# Screw In Lamp Socket Dimmer

# **1. INTRODUCTION**

Thank you for your purchase of a SkylinkHome™ lighting receiver, Screw In Lamp Socket Dimmer, Model LS-318. This receiver module allows you to wirelessly turn on and off, dim and brighten different lighting fixtures with the SkylinkHome<sup>™</sup> lighting transmitters.

The Screw In Lamp Socket Dimmer LS-318 can communicate with up to 16 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<sup>™</sup> lighting system are based on rolling code technology to ensure highest security is used.

The following items are included in this package:

- Screw In Lamp Socket Dimmer
- Antenna
- User's Instructions

Screw In Lamp Socket Dimmer



2. SETUP

There is no wiring involved in setting up the Screw In Lamp Socket Dimmer.

Insert the antenna to the Screw In Lamp Socket Dimmer as shown.

CAUTION: Turn off the light switch of the empty socket where you plan to install the screw in Lamp Socket Dimmer.

Simply screw a light bulb to the fixture end of the Screw In Lamp Socket Dimmer. Then screw the light bulb with the Screw In Lamp Socket Dimmer to an empty socket.

Follow the programming instructions below to get started.

Note: The antenna should be placed away from the light bulb so it is away from the heat generated by the light bulb.

Note: Lighting Load

The Screw In Lamp Socket Dimmer is designed to operate maximum load of 200W at 120VAC. It can dim incandescent light and designated dimming compact fluorescent light. Do not connect other kinds of loading or loading that exceeds this maximum rating.

# 3. PROGRAMMING TRANSMITTERS (TC SERIES) / SENSORS

In order to operate the Screw In Lamp Socket Dimmer remotely with a transmitter or sensor, it must be programmed to the Screw In Lamp Socket Dimmer. Each module can be operated by up to 16 different transmitters (or 16 different command signals).

There are 3 operating modes with the Screw In Lamp Socket Dimmer:

- 1) On / Off Mode When a valid signal is received, it will toggle the load, i.e. turning off or on the light
- 2) Flashing 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) Timer Mode When a valid signal is received, the load will be on for a specific period of time, from 1 minute, 5 minutes, 15 minutes, 30 minutes, and 60 minutes

You can program multiple transmitters / sensors to the module and each transmitter / sensor can operate in its own mode.

To program a transmitter / Sensor into the Screw In Lamp Socket Dimmer, follow the instructions below.

# 3. PROGRAMMING TRANSMITTERS (TC SERIES) / SENSORS

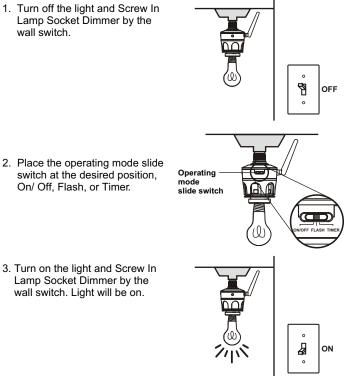
1. Turn off the light and Screw In Lamp Socket Dimmer by the wall switch.

switch at the desired position,

On/ Off, Flash, or Timer.

3. Turn on the light and Screw In Lamp Socket Dimmer by the

wall switch. Light will be on.



4. The red LED indication shows the operation mode you have selected:

Operating Mode	LED Indication
On / Off	One Flash
Flashing	Two Flashes
Timer	Steadily On

- 5. Ensure the LED indication shows the operation mode you have selected.
- 6. You can now activate the transmitter or sensor you would like to program.
- Press the PROG button on the back of the TC 7 transmitter with a sharp object. Red LED on the transmitter will be on steadily.
- 8. Press the button on the TC transmitter that you would like to program into the module.
- 9. Once the transmitter is programmed, the red LED on the module flashes quickly then stops flashing, indicating you have successfully programmed the transmitter to the module.
- 10. You may operate the light with the programmed transmitter.

Note: To program other transmitters/sensors (besides TC transmitter), please refer to the instructions of the transmitters/sensors.

