Dimmer Switch

YS5707-UC

Installation Manual & User Guide

Rev 1.2

February 2, 2023

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User Guide Conventions

To assure your satisfaction with your purchase, please read this user guide we have prepared just for you. The following icons are used to convey specific types of information:

 Very important information (can save you time!)

 Good to know info but may not apply to you

 Mostly unimportant (it's ok to breeze past it!)

A Welcome!

Thank you for purchasing YoLink products!
Whether you are adding additional YoLink products or if this is your first YoLink system, 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 Dimmer Switch, or if you have any questions that this manual does not answer, please contact us right away. See the Contact Us section, on the last page, for more info.

Thank you!

Eric Vanzo
Customer Experience Manager

B Introduction

The YoLink Dimmer Switch is a smart dimmer style single-pole light switch, for 120 to 250 VAC circuits and dimmable light bulbs.

For full functionality, including functionality of the YoLink app, your smart Dimmer Switch connects to the internet by connecting wirelessly to one of our hubs (original YoLink Hub or the SpeakerHub), not via WiFi or other wireless methods. If you do not already have a YoLink hub, and unless there is an existing YoLink wireless network in your building (for example, an apartment complex or condo building with a building-wide YoLink system), please purchase and set-up your hub before proceeding with the installation of your new Dimmer Switch.

Please note: the Dimmer Switch requires a neutral wire! It will not function without a neutral wire. As explained in the Installation section, you must identify the neutral wire in the switch's electrical box. If a neutral wire is not present, one must be installed. Consult with or hire a qualified and properly licensed electrician, as required.

Also note: the Dimmer Switch is not compatible with 3-way switches or 3-way style wiring, but 3-way operation functionality can be accomplished using two YoLink Dimmer Switches, wired as standard switches, and paired using Control-D2D pairing. This pairing process is explained in the Control-D2D pairing section of this user guide.

Refer to the Before You Begin section for additional important information prior to installing your Dimmer Switch.

C Before You Begin

The Dimmer Switch is generally compatible with the following light bulb types, at their respective maximum loads:

LED – 150 Watts

Fluorescent/CFL – 150 Watts

Halogen – 450 Watts

Incandescent – 450 Watts

Refer to the Device Settings section to calibrate your Dimmer Switch if the lights flicker.

Do NOT overload or use your dimmer switch to control receptacles, motor-driven appliances, or transformer-supplied appliances.

Do review the environmental limitations of the Dimmer Switch prior to installation. The Dimmer Switch is intended for indoor locations, only!

Do familiarize yourself with this user guide prior to beginning installation.

Do ensure that you are comfortable working with electricity and handling the associated tools, or hire a qualified electrician to install your Dimmer Switch!

Tools you will need:

Medium Phillips Screwdriver

Small Slotted Screwdriver

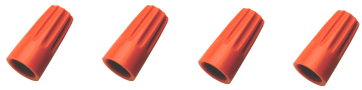
Tools you *may* need:

Wire-strippers/Wire Cutters

Multimeter

D What's in the Box?

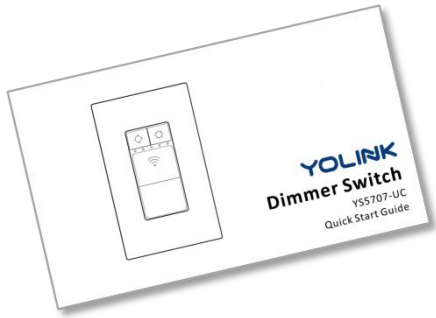
Dimmer Switch, with Faceplate



Wire Connectors (4)

Faceplate Screws (2)

Electrical Box Screws (2)



Quick Start Guide

E Install the YoLink App

1

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

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

Available on the App Store

Apple phone/tablet
iOS 9.0 or higher

ANDROID APP ON Google Play

Android phone/tablet
4.4 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, if prompted.

If you encounter an error message attempting to create an account, disconnect your phone from WiFi, and try again, connected only to the cellular network

Retain your username and password in a secure location

E Install the YoLink App, Continued

2

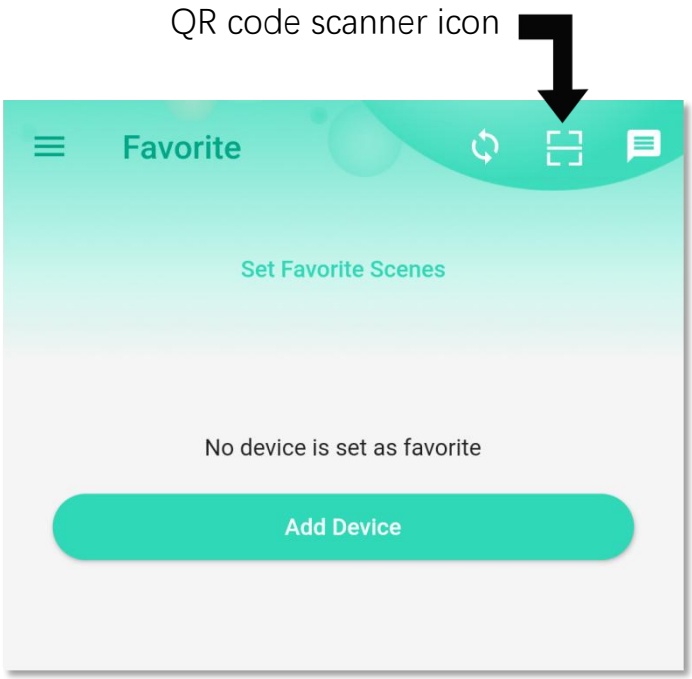
You will immediately receive an email from no-reply@yosmart.com with some helpful information. Please mark the yosmart.com domain as safe, to ensure you receive important messages in the future.

