

## Wall Dimmer

Model WR-001

### 1. INTRODUCTION

Thank you for your purchase of a SkylinkHome™ lighting receiver, Wall Dimmer, Model WR-001. Simply replace your existing wall switch with this Wall Dimmer, you can then wirelessly turn on and off, dim and brighten lights with a SkylinkHome™ transmitter.

The Wall Dimmer WR-001 can communicate with up to 8 transmitters, so user has the option to add more transmitters to the system, such as more remote controls, or motion sensors etc.

All wireless signal communications within the SkylinkHome™ System are based on rolling code technology to ensure highest security is used.

The following items are included in this package:

- Wall Dimmer
- Wire nuts
- User's Instructions



Wall Dimmer  
WR-001



Wire nuts

### 2. SETUP

Setup of the Wall Dimmer is simple. Simply replace your existing wall switch by the Wall Dimmer.

#### CAUTION ⚠

Installation is required and enclosed instructions must be followed carefully to all steps and notes. If you are uncertain or uncomfortable performing this installation, please consult a qualified electrician. This manual should also be retained for future reference.

1. Turn off power to the circuit that you plan on installing the Wall Dimmer to at the circuit breaker.

#### WARNING ⚠

Failure to turn off power at the circuit breaker can result in electrical shock causing severe or fatal injury.

Note: Lighting Load

The Wall Dimmer is designed to operate incandescent light or dimmable compact fluorescent light with a maximum load of 300W at 120VAC. Light bulbs must be dimmable in order to achieve dimming function.

2. Follow the diagrams below to install the Wall Dimmer with the 2 wires: Live, Load. Use the provided wire nuts to connect these wires respectively to the existing wires from the wall : Load (red) to load and Live (Black) to live. Ground (Green) to Ground.

3. After all the wires are connected, ensure that all of the wire connectors are attached securely and there should be no exposed copper wiring. Secure the Wall Dimmer with the provided screws.

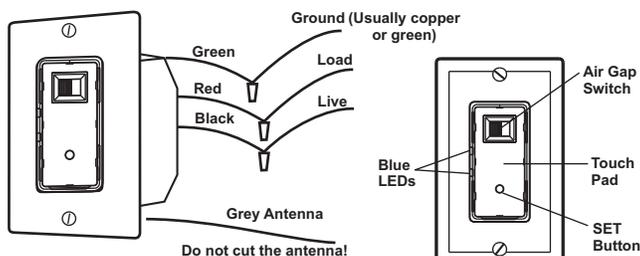
4. Place the air gap switch to off position.



5. Turn the circuit breaker back on.

6. Place the air gap switch to on position. The two blue LEDs will be on.  
Note: If the 2 blue LEDs remain off, please check and ensure the light bulb is installed and in good condition.

7. The light connected will be off. The Wall Dimmer is now installed and you can tap the metal touch pad to turn ON/OFF the connected light or to begin programming to learn transmitters into the Wall Dimmer.



#### Note:

**Antenna** ( grey wire) -- Do not cut it, keep it as straight as possible. Put the antenna directly into the dry wall or through a hole of the metal box into the dry wall to get more control distance with a remote

### 3. PROGRAMMING TRANSMITTERS SENSORS

In order to operate the Wall Dimmer remotely with a transmitter or sensor, it must be programmed to the Wall Dimmer. Each module can be operated by up to 8 different transmitters (or 8 different command signals).

**There are 3 operating modes with the Wall Dimmer :**

- 1) Regular Mode - When a valid signal is received, it will turn on or off the light, or change the brightness of the light.
- 2) Flashing Alert Mode - When a valid signal is received, the light will flash for a specific period of time, which is the time defined in the timer duration. This works as an alert indication.
- 3) Countdown Timer Mode - When a valid signal is received, the light will be on for a specific period of time, 1 minute, 5 minutes, 15 minutes, 30 minutes, or 60 minutes. This is mainly for energy saving.

You can program multiple buttons/transmitters / sensors to the module and different button/transmitter / sensor can activate a different mode.

**To program a transmitter into the Wall Switch Dimmer, follow the instructions below:**

Before you program a transmitter to the Wall Dimmer, decide the operating mode for this transmitter (Regular Mode, Flashing Alert Mode or Countdown Timer Mode).

1. Wall Dimmer must be installed and powered properly. Touch the touch pad. The connected light should be on, and the 2 blue LEDs are off.
2. Press and hold the "SET" button for about 3 seconds, the upper blue LED flashes quickly, meaning it is in Regular Mode programming sequence. Release the "SET" button if you are programming a transmitter to operate in On/Off Mode.

Note: Use a sharp non-conductive object to press the SET button. Changing the state of the load by the Touch Pad while pressing the SET button will interfere the learning process.

3. If you are programming a transmitter to operate in Flashing Alert Mode, continue to hold the "SET" button for about 10 seconds, until the upper blue LED flashes slowly, then release the "SET" button.
4. If you are programming a transmitter to operate in Countdown Timer Mode, continue to hold the "SET" button for about 10 seconds, until the upper blue LED is on steadily on, then release the "SET" button.

