

March 6, 2012

**Wireless Remote Control AC Switch marketed as
"SwitchLinc™ On/Off Switch (Dual-Band)"
Model: 2477S
FCC ID: SBP2477S IC: 5202A-2477S**

The owner's manual below may be accessed freely via the Internet
with any web browser and supports the PDF format.

www.smarthome.com/2477S.html

Certification
This product has been thoroughly tested by Intertek ETL SEMKO, a nationally recognized independent third-party testing laboratory. The North American ETL Listed mark signifies that the device has been tested to and has met the requirements of a widely recognized consensus of U.S. and Canadian device safety standards, that the manufacturing site has been audited, and that the manufacturer has agreed to a program of quarterly factory follow-up inspections to verify continued conformance.

FCC & Industry Canada Compliance Statement
This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS-210. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le present appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorise aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioelectrique subi, mme si le brouillage est susceptible d'en compromettre le fonctionnement.

Changes or modifications to this unit voids the user's authority to operate this product and the manufacturer's warranty

The digital circuitry of this device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15B of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. 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 and television reception. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause such interference, which can be verified by turning the device off and on, the user is encouraged to eliminate the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna of the device experiencing the interference
- Increase the distance between this device and the receiver
- Connect the device to an AC outlet on a circuit different from the one that supplies power to the receiver
- Consult the dealer or an experienced radio/TV technician

WARNING: Changes or modifications to this device not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Complies with Section 5 of FCC document [784748 D01 Labeling Part 15 18 Guidelines v07](#) where cautionary statements in the user manual may be provided over the Internet.

SwitchLinc™ On/Off
INSTEON® Remote Control Switch (Dual-Band)
Owners Manual (#2477Sxx)



INSTEON

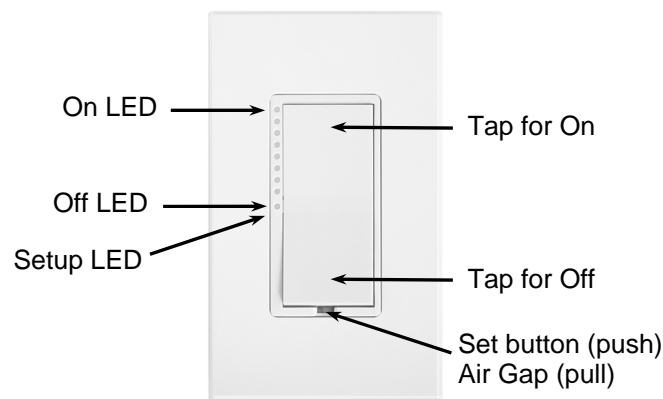
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SwitchLinc On/Off – Features & Benefits

Features

- Controls virtually all load types
- 17 Amp capacity
- 1,800 Watt incandescent capacity
- 100-277VAC capable (can be used to control 277V commercial lighting circuits)
- 50/60 Hz Auto-switching
- Dual-color setup LED and beeper for easy setup
- Status LED provides gentle nightlight when switch is off (can be dimmed or turned off)
- White LEDs are changeable to green, blue, amber or red with optional kit
- Responds to commands from X10 controllers and sends X10 commands to X10 devices
- Wires in like a standard wall switch (does require a neutral connection)
- Supports SwitchLinc "virtual" 3-way, 4-way circuits
- White paddle and trim frame is changeable to ivory, almond, black, brown or gray with optional kit
- 2 year warranty



What's in the box?

- SwitchLinc On/Off (Dual-Band)
- Four Wire Nuts
- 2 Screws
- Quick-Start Guide

Installation

CAUTIONS AND WARNINGS

Read and understand these instructions before installing and retain them for future reference.

This product is intended for installation in accordance with the National Electric Code and local regulations in the United States or the Canadian Electrical Code and local regulations in Canada. Use indoors only. This product is not designed or approved for use on power lines other than single-phase voltages between 100V and 277V, 50/60Hz. Attempting to use this product on non-approved power lines may have hazardous consequences.