3

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

4

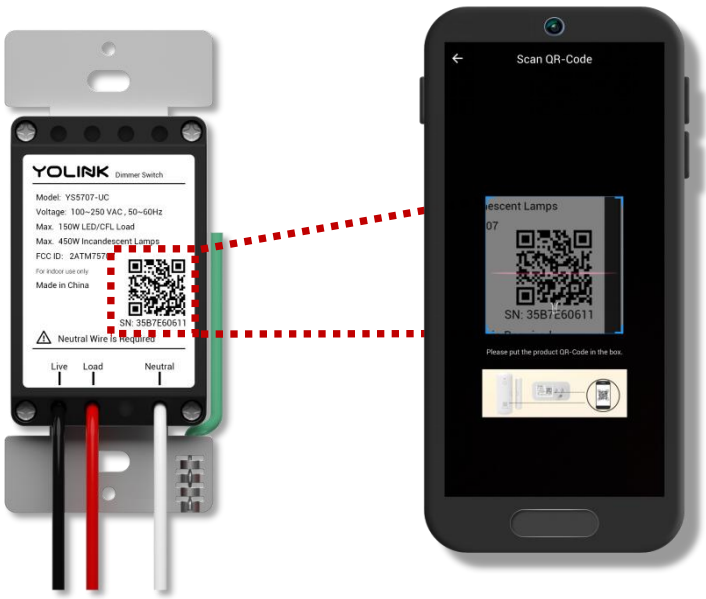
Tap **Add Device** (if shown) or tap the scanner icon



F Add Your Dimmer Switch to the App

5

Approve access to the camera, if requested. A viewfinder will be shown on the app.



6

Hold the phone over the QR code (on the Dimmer Switch “Remove After Registering” decal, as well as on the rear of the Dimmer Switch) so that the code appears in the viewfinder. If successful, the **Add Device** screen will be displayed

7

Refer to Figure 1 on the next page. You can edit the name of the Dimmer Switch, and assign it to a room, if desired. Tap the Favorite heart icon to add this device to your Favorites screen. Tap **Bind device**

F Add Your Dimmer Switch to the App, Cont.

8

If successful, close the Device Bound pop-up message by tapping **Close**

9

Tap **Done** as shown in Figure 2.

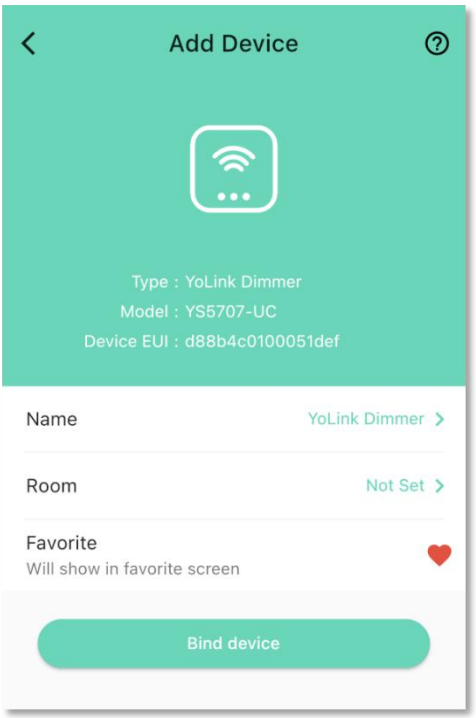


Figure 1

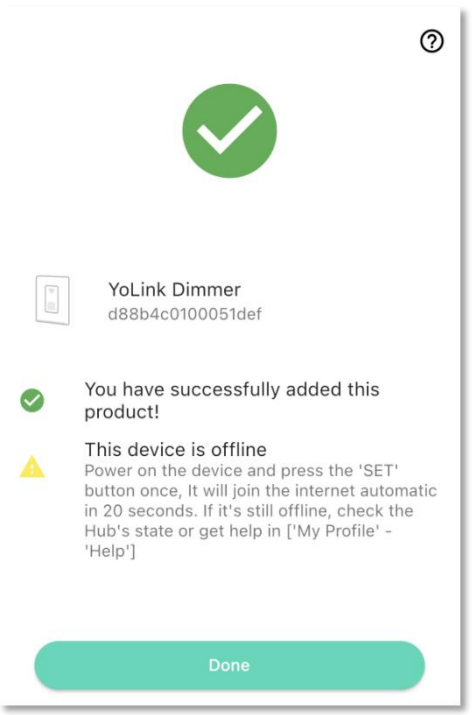


Figure 2

If this is your first YoLink system, please visit our product support area at yosmart.com for an introduction to the app, and for tutorials, videos, and other support resources.

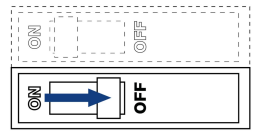
10

Ensure your YoLink Hub or SpeakerHub is setup and online before proceeding to the next step.

G Installation

1

Turn off the circuit that serves the switch at the circuit breaker panel (or other means of disconnecting the AC power to the circuit). Do NOT work on “hot” electrical wiring!



Verify that power has been removed to the light switch, by testing the switch, and by using a multimeter or other type of voltage tester before removing any wires from the switch.

If replacing an existing switch, proceed to the next step. For new installations, skip ahead to step 5.

2

Using a slotted screwdriver, remove the switch faceplate, then using a slotted or Phillips screwdriver, remove the switch and pull it away from the wall.

3

Before removing any wiring from the switch, identify the wires on the switch and in the electrical box:

Ground wire: this wire is typically a bare copper wire, but it may have a green jacket (insulation), or it may have another color insulation with green tape identifying it as a ground. Additional means of identification are the wire is terminated on (connected to) a green screw on the switch, and/or the screw or wire connection has a designation such as “GND” and/or includes the universal earth ground icon:

Line or Hot Wire: this wire is typically black, but can be red or another color, but if not it may be marked as the hot wire with black or red tape. One of the wires on the existing light switch should be the hot wire. Another way of identifying this wire is that it may be connected to other wires in the box. If the box contains multiple switches, for example, there will typically be a hot wire that connects to each switch. Observe each of the non-ground wires on the switch, looking for connections to other black (or red) wires under a "wire-nut" or similar wire connector.