Operating Mode	Upper LED Indication
Regular	Flashes quickly
Flashing Alert	Flashes slowly
Countdown Timer	Steadily On

5. Transmit a "Learn" code from the transmitter. Refer to the manual of the transmitter to transmit this "Learn" code.
6. Once the transmitter is programmed, the both blue LEDs flash quickly then stops flashing. You have successfully programmed the transmitter.

Note: You must complete the programming sequence within the 15-second interval, otherwise, the Wall Dimmer will quit from programming mode and you need to start again from step 1.

### 4. SET TIMER DURATION

This section is for transmitters that are programmed for Flashing Alert Mode and Countdown Timer Mode.

The timer for both Flashing Alert Mode and Countdown Timer Mode can be set to the following duration, meaning the light will stay on for the following time: 1 minute, 5 minutes, 15 minutes, 30 minutes, or 60 minutes. Only one timer interval can be set. To set the timer duration, follow the instructions below.

1. Wall Dimmer must be installed and powered properly. The connected light should be off, and the 2 blue LEDs are on. The light must be off in order to set the timer duration.
2. Press and hold the SET button for 3 seconds, the lower blue LED flashes once. The number of flashes indicates the timer duration:

#### 4. SET TIMER DURATION (CONT)

Note: Use a sharp non-conductive object to press the SET button. Changing the state of the load by the Touch Pad while pressing the SET button will interfere the learning process.

Number of Flashes	Timer Duration
1	1 min.
2	5 min.
3	15 min.
4	30 min.
5	60 min.

- Continue to hold the SET button until it reaches the desired setting. The status will change every 6 seconds, i.e. hold the SET button for another 6 seconds, you will see the number of flashes changes from 1 to 2, 2 to 3, etc.

Note: Once the number of flashes reaches 5, it will stay at this setting. If you would like to go back to other settings, such as 1 minute, release the button and repeat from step 1 to start over.

Once a transmitter (button) is programmed for timer mode or flashing mode, activating this programmed transmitter (button) will turn on the light for the specified timer duration.

During a timer count down, if the Wall Dimmer receives another signal for timer operation, the timer will start again and overrides the previous timer, therefore, extending the On period by another timer interval.

To stop timer count down, press a programmed button for regular mode.

#### 5. REGULAR OPERATING MODE

The Wall Dimmer can control the light in 2 different operating modes:

- On / Off Mode - Allows operating the light either on or off, without dimming function.
- Dimming Mode - Allows operating the light in on, off or dimming (dim / brighten). Light source must be either incandescent light or dimmable compact fluorescent light.

#### **WARNING** ⚠

**Non-dimmable load has to be always working under ON/OFF mode. Using non-dimmable load under dimming mode may damage the non-dimmable CFL.**

The factory default operating mode is On/Off mode. However, if your light is dimmable, you may change the operating mode to Dimming Mode. To change the operating modes, please follow the instructions below:

- Turn on the light by the programmed transmitter or touch pad.
- Press and hold the button on the transmitter that is programmed to the Wall Dimmer in "Regular" mode for 10 seconds or touch the touch pad for 10 seconds with your finger.
- The light will flash. If it flashes once, that means it is in On / Off Mode. If it flashes twice, that means it is in Dimming Mode.
- Repeating step 2 above will toggle the setting between On / Off Mode and Dimming Mode.

#### 5.1 ON / OFF operation:

##### Use the Wall Dimmer

To turn on / off the light, simply tap the touch pad of the wall dimmer once with your finger, it will toggle the status of the light, i.e. from on to off or from off to on.

##### Use a Transmitter

Wall Dimmer allows on / off operation, when the programmed button is pressed, it will transmit a signal to toggle the status of the load. For example, if a toggle signal is received when the light is off, that signal will turn on the light.

#### 5. REGULAR OPERATING MODE (CONT)

#### 5.2 Brightness control operation:

Besides turning on and off the light, you may also control the brightness of the light if the light bulb is either incandescent light or dimmable compact fluorescent light.

##### Use the Wall Switch

Turn on the light first. Then keep touching the touch pad to change the brightness. Remove your finger from the touch pad until the desired brightness is reached. To change the brightness in the opposite way, remove your finger from the touch pad and then keep touching again, remove the finger from the touch pad until the desired brightness is reached.

##### Use a Transmitter

First turn on the light. Then press and hold the programmed button on the transmitter to change the brightness. Hold the button until the desired brightness is reached, then release the button.

Press and hold the same button again on the transmitter to change the brightness again in the opposite way. When the desired brightness is reached, release the button.

Refer to the user's instructions of the transmitter for more detailed instructions for dimming operation, as well as other operations such as Zone On / Zone Off, Zone Dimming, All On / All Off etc.

Note: Press and hold for more than 10 seconds will toggle the mode between ON/OFF and Dimming.

Note: If the 2 blue LEDs are off when the loading is off, please check and ensure the light bulb is installed and in good condition.

#### 6. FLASHING ALERT OPERATING MODE

If a Flashing Alert Mode transmitter or sensor is activated, the light connected to the Wall Dimmer will flash for a predetermined time interval. During the flashing interval, the upper blue LED on the Wall Dimmer will flash, the lower blue LED will start to flash during the last minute of the countdown timer. Activating a programmed transmitter or sensor under Regular Mode or Countdown Timer Mode during flashing interval can override flashing alert operation.