Recommended installation practices:

- Use only indoors or in an outdoor rated box
- Be sure that you have turned off the circuit breaker or removed the fuse for the circuit you are installing this product into. Installing this product with the power on will expose you to dangerous voltages.
- The wires connecting SwitchLinc to the incoming power must be protected by a fuse or circuit breaker of 20-amps or less
- Connect using only copper or copper-clad wire
- This product may feel warm during operation. The amount of heat generated is within approved limits and poses no hazards. To minimize heat buildup, ensure the area surrounding the rear of this product is as clear of clutter as possible.
- To reduce the risk of overheating and possible damage to other equipment, do not use this product to control Loads in excess of the specified maximum(s) or, install in locations with electricity specifications which are outside of the product's specifications. If this device supports dimming, please note that dimming an inductive Load, such as a fan or transformer, could cause damage to the dimmer, the load bearing device, or both. If the manufacturer of the load device does not recommend dimming, use a non-dimming INSTEON on/off switch. **USER ASSUMES ALL RISKS ASSOCIATED WITH DIMMING AN INDUCTIVE LOAD.**

Identifying the Electrical Wires in your Home

- Line - usually Black, may also be called HOT, LIVE or Power, carries 100 - 277VAC electricity into the wall box
- Neutral - usually White commonly daisy chained from box to box usually appearing as a White wire bundle
- Load – usually Black from a separate cable jacket
- Ground - Bare wire or metal fixture (if grounded)

IMPORTANT!

- Each INSTEON product is assigned a unique INSTEON ID, which is printed on the product's label. Please take note for future reference
- If you have any difficulties or questions, consult an electrician. If you are not knowledgeable about, and comfortable with electrical circuitry, you should have a qualified electrician install the product for you.

Tools Needed

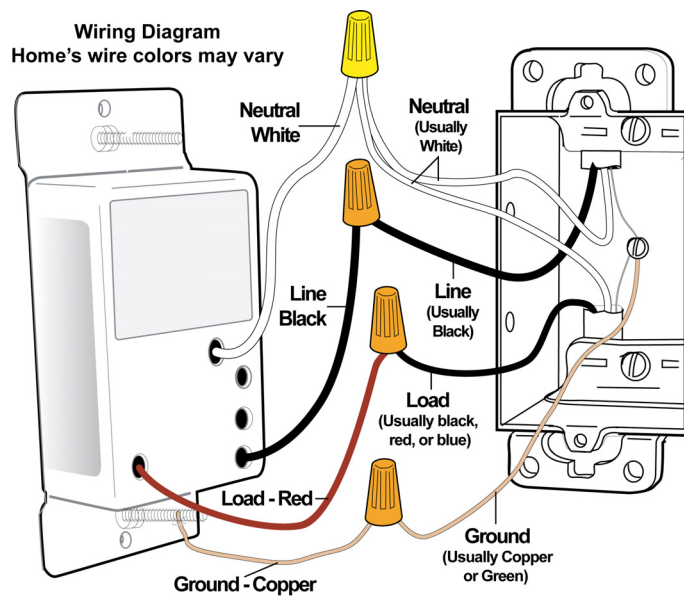
- Slotted screwdriver
- Wire cutter / stripper
- Phillips screwdriver
- Voltage Meter

Installing SwitchLinc (in circuits with 1 Switch)

- 1) Turn off breaker¹ supplying power to wall box
- 2) Remove wallplate and unscrew old switch
- 3) Gently pull out and disconnect wires from old switch²
- 4) Turn breaker back on
- 5) Check old switch wires with a voltage meter to identify Line and Load
- 6) Turn breaker back off
- 7) Connect wires as follows

Sequence	SwitchLinc	Home Wire	Commonly
1	Copper	Ground	Bare, green or green screw
2	White	Neutral	White bundle in back of box
3	Red	Load	
4	Black	Line	

- 8) Gently place SwitchLinc into wall box with LED bar on left and screw into place
- 9) Turn breaker back on
SwitchLinc LED bar and connected load will turn on
- 10) Test by tapping SwitchLinc on and off
- 11) Reinstall the wallplate



¹ If multi-gang box, turn off all breakers (or fuses) that could possibly be supplying power to the box

² If the wires cannot be detached, cut the wires where they enter switch and strip ½" of insulation off ends

Installing SwitchLinc (in circuits with 2 Switches “3-Way Circuit”)

Circuits with 2 switches are called 3-way circuits. Once installed, see the section “GROUPING” for programming instructions. Notes:

- Both switches in 3-way circuits need to be replaced with INSTEON products
- INSTEON products do not require travelers.