Switch Leg Wire: this wire is typically black, but may be red or another color. This is the wire that is energized when the switch is on. After you have identified the ground and the hot wires on the existing switch, the remaining wire should be the switch leg wire. This wire can also be helpful in identifying the neutral wire. While the existing switch you are replacing with the Dimmer Switch may not have required a neutral wire, the light that it controlled does require a neutral wire. Follow the switch leg wire to its connections to another wire, or for it to join a "multi-conductor" cable (a larger jacketed cable with two or more different conductors within it). If the switch leg wire is in a yellow jacketed cable, for example, that also has a white and a bare copper wire with in it, this cable most-likely serves the existing light, and you have also identified the neutral wire.

Neutral Wire: this wire is typically white. As explained above, the light that is controlled by the existing switch will require a neutral wire, making it easier to identify if it is in the box. Otherwise, look for multiple white wires under one wire connector in the electrical box. If you find a white wire with black tape, this is likely a wire NOT used as a neutral; do not use this wire! If you are still unable to identify a neutral wire, stop and consult an electrician to have one installed, otherwise contact us regarding questions about returning your Dimmer Switch, if so desired.

4

Identify each wire with a marker, tape or other labeling method, as desired, so they are not confused with each other during the wire termination step.

5

Connect the Dimmer Switch's "pigtail" wires (pre-installed colored wires, connected to the switch) to your identified wires. As shown in the example shown in Figure 1 below, and using the included or existing "wire-nut" connectors:

Connect the switch's green pigtail to the ground wire(s).

Connect the switch's white pigtail to the neutral wire(s).

Connect the switch's black pigtail to the hot wire(s).

Connect the switch's red pigtail to the light switch leg wire.

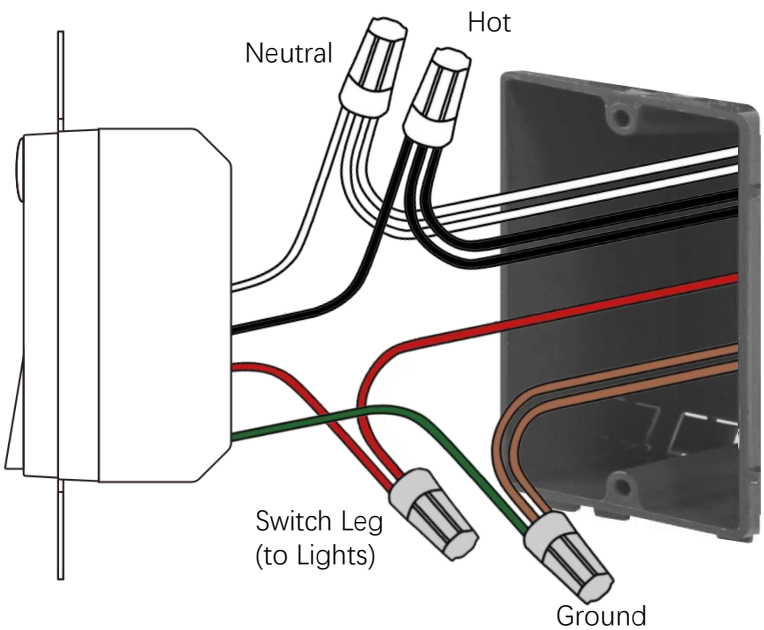


Figure 1

6

Check each wiring connection by gently tugging on each conductor, ensuring it does not pull out of the wire-nut or appear loose. Re-do any that do not pass this test.

7

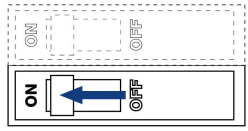
Gently push the wiring and the switch into the electrical box, then secure the switch to the box using the included or existing screws (if more suitable for the box).

8

Using the included screws, secure the faceplate mounting plate to the switch, then mount the outer part of the faceplate onto the mounting plate, snapping it into place. (If this switch is in a multi-gang box, use the existing faceplate or furnish one suitable for the switches in the electrical box.)

9

Turn on power to the circuit by returning the circuit breaker to the on position (or reconnect power per your applicable circuit disconnection method).

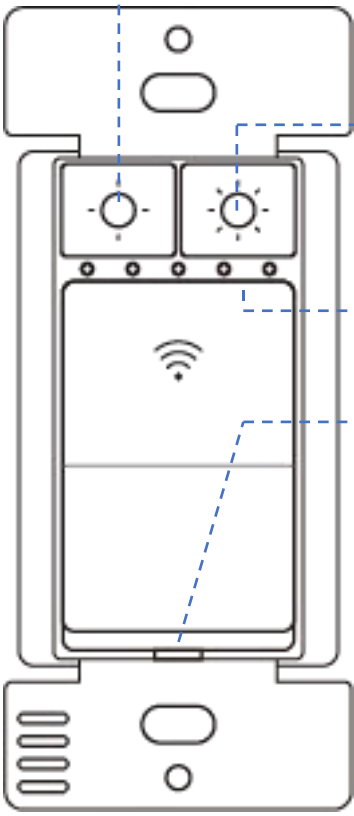


10

Test the switch by turning the light on and off.

H Get to Know Your Dimmer Switch

Please take a moment to familiarize yourself with your Dimmer Switch, in particular the LED behaviors.



