9AM to 5PM** Pacific)

You can also find additional support and ways to contact us at:

[www.yosmart.com/support-and-service](http://www.yosmart.com/support-and-service)

Or scan the QR code:



Support Home Page

Finally, if you have any feedback or suggestions for us, please email us at [feedback@yosmart.com](mailto:feedback@yosmart.com)

Thank you for trusting YoLink!

YoLink Customer Support

# YOLINK

25172 Arctic Ocean Drive, Suite 106 Lake Forest, CA 92630  
© 2024 YOSMART INC. CALIFORNIA, USA