- 1) Turn off breaker¹ supplying power to both wall boxes
- 2) Remove wallplates and unscrew old switches
- 3) Gently pull out and disconnect wires from old switch (each switch will have at least 3)²
- 4) Turn breaker back on
- 5) Check old switch wires with a voltage meter to identify the single wire with 120V (Line)
- 6) This is box 1 (box 2 will have the Load wire)
- 7) Turn breaker back off
- 8) Follow the sequence of steps below for box 1

Sequence	SwitchLinc	Home Wire	Commonly
1	Copper	Ground	Bare, green or green screw
2	White	Neutral	White bundle in back of box
3	Red (Cap it)	-	
4	Black	Line + Traveler1	Traveler1 can be either of the travelers and will now carry power to box2
5	-	Traveler2 (Cap it)	

- 9) Turn breaker back on
- 10) Check old switch wires in box 2 with a voltage meter to identify the single wire with 120V (Line2)
- 11) The other wire in the same “sheath” or pipe is Traveler2
- 12) Turn breaker back off
- 13) Follow the sequence of steps below for box 2

Sequence	SwitchLinc	Home Wire	Commonly
1	Copper	Ground	Bare, green or green screw
2	White	Neutral	White bundle in back of box
3	-	Traveler2 (Cap it)	The 2 nd wire entering box 2 from sheath/pipe containing Line2
4	Red	Final remaining wire from old switch	
5	Black	Line2	

- 14) Gently place SwitchLinc into wall boxes, orienting unit with LED bar on left and screw into place.
- 15) Turn breaker back on

*Both SwitchLincs' LEDs and connected load will turn on³
Only box 2 SwitchLinc will control connected load at this time*

- 16) Add both SwitchLincs to a Group (see [Grouping](#))

¹ If multi-gang box, turn off all breakers (or fuses) that could possibly be supplying power to the box

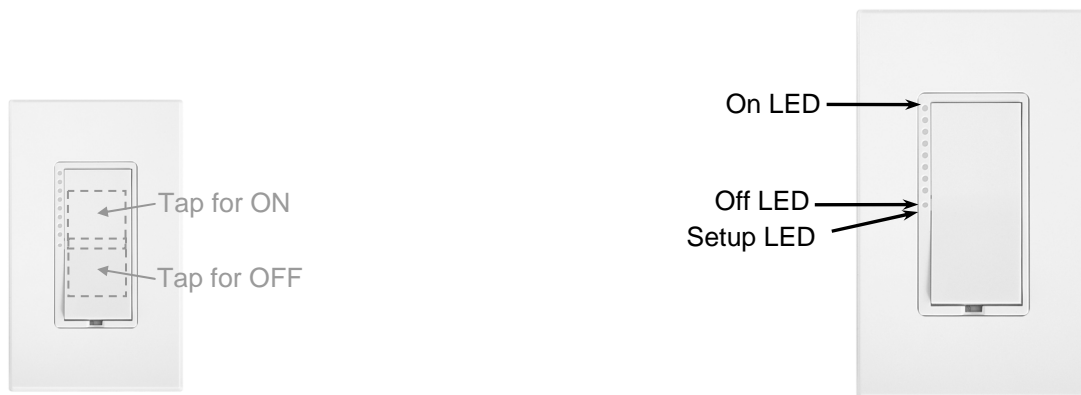
² If the wires cannot be detached, cut the wires where they enter switch and strip ½" of insulation off ends

³ If connected light doesn't turn on, try connecting box 2 SwitchLinc Red wire to what was thought to be Traveler 2 (which was previously capped) and capping what was previously connected to Red.