Note: You must complete the programming sequence within the 15-second interval, otherwise, the module will quit from programming mode and you need to start again from step 1 if the red LED is off.

You may follow the same instructions to program additional transmitters or sensors to operate the receiver module.

# 4. SET TIMER DURATION

As mentioned, the timer can be set to the following durations, 1 minute. 5 minutes, 10 minutes, 30 minutes, and 60 minutes.

There is only one timer setting, so all transmitters that are programmed in timer mode will have the same timer duration. To set the timer duration, follow the instructions below:



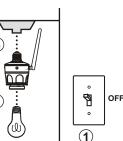
# "PROG" switch





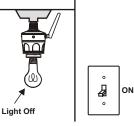
Model LS-318

Antenna



# 4. SET TIMER DURATION (CONT)

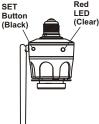
- 1. Screw In Lamp Socket Dimmer should be powered up.
- 2. Turn off the light bulb by a programmed transmitter. The light bulb must be off in order to set the timer duration.



3. Press and hold the SET button for 3 seconds, the red LED flashes once.

The number of flash indicates the timer duration:

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



#### CAUTION

DO NOT TOUCH ANY METAL PARTS WHILE PRESSING THE SET BUTTON. MAKING CONTACT WITH METAL PARTS CAN RESULT IN ELECTRICAL SHOCK CAUSING SEVERE OR FATAL INJURY.

4. Continue to hold the SET button until it reaches the desired setting. The status will change every 6 seconds, i.e. hold onto 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 flash reaches 5, it will stay at this setting. If you would like to go back to other settings, such as 1 flash, release the button and repeat from step 1 to start over.

Once a transmitter (button) is programmed in timer mode, activating this programmed transmitter (button) will turn on the light for the specific timer interval.

During a timer count down, if the module receives another signal for timer operation, the timer will start again and overrides the previous timer, therefore, extending the on period by another timer duration.

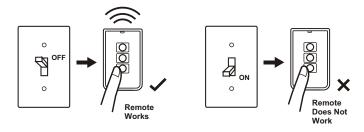
#### 4. ON / OFF OPERATING MODES

If a transmitter is programmed under ON / OFF operating mode, the programmed transmitter can control the lights either in:

- 1) On / Off Mode Allows operating the light either on and off, without dimming function.
- 2) Dimming Mode Allows operating the light in on, off and dimming (dim / brighten) modes. Light must be either incandescent light and designated dimming compact fluorescent light.

# On / Off Mode Operation

The Screw In Lamp Socket Dimmer allows on / off operation, when the programmed button is activate, it will transmit a signal to toggle its current status. For example, if a signal is received when the light is off, that signal will turn on the light.



Transmitter can only be used to operate the light when the wall switch is in the ON position. If the wall switch is in the OFF position, no power is provided to the Screw In Lamp Socket Dimmer, therefore it cannot receive signals from the transmitter.

#### 4. ON / OFF OPERATING MODES (CONT)

#### Note:

When used with Compact Fluorescent Light, if there is flickering when you switch off the light, it is recommended you replace a different Compact Fluorescent Light with higher quality.

# Power On - Light On

There is a function "Power On - Light On" built in to the receiver module. This means when the power supply to the receiver module change from off to on, this will turn the light on. This function allows you to operate the light with original wall switch.

When the wall switch is in the off position, switching it on will turn on the light. Once the switch is on, you may use the remote control to operate the light.

If the wall switch is switched from on to off, the light will be off. At the same time, the remote control cannot operate the light cause there is no power supplied to the Screw In Lamp Socket Dimmer.

In case you do not want to operate the light with the original wall switch, you can disable this Power On - Light On feature and use only remote control to operate the light. One incident that the light may be turned on by accident is after a power failure. If you leave the wall switch on, but turn off the light with a remote control. When power comes back on, the light will be on. Therefore, there is an option not to turn the lights on when power is supplied to the receiver module. The way to disable this feature is to re-program a transmitter (button) that is already programmed to the receiver module (i.e. program a transmitter twice). This will disable this feature. You may re-program it again to toggle the setting between enabling and disabling this feature.