#### 7. COUNTDOWN TIMER OPERATING MODE

If a Countdown Timer Mode transmitter or sensor is activated, the light connected to the Wall Dimmer will be on for the predetermined time interval. During the timer count down, the upper blue LED on the Wall Dimmer will be on steadily, the lower blue LED will start to flash during the last minute of the countdown timer. Activating a programmed transmitter or sensor under Regular Mode or Flashing Alert Mode during timer interval can override the countdown timer operation.

#### 8. ERASING TRANSMITTERS FROM THE MODULE

You may erase a transmitter or sensor from the wall dimmer, but you cannot erase a specific device directly, you must erase all the wireless devices, then program the ones you want to keep. Follow the instructions below to erase programmed transmitters / sensors.

- Power off the Wall Dimmer by placing the air gap switch to off position.
- Press and hold the SET button, while holding the SET button, slide the air gap switch to on position.

Note: Use a sharp non-conductive object to press the SET button. Changing the state of the load by the Touch Pad while pressing the SET button will interfere the learning process.

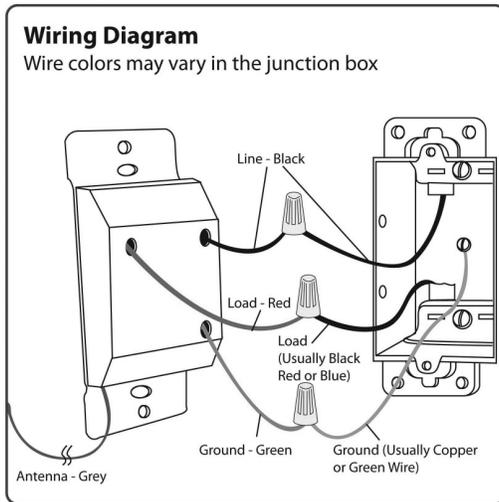
- The blue LEDs will be on first, then turn off.

- You may release the SET button, now you have successfully erased all the devices.

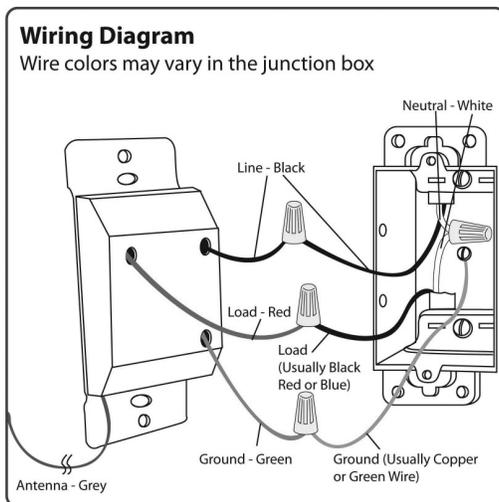
#### 9. TECHNICAL SPECIFICATIONS

Input Voltage: 120V AC, 60Hz  
Standby Current: 0.2mA  
Minimum Load: 10W  
Maximum Load: 300W at 120VAC  
Operating Frequency: 318MHz  
Operational Temperature: -4° F - 140° F (-20° C - 60° C)  
Humidity: 5%-95%  
Range: Up to 500 feet in open area

## 10 .Wiring Diagram



Wiring Diagram w/o Neutral Wire



Wiring Diagram with Neutral Wire

## 11. FCC

The Device is approved by the FCC and it complies with Part 15 of the FCC Rules. Its operation is subject to the following two conditions :

1. This device may not cause harmful interference.
2. This device must accept any interference that may cause undesired operation.

### WARNING:

Changes or modifications to this unit not expressly approved by the party responsible of compliance could void the user's authority to operate the equipment.

## 12. WARRANTY

If, within one year from date of purchase, this product should become defective (except battery), due to faulty workmanship or materials, it will be repaired or replaced, without charge. Proof of purchase and a Return Authorization are required.

## 13. CUSTOMER SERVICE

If you would like to

- find out the up-to-date specifications
- know more about features and applications
- download documents, i.e. user's instructions
- order Skylink products

or if you have difficulty getting products to work, please:

1. visit our FAQ section at [www.skylinkhome.com](http://www.skylinkhome.com), or
2. email us at [support@skylinkhome.com](mailto:support@skylinkhome.com), or
3. call our toll free at 1-800-304-1187 from Monday to Friday, 9 am to 5 pm EST. Fax (800) 286-1320

## 14. ACCESSORIES

The SkylinkHome™ System consists of many other devices such as SkylinkHome™ Remotes, Motion Sensor, ON/OFF Wall Switch, Wall Dimmer, Plug-In Dimmer with or without Repeater, Plug-In ON/OFF Control (Outdoor/Indoor), Screw-In Dimmer, ON/OFF/Dimming Control, ON/OFF Control, Smart Button™ Garage Door Control, etc. Please visit Skylink website at [www.skylinkhome.com](http://www.skylinkhome.com) for more information.



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Patent Pending

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