- 17) Test by tapping SwitchLincs' paddles
Connected load will turn on and off
LEDs on both SwitchLincs will remain in synch
- 18) Reinstall wallplates
ing SwitchLinc

LEDs

Using SwitchLinc



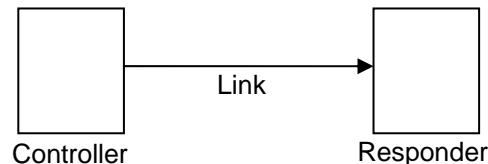
SwitchLinc Paddle	Tap	Press & hold	Double-tap	LEDs
Top	On	Brighten Responders	Fast on to Responders	Top LED on
Bottom	Off	Dim Responders	Fast off to Responders	Bottom LED on

Setup

INSTEON Controllers, Responders and Links

First, let's define a few terms.

- The device initiating an INSTEON message is called a **Controller**.
- The device receiving the message is called a **Responder**
- The association between the controller and responder is called a **Link**

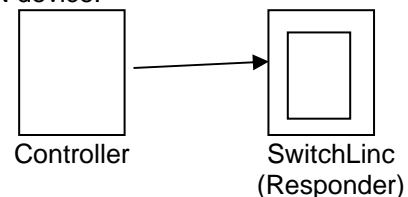


Please note that a link is one way. If you wish to have control “the other way”, simply repeat link setup process “the other way”. Most INSTEON devices can store hundreds of links. Furthermore, a controller can simultaneously control from 1 to hundreds of responders using what are called groups and scenes. Each link can have its own properties (e.g. 50% brightness at a 4 second ramp rate).

Make SwitchLinc a Responder

Follow the steps below to control SwitchLinc from another INSTEON device.

- 5) Press & hold controller button until it beeps¹
Controller LED will start blinking
- 6) Tap SwitchLinc on (or off if desired for the link)
Load will be on (or off)
- 7) Press & hold SwitchLinc set button until it double-beeps
Controller LED will stop blinking and it will (beep)-(beep)²
- 8) Test by tapping controller button on and off
SwitchLinc will respond appropriately

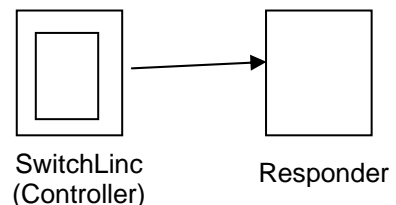


Note: the link just created is one-way, see “Make SwitchLinc a Controller” to add another link to keep the two products in synch.

Make SwitchLinc a Controller (Add a Responder)

Follow the steps below to control an INSTEON device from SwitchLinc.

- 1) Press & hold SwitchLinc set button until it beeps
SwitchLinc LED will start blinking green
- 2) Adjust the responder(s) to the “state” you want when scene is activated from SwitchLinc (e.g., 50%, 25% or even OFF)¹
- 3) Press & hold responder set button until it double-beeps (or until its LED/Load flashes)
SwitchLinc LED will stop blinking



¹ If the controller does not have a beeper, wait until its LED begins blinking

² Most models

¹ If the responder is a multi-Scene device such as a KeypadLinc, tap the Scene button you wish to control until its LED is in the desired Scene state (on or off)

- Responder LED will stop blinking and it may (Beep)-(Beep)*³
- 5) Test by tapping SwitchLinc paddle on and off
Responder will toggle between the scene on level and off
 - 6) If you wish to add another responder, repeat steps 1-5 or (see [Add Multiple Responders](#))

Notes:

- The link just created is one-way, see “SwitchLinc a Controller” to add another link to keep the two products in synch.
- If you wish the SwitchLinc load to be off when the link is activated (ie for an “all off” scene), turn the load off in step #2.

Groups (keeps devices synchronized) formerly “Cross-Linking”

Devices in a group share all the same settings (e.g., on-level, ramp rate). This keeps all group members synchronized. Every device in a group is both a controller of, and responder to, all the other devices. The most common example of a group is a 3-way lighting circuit (2 switches). For simplicity, we will assume that the desired group level is on.