Brightness Decrease Button
Short press to decrease the brightness in order 100%->80%->60%->40%->20%
Long Press to decrease by 1%

Brightness Increase Button
Short press to increase the brightness in order 20%->40%->60%->80%->100%
Long Press to increase by 1%

Brightness LED
Indicate the current lighting brightness
20%-40%-60%-80%-100%

Status LED

Blinking Red Once, then Green Once
Device Start-up

Red
Dimmer is off

Green
Dimmer is on

Blinking Green
Connecting to Cloud

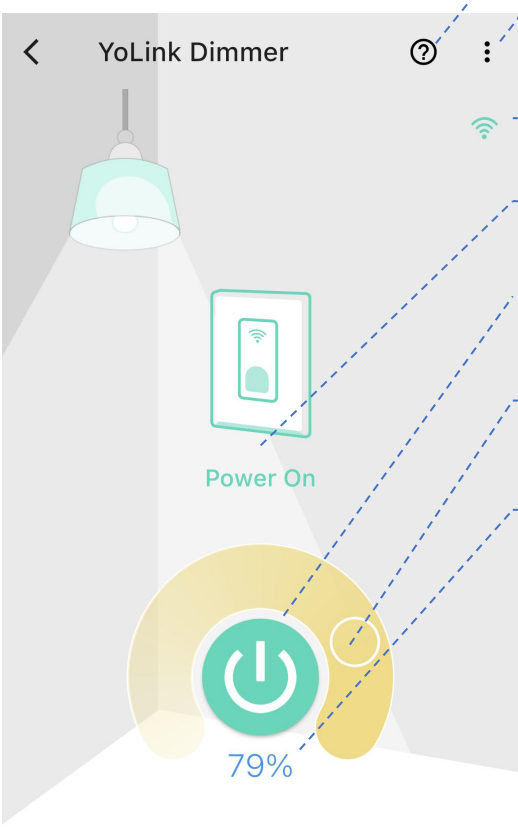
Slow Blinking Green
Updating

Fast Blinking Green
Pairing Device to Device

Fast Blinking Red
Unpairing Device-to-Device

Blinking Red And Green Alternately
Restoring to Factory Defaults

I App Functions: Device Screen



Product Support

Device Settings

-Tap to go to Details screen

Connection Status

Real-time Status

-Turned on or turned off

Power Button

-Tap to turn on/off the dimmer

Brightness Control

-Slide to set the desired brightness

Brightness Status

-Shows the current brightness level

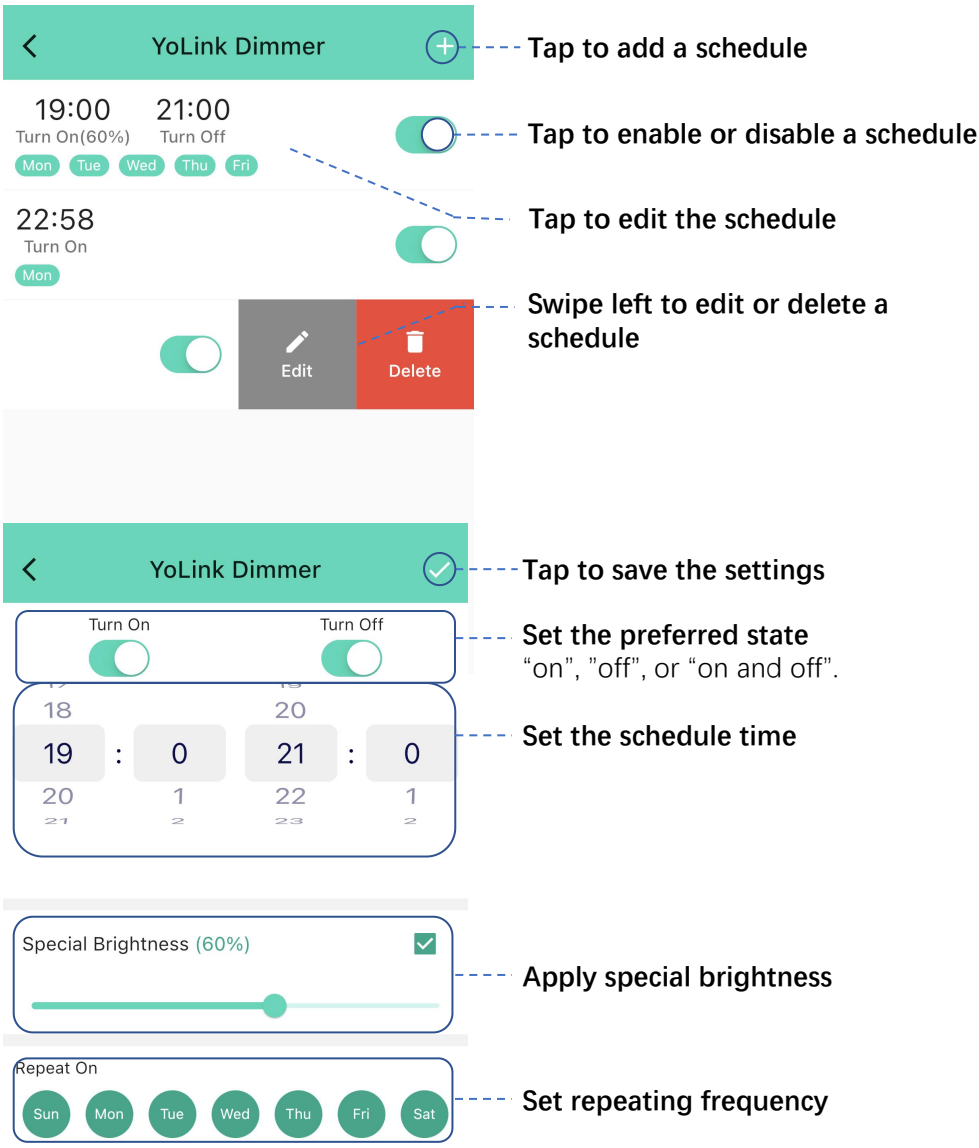
Schedule

-Set schedules to automatically turn on/off the dimmer

Timer

-Set the one-time timer to automatically turn on/off after the timer ends

J App Functions: Schedule

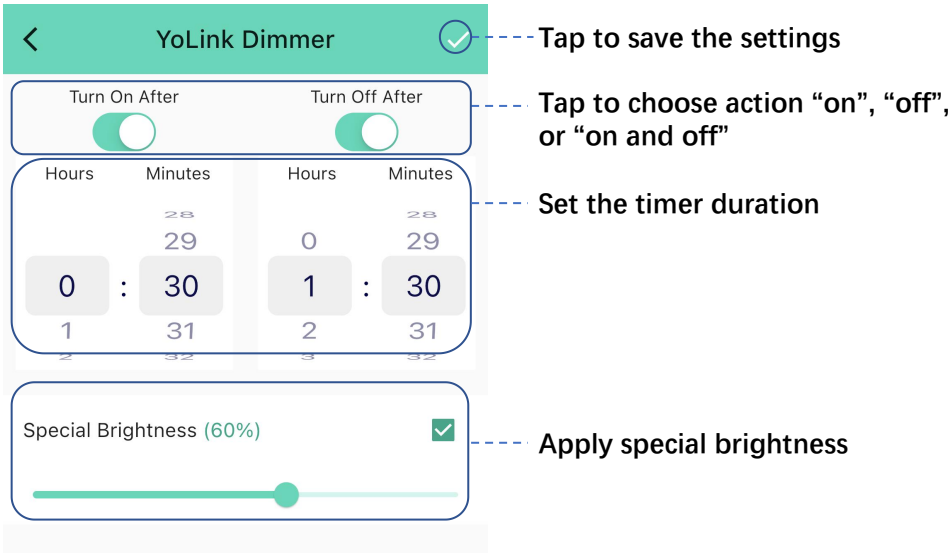