If the Power On - Light On feature is disabled, the light will not be turned on under most circumstances, i.e. power comes back up after power failure, or manually turning on the wall switch. However, you can still turn on the light by the wall switch with a specific power up sequence, that is to turn on the wall switch twice within 2 seconds. So in case the remote control is lost, you can still operate the light.

#### **Dimming Mode Operation**

Besides turning on and off the light, you may also dim the light if the light bulb is dimmable, i.e. either incandescent light and designated dimming compact fluorescent light. Again, you can control this by a transmitter or the wall switch itself.

To change the brightness, first turn on the light.

Press and hold the programmed button on the transmitter will change its brightness. Hold onto 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 (i.e. Dim to brighten or brighten to dim), until the desired brightness is reached, then release the button.

#### Changing Between On / Off Mode and Dimming Mode

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.

- 1. Turn on the light by the programmed transmitter.
- 2. Press and hold onto a button on the transmitter that is programmed to the module for 10 seconds.
- 3. The light will flash. If it flashes once, that means it is in On / Off Mode. If the light flashes twice, that means it is in Dimming Mode.
- Repeating step 3 above will toggle the setting between On / Off Mode and Dimming Mode.

# **5. FLASHING OPERATING MODES**

If a transmitter or a sensor is programmed to the Screw In Lamp Socket Dimmer under flashing mode, when that transmitter is activated, the light connected will flash for the predetermined time interval. During the flashing operation, the red LED on the Screw In Lamp Socket Dimmer will flash, indicating it is now in flashing mode. After the timer interval, the light bulb will be off.

# 6. TIMER OPERATING MODE

If a transmitter or a sensor is programmed to the Screw In Lamp Socket Dimmer under timer mode, when that transmitter is activated, the light connected will be on for the predetermined time interval. During the timer count down operation, the red LED on the Screw In Lamp Socket Dimmer will be on steadily indicating it is in timer operation. After the timer interval, the light bulb will be off.

# 7. ZONE OPERATION

A Zone Command allows you to operate multiple lights at the same time in the same zone. To set this up, simply program the zone signal into the Screw In Lamp Socket Dimmers and other receiver modules that are in the same zone. For instance, you may assign zone 1 to the 3 lighting fixtures in the family room (each light has its own receiver module). You then need to program the Zone Command to all 3 receiver modules.

To activate the zone command, simply press "Zone On" or "Zone Off", then the zone number, i.e. [Zone On] + [1] means Zone 1 On.

Enter [Zone On] + [Zone Number] during step 8 of the programming sequence (Section 3), the Zone Command signal would be programmed. Repeat this step for all the receiver modules in the same zone.

# 8. ERASING TRANSMITTERS FROM THE MODULE

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

- 1. Turn off the light and Screw In Lamp Socket Dimmer by the wall switch.
- 2. Place the operating mode slide switch to the "Timer" position.
- Press and hold the SET button, while holding onto the SET button, turn on the light and Screw In Lamp Socket Dimmer by the wall switch. You may need another person helping you to do this. Do not release the SET button until step 5.
- 4. The red LED will flash quickly.
- You may release the SET button, the light bulb is now on, and the red LED will be on steadily indicating you have successfully erased all the devices.
- 6. You may now program the transmitters / sensors that you would like to keep.

# 9. TECHNICAL SPECIFICATIONS

Input Voltage: 120V AC, 60Hz Standby Current: 5mA Maximum Load: 200W at 120AVC Operating Frequency: 318MHz

#### 7. FCC

The Remote Control 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.



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# **10. ACCESSORIES**

The SkylinkHome<sup>™</sup> Lighting System consists of many other devices from multiple button transmitters, Motion Sensor, various receivers such as Wall Switch Receiver, Plug-in Receiver with Repeater, Outdoor Receiver, Dimmer Module etc. Please visit Skylink website at <u>www.skylinkhome.com</u> for more information.