Example: 3 way circuit with switches “A” and “B”

- 1) Turn A and B on
- 2) Press & hold A set button until it beeps (or LED blinks)
A status LED will start blinking green
- 3) Press & hold B set button until it double-beeps (or LED flashes)
B will (Beep)-(Beep)
A will (Beep)-(Beep) and its LED will stop blinking
- 4) Press & hold B set button until it beeps (or LED blinks)
B LED will start blinking green
- 5) Press & hold A set button until it double-beeps (or LED flashes)
A will (Beep)-(Beep)
B will (Beep)-(Beep) and its LED will stop blinking
- 6) Test the group by controlling the Load from A and then B
The load, A LED and B LED will all remain in synch

Scenes

INSTEON Scenes allow a controller to set the mood by setting multiple responders to desired levels simultaneously. Software is especially helpful in setting up and maintaining scenes, especially larger scenes.

Example: Create a scene with a single controller and SwitchLinc as a responder / member

- 1) Press & hold controller set button until it beeps¹
Controller LED will start blinking
- 2) Tap SwitchLinc on (or off if desired for the link)
Load will be on (or off)
- 3) Press & hold SwitchLinc set button until it double-beeps
*Controller LED will stop blinking and it will (beep)-(beep)*²
- 4) For each additional scene member
 - a. Adjust device to desired scene state
 - b. Press & hold its set button
- 5) Tap controller set button
Controller LED will stop blinking
- 6) Test by tapping controller button on and off
SwitchLinc and other scene responders will all respond appropriately

³ If either the SwitchLinc or responders LED continues to blink, the addition failed. Tap the device's Set button until LED stops blinking and try again.

¹ If the controller does not have a beeper, wait until its LED begins blinking

² Most models

Stop SwitchLinc from Responding

If you no longer want a controller button to control SwitchLinc follow these directions. Note: If you ever wish to un-install SwitchLinc, it is important that you remove all SwitchLinc responder links. Otherwise, controllers will retry commands repetitively, creating network delays.

- 1) Press & hold controller set button until beep³
LED will start blinking
- 2) Press & hold controller set button until beep
LED will continue blinking
- 3) Press & hold SwitchLinc set button until double-beep
Controller LED will stop blinking
- 4) Test by tapping controller button on and off
SwitchLinc will no longer respond

Stop SwitchLinc from Controlling (Remove a Responder)

If you no longer want SwitchLinc to control another device (or are removing SwitchLinc) it is important that you follow the instructions below for each responder.

- 1) Press & hold SwitchLinc set button until beep
LED will start blinking green
- 2) Press & hold SwitchLinc set button until beep
LED will start blinking red
- 3) Press & hold responder set button until double-beep (or LED blinks)
SwitchLinc will (Beep)-(Beep) and its LED will stop blinking
- 4) Test by tapping SwitchLinc on and off
Responder will not respond

Add Multiple Responders

- 1) Press & hold SwitchLinc's set button until it beeps
SwitchLinc status LED will start blinking green
- 2) Tap SwitchLinc set button
SwitchLinc status LED will continue blinking green
- 3) For each responder you are adding
 - a. Tap on or off or press & hold to adjust to desired responder state
 - b. Press & hold responder set button until it beeps (or LED flashes)
SwitchLinc will (Beep)-(Beep)
- 4) After all responders have been added, tap SwitchLinc set button
SwitchLinc LED will stop blinking
- 5) Test by tapping SwitchLinc on and off a couple of times
All the responders added will respond

Remove Multiple Responders

- 1) Press & hold SwitchLinc set button until it beeps
SwitchLinc status LED will start blinking green
- 2) Press & hold SwitchLinc set button again until it beeps again
SwitchLinc status LED will start blinking red
- 3) Tap SwitchLinc set button
SwitchLinc status LED will continue blinking red
- 4) For each responder you are removing
 - a. If multi-button device, tap the responding button
 - b. Press & hold responder set button until it beeps (or LED flashes)