You can have a maximum 6 schedules at one time.

The schedule runs on the device without an internet connection.

You can add more schedules in Automation settings. Automation settings are saved in the cloud.

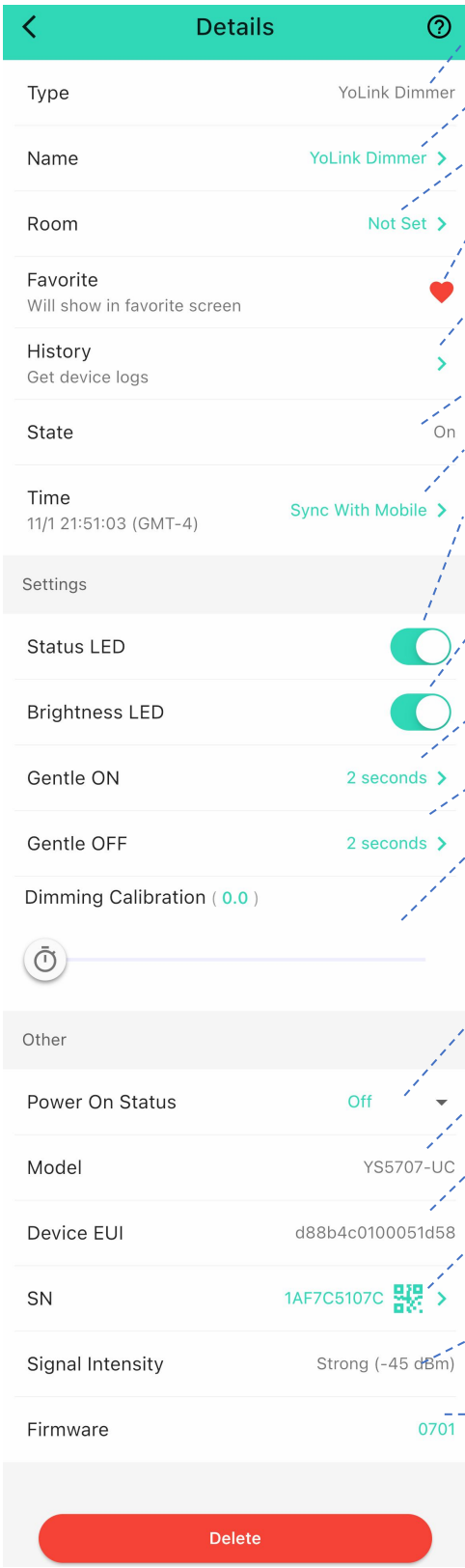
K App Functions: Timer



The timer will run only once. You can set a new timer after the timer has already run once or after you cancel it.

The timer runs on the device without an internet connection.

L App Functions: Device Details Screen



Device type (Temp Humidity Sensor)

Device name
-Tap to edit the device name

Room
-Tap to assign a device to a room

Favorite
-Tap the heart icon, the device will be displayed on the Favorite tab

History
-Tap to view the device on/off history, logged with date and time

Device Status
-Turned on or turned off

Device Time
-Tap to sync with mobile

Device Status LED
-Tap to enable or disable the device status LED

Device Brightness LED
- Tap to enable or disable the device brightness LED

Gentle On
-The ramp-up duration (turning on)

Gentle Off
-The ramp-down duration (turning off)

Dimming Calibration
-Set the dimming range to find the proper minimum level of brightness by dimming up/down the brightness and checking if the light flickers.

Power on status after power outage
-Switch to Last State or On or Off
*Default is set to Off State

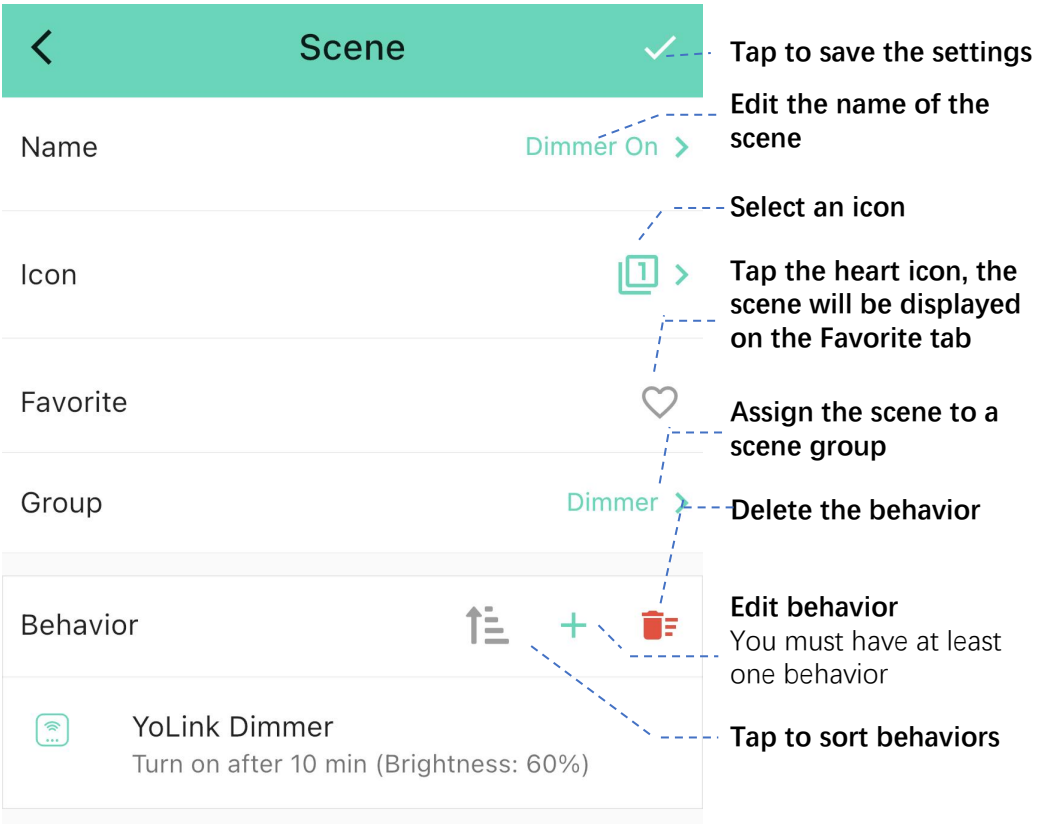
Model
-Dimmer Switch (YS5707-UC)

Device EUI
-Device's unique ID number

SN
-Device's unique serial number, tap to save the device's QR code, if desired

Signal Intensity
-Indicate how strong the signal is from the nearest hub

Firmware
-Indicates the current firmware version. If a second number is shown with the words "Ready" there is a newer firmware version available. Tap the word Ready to start the update

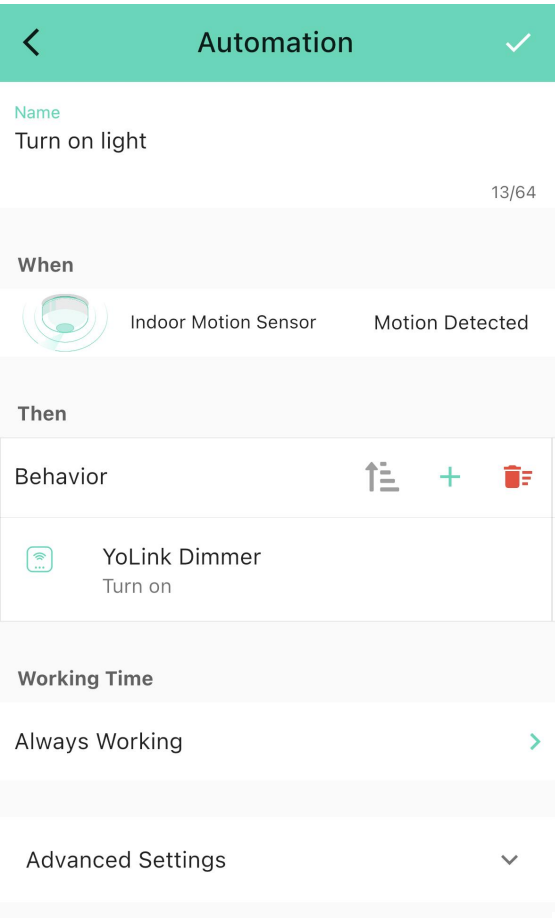


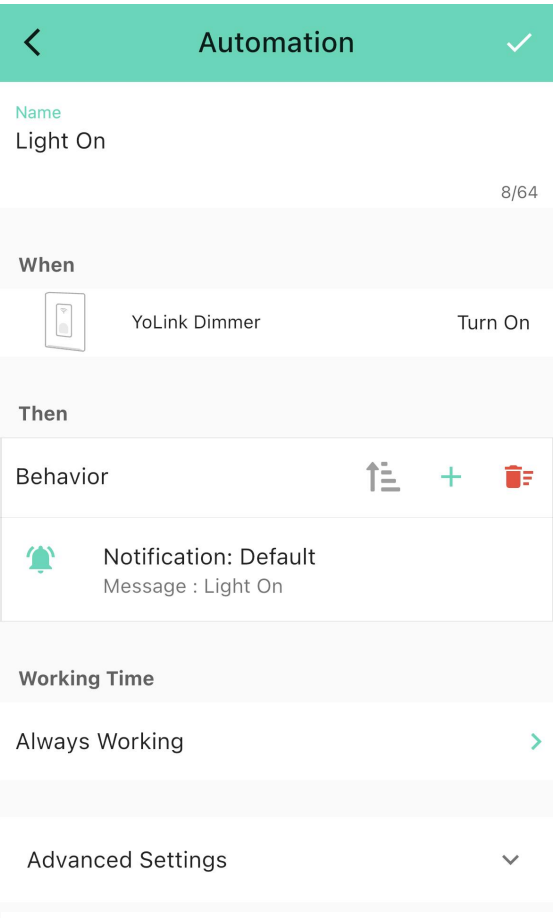
The Scene settings are saved in the cloud.