³ For devices without beepers hold until its LED begins blinking (this may take 10+ seconds)

- 5) Tap SwitchLinc set button
SwitchLinc status LED will stop blinking
- 6) Test by tapping controller button a couple of times
All responders removed will not respond

LED Brightness

- 1) Press & hold SwitchLinc set button until it beeps
*LED will start blinking **green***
- 2) Press & hold set button until it beeps again
*SwitchLinc setup LED will start blinking **red***
- 3) Press & hold set button until it beeps a third time
SwitchLinc setup LED will stop blinking and turn off
SwitchLinc status LED will illuminate at current LED brightness level
- 4) Use SwitchLinc paddle to adjust LED brightness
 - Press & hold paddle top to brighten
 - Press & hold paddle bottom to dim (fully off for dimmest)
- 5) Once you have reached the desired brightness for the LED, tap set button
SwitchLinc status LED will remain at new desired brightness
*SwitchLinc will **(Beep)***

Error Blinking

This setting is adjustable via software or a central controller only. SwitchLinc LED blinks red for a few seconds if one or more responders do not acknowledge a message.

Air Gap (Remove Power)

To remove all power from SwitchLinc and connected light(s), pull the set button at the bottom of the switch out as far as it will go, about 1/8". (It might be helpful to use a small screwdriver.)

To restore power (being careful to not hold the button in or a factory reset may occur) tap the air gap back into place, until its top is even with the trim frame.

Factory Reset

Factory Reset clears all user settings from SwitchLinc including INSTEON scenes, X10 addresses, etc.

- 1) Pull set button out (creating an air gap)
- 2) Wait 10 seconds
- 3) Press the set button in as far as you can & hold
*SwitchLinc will sound a long **(Beep)***
- 4) Release set button when beep stops
*SwitchLinc LED will turn **GREEN** momentarily, then turn off*
A few seconds will pass
*SwitchLinc will **(Beep)-(Beep)***
LED will return to normal brightness

X10 Setup

SwitchLinc ships with no X10 address assigned.

Add X10 Address

- 1) Press & hold set button until beep
LED starts blinking green
- 2) Send the X10 address 3 times (with or without commands)
SwitchLinc will (beep)-(beep) and LED stops blinking
- 3) Test by sending X10 on and off commands
Light / load will turn on and off

Remove X10 Address

- 1) Press & hold set button until beep
LED starts blinking green
- 2) Press & hold set button until beep
LED starts blinking red
- 3) Send the X10 address 3 times (with or without commands)
SwitchLinc will (beep)-(beep) and LED stops blinking
- 4) Test by sending X10 on and off commands
SwitchLinc will not respond

Other X10 Setup

For other X10 setup instructions visit <http://www.smarthome.com/insteon-x10-programming.html>

Changing the Paddle and LED Colors

Note: The setup LED uses red and green colors to assist in programming the SwitchLinc. Changing the clear light pipe to a different color will make determining red or green colors difficult.

You can remove the LEDs and/or front paddle and trim frame assembly before or after SwitchLinc is installed. During the changeover process, power and load may remain on and operating. There are no dangerous voltages or unsafe areas under the paddle.

- 1) If SwitchLinc is already installed in the wall, remove the wallplate from the switch junction box
- 2) Remove the four Phillips screws that hold the paddle assembly to the metal frame
- 3) Pull the entire paddle straight away from the switch. You may have to wiggle the bottom of the frame to get it free from the set button.



Figure 1: Paddle assembly and SwitchLinc body separated

- 4) Using a flat blade or needle nose pliers, remove the large light pipe as shown in Figure 2. Light pipe will snap out of the frame. Do the same for the small light pipe.



Figure 2: Snap out the light pipes with a flat tool

- 5) Choose which LEDs and/or paddle and trim frame you would like to install into SwitchLinc
- 6) Orient the new small light pipe with its protrusion facing toward center of the new frame and snap it into place. If placed in backwards or reversed, it will not click into place. Refer to Figure 3.
- 7) Orient the new large light pipe with side that has the most protrusions facing toward the center of the new frame. Using only finger pressure, snap the light pipe into the frame. Refer to Figure 3.