One Scene group only shows one active scene, for example, in Home scene group, if you execute the Home scene, it will show the Home scene activated, if you execute Away scene next, the Away scene will revert the Home scene's active status to off.

N App Functions: Smart - Automation

The Dimmer Switch can be set up as a condition or action in automation.





The Automation settings are saved in the cloud.

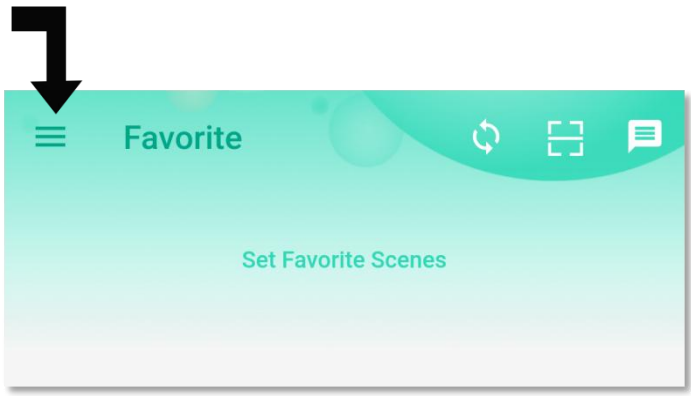
You can edit the Advanced Settings, including save the log, retry if action fails, notify if action fails, etc.

0 Third-party Assistants & Integrations

The YoLink Dimmer Switch is compatible with Alexa and Google voice assistants, as well as IFTTT.com. Home Assistant (coming soon).

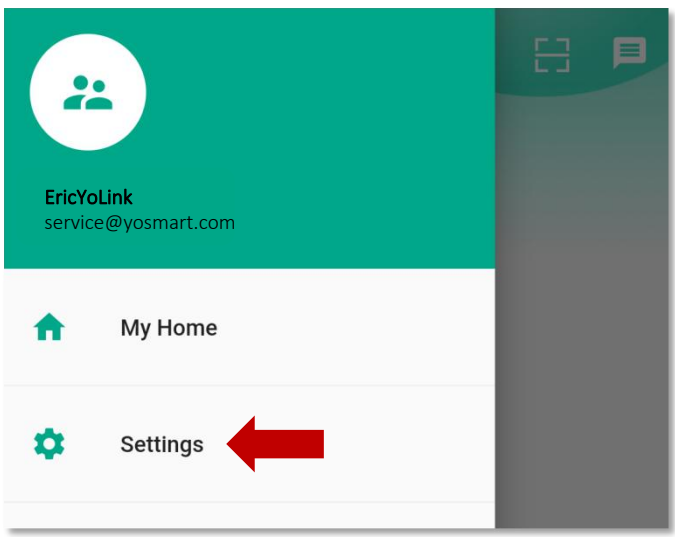
1

From the Favorites, Rooms, or Smart screen, tap the menu icon.



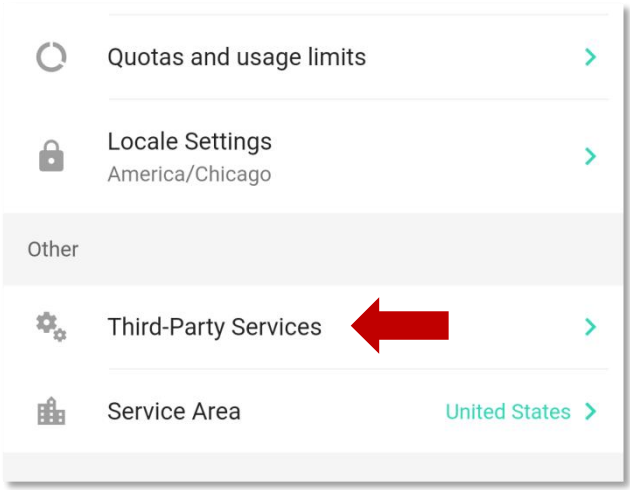
2

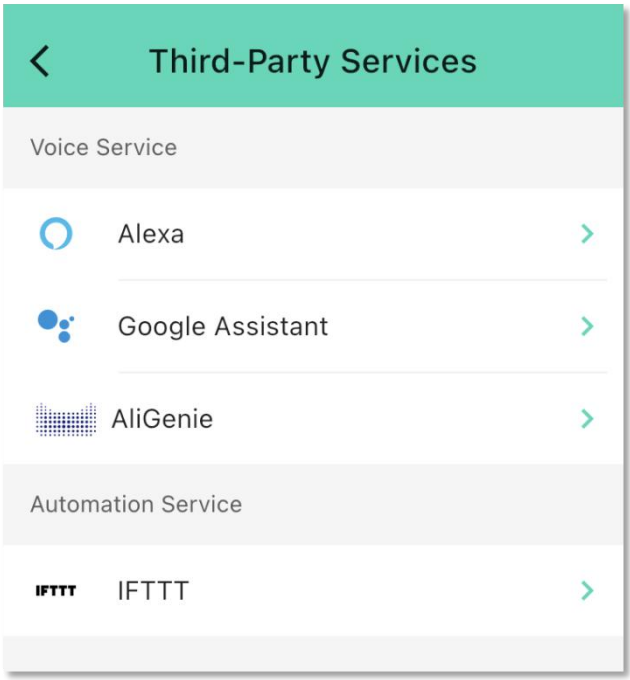
Tap **Settings**



3

Tap **Third-Party Services**. Tap the appropriate service, then **Get Started**, and follow the instructions. Additional information and videos are available in the Support areas on our website.





P About Control-D2D (Device Pairing)

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.
- The Dimmer Switch buttons will operate for on, off and dimming settings regardless of it being online or connected to the cloud.
- While online, any paired behaviors as well as automation and scene settings (desired switch behaviors set in advance by you, such as the motion sensor/light switch 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.
- A device that controls another device is referred to as a Controller. The device that is controlled is referred to as a Responder.

How to Pair Two Devices:

In this example, two Dimmer Switches will be paired to each other, to provide 3-way functionality.

1

Start with both switches off. Choose one switch to act as a Controller. Turn on the Controller, then press the power button for 5 to 10 seconds until the green LED flashes.

2

At the other switch (the Responder), turn the switch on. Press the power button for 5 to 10 seconds until the green LED flashes. After a moment, the LEDs will turn off.

3

Test your pairing by turning off both lights, then turning the Controller light on. The Responder light should then turn on (the switch will go to the last brightness level set). If not, repeat the pairing. If still not successful, follow the How to Unpair Devices section on the next page.

4

For 3-way type operation between these two switches, repeat steps 1 and 2, but for the switch that was originally the Responder. This switch will now act as a Controller.

5

Test your pairing, from both switches. Turning one switch on should result in both switches turning on. Turning either of the switches off results in both light switches turning off.

If replacing existing 3-way switches with Dimmer Switches, the wiring may not immediately be compatible with the Dimmer Switch. The “traveler” wire will not be connected to either Dimmer Switch, but it may need to be changed to another function (such as to a neutral wire), so that each switch has a hot, neutral, ground, and at least one switch leg wire going to the controlled light(s).

How to Unpair Two Devices:

1

Start with both switches off. Turn on the Controller device (in this case, either one of the lights that are now in a 3-way type pairing). Press the power button for 10 to 15 seconds, until the LED flashes orange. Note: the LED will flash green prior to the 10 second mark, going into pairing mode, but keep pressing until the LED flashes orange. The Controller’s pairing is now removed. This switch will no longer control the other switch, but the other switch’s pairing is unchanged.

2

To remove the other switch’s paired behavior, repeat the steps just used for the first switch. Test both switches to ensure that they no longer control or respond to the opposite switch.

These instructions can be applied to other devices, but the LED color and flash behaviors can vary between models.

Generally, when pairing, the Responder should begin in the state (on/off or opened/closed or locked/unlocked) that it should change to when the Controller is activated.

Q Firmware Updates

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. The LED light will slowly blink green during the update and the update may continue for several minutes beyond the LED turning off.

R Factory Reset

Factory reset will erase device settings and restore it to factory defaults.

Instructions:

Hold the SET button down for 20-30 seconds until the LED blinks red and green alternatively, then, release the button, as holding the button longer than 30 seconds will **abort** the factory reset operation.

Factory reset will be complete when the status light stops blinking.

Only deleting a device from the app will remove it from your account

S Specifications

Controller:	Semtech® LoRa® RF Module YL09 microcontroller with 32-Bit RISC processor
Listings:	ETL-Listing Pending
Color:	White
AC Input Power:	100 - 120VAC, 60Hz
Maximum Load (Watts):	
Incandescent:	450
Fluorescent:	150
LED:	150
Dimensions, Imperial (L x W x D):	4.71 x 1.79 x 1.73 inches
Dimensions, Metric (L x W x D):	106 x 45.5 x 44 mm
Operating Temperature Range:	
Fahrenheit:	-22°F – 113°F
Celsius:	-30°C – 45°C
Operating Humidity Range:	<95% Non-Condensing
Application Environments:	Indoor, Only

T Warnings

- Please install, operate and maintain the Dimmer Switch only as outlined in this manual. Improper use may damage the unit and/or void the warranty.
- Always adhere to local, regional and national electrical codes, including any local ordinances regarding electrical installation or service work.
- Hire and/or consult a qualified electrician if you are not capable of installing this device safely and per all requirements.
- Use extreme care around electrical circuits and panels, as the electricity can burn and cause property damage, bodily harm or death!
- Use care when using any tools, as sharp edges and/or improper use can result in serious injuries.
- Refer to Specifications (page 23) for the device environmental limitations.
- Do not install or use this device where it will be subjected to high temperatures and/or open flame
- This device is not waterproof and is designed and intended only for indoor use.
- Subjecting this device to outdoor environment conditions such as direct sunlight, extreme hot, cold temperatures or extreme humid, rain, water and/or condensation can damage the device and will void the warranty
- Install or use this device only in clean environments. Dusty or dirty environments may prevent the proper operation of this device, and will void the warranty
- If your Dimmer Switch does get 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
- 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
- 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

1-Year Limited Electrical Warranty

YoSmart warrants to the original user of this product that it will be free from defects in materials and workmanship, under normal use, for 1 year from the date of purchase. User must provide a copy of original purchase receipt.

This warranty does not cover abuse or misused products or products used in commercial applications. This warranty does not apply to YoLink 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 is limited to repair or replacement of the YoLink 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. Please contact us, to implement this warranty (see the Contact Us page of this user guide for our contact information).

V 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.
-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:	RESPONSIBLE PARTY:	TELEPHONE:
YOLINK DIMMER SWITCH	YOSMART, INC.	(949) 825-5958

MODEL NUMBER:	ADDRESS:	EMAIL:
YS5707-UC	15375 BARRANCA PKWY SUITE J-107, IRVINE, CA 92618 USA	SERVICE@YOSMART.COM

W Contact Us / Customer Support

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

Please email us 24/7 at service@yosmart.com

You can use our online chat service by visiting our website, www.yosmart.com or by scanning the QR code

You can also find additional support and ways to contact us at: www.yosmart.com/support-and-service
or scanning the QR code below

Support & Service

Finally, if you have any feedback or suggestions for us, please email us at feedback@yosmart.com

Thank you for trusting YoLink!

Eric Vanzo
Customer Experience Manager

YOLINK

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