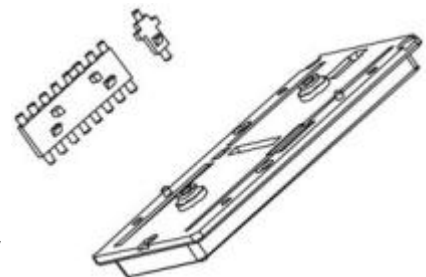


Figure 3: Insert the new light pipes with the protrusions facing the center

- 8) If both light pipes are installed correctly, they will stick straight out from back of the frame, as shown in Figure 4. If installed incorrectly, they will appear to be tilted as shown in Figure 5.



Figure 4: Installed correctly



Figure 5: Installed incorrectly

- 9) Gently place the paddle assembly back onto front of SwitchLinc. A little force may be necessary to snap the assembly over the set button. Reinstall four screws that you removed in step 2.

Using SwitchLinc as a Phase Bridge

SwitchLinc automatically bridges the electrical phases in your home (via communications with other Dual-Band devices on the “other phase”). This is only important if you have powerline only INSTEON products in your home. If you are relying on SwitchLinc to bridge the electrical phases, use the following procedure to confirm bridging:

- 1) Tap SwitchLinc set button four times quickly
 - SwitchLinc will begin (Beeping) once per second*
 - SwitchLinc setup LED will be solid green*
 - 2) Check the LED behavior of other Dual-Band devices
 - a. If the “other” Dual-Band device is blinking Green, it is on the other phase
 - Device provides a phase bridge to SwitchLinc*
 - b. If the “other” Dual-Band device is blinking Red, it is on the same phase
 - Device does not provide a phase bridge to SwitchLinc*
 - (move if/as necessary/possible)
 - c. If the “other” Dual-Band device is not blinking
 - Device not within RF range of SwitchLinc*
 - Does not provide a phase bridge to SwitchLinc*
 - (move if/as necessary/possible)
 1. If the “other” Dual-Band device is exhibiting any other behavior or color, refer to its owners manual
- 3) Tap SwitchLinc set button
 - SwitchLinc will stop beeping*
 - SwitchLinc setup LED will return to steady on*
 - Other devices LEDs will stop blinking*

Blink LED on INSTEON Traffic

This feature can be enabled (and subsequently disabled) via compatible software packages and is handy when troubleshooting larger installations.

Specifications

General		
Product Name	SwitchLinc Relay - INSTEON Remote Control On/Off Switch (Dual-Band)	
Brand	Smarthome	
Manufacturer Product Number	2477S	
UPC	813922012378	
FCC ID	SBP2477S	
Patent Number	7,345,998 US, International Patents Pending	
Warranty	2 Years, Limited	
INSTEON		
INSTEON ID	1	
INSTEON	400 responder groups & 1 controller group	
Maximum Scene Memberships	400 (Combined controller + responder)	
Scene Commands Supported as Controller	On	Off
	Fast-On	Fast-Off
	Begin Bright	Begin Dim
	End Bright	End Dim
Scene Commands Supported as Responder	On	Off
	Fast-On	Fast-Off
Software Configurable	Yes	
RF Range	> 100' Open air	
X10 Support	Yes	
X10 Addresses	256 max, unassigned by default	
INSTEON Device Category	0x02	
INSTEON Device Subcategory	0x2A	
Mechanical		
Mounting	Standard, single gang wall box	
Wires	Line, Load, Ground – 12 AWG Neutral – 18 AWG	
Wires	Black – Line (Hot)	
	White – Neutral	
	Red – Load	
	Bare Copper - Ground	

Color	White (Color change kits available)
Set button	Clear
Air Gap	Set button (when pulled out)
Plastic	UV Stabilized Polycarbonate
Beeper	Yes
Setup LED	1, Dual Color, Green & Red
Status LEDs	9, Dimmable, White (Color change kits available)
Dimensions	4.1" H x 1.73" W x 1.73" D
Weight	120 grams / 0.26 pounds
Operating Environment	Indoors
Operating Temperature Range	32 - 104 degrees Fahrenheit (0 – 40 degrees Celsius)
Operating Humidity Range	0-90% relative humidity, non-condensing
Storage conditions	4F to +158F (-20 – 70 degrees Celsius)
Electrical	
Voltage	100-277VAC +/- 10%, Split, Single Phase
Frequency	50/60Hz (+/- 5%) Auto Detected at power-up
Maximum Load	1,800 Watts (1,700 watts at 100VAC) 17 Amps
Load Type(s)	Wired-in inductive/transformer, motor or resistive
Surge Resistance	Up to 500 VAC
Retains all settings without power	Yes, all saved in Non-volatile EEPROM
Standby power consumption	< 1 watt
Safety Approved	ETL (Intertek Testing Services)
Certifications	FCC, IC Canada

Troubleshooting

Problem	Possible Cause	Solution
The LED bar on SwitchLinc is not turning on at all and connected load will not turn on	SwitchLinc is not getting power	Make sure the circuit breaker is turned on
		Check junction box wires to ensure all connections are tight and no bare wires are exposed
		Check the light fixture to ensure all connections are tight and no bare wires are exposed
The switch I'm replacing only has two wires	SwitchLinc needs a NEUTRAL wire in order to operate	Look in the rear of the junction box for a group of white wires all tied together with a wire nut. Those are the NEUTRAL wires. Connect the NEUTRAL SwitchLinc wire there.
SwitchLinc unexpectedly turned on	Another controller, a timer, or a stray X10 command was received	Install a power line signal blocker in your home to keep X10 signals from neighboring homes from interfering. Consider not using SwitchLinc in X10 mode
		If the above doesn't work, perform a factory reset. (see Factory Reset)
SwitchLinc responds to scene ONs but not OFFs	The connected load is producing electrical noise that is interfering with the reception of power line signal when load is turned on <u>and</u> SwitchLinc is not within RF range	Move or add a dual-band product nearer SwitchLinc
SwitchLinc responds to scene offs but not ons	SwitchLinc is scene responder at OFF	Re-add SwitchLinc to scene, while the light is on
When I press a button on SwitchLinc, it takes a long time for other INSTEON devices it is controlling to respond	You may have removed an INSTEON device that your SwitchLinc is trying to operate. SwitchLinc is retrying the missing INSTEON device.	If the INSTEON device is still available, Remove it from SwitchLinc scene as a responder (see Stop SwitchLinc from Responding)
		Perform a factory reset (see Factory Reset)
SwitchLinc is locked up	A surge or excessive noise on the power line may have locked it up	Pull the set button on SwitchLinc all the way out for 10 seconds to air-gap it, then push it back in until it is flush with the trim frame (don't push it all the way in).
		If the above doesn't work, perform a factory reset (see Factory Reset)
SwitchLinc can turn off my responder, but nothing happens when I send an ON command from SwitchLinc	Your responder may be added to the scene in its off state	Re-add your responder to a scene in SwitchLinc, while the responding device is on
Status LEDs are too bright	LEDs set at too bright a level	Dim the LEDs (see LED Brightness)
SwitchLinc won't add to scene as a responder	The controller may have dropped out of Add to a scene mode, or Added to scene of another device	Try Adding SwitchLinc to a scene on the controller again
	The INSTEON signal may not be getting to the "vicinity" of SwitchLinc	Make sure phases are bridged, Add additional INSTEON devices and/or move around existing INSTEON devices
	Large appliances, such as refrigerators or air conditioners, may be producing electrical noise on the power line	Install a power line noise filter (e.g. #1626-10) to filter electrical noise and minimize signal attenuation
	Other electrical devices, such as computers, televisions, or power strips, may be absorbing the INSTEON signal	
SwitchLinc is taking a long time to respond to a controller	The controller may be sending commands to a responder that is no longer available, causing delays	Remove all unused responders from SwitchLinc scene. If the above doesn't work, perform a factory reset on the controller
The load turned on by itself	Another controller, a timer, or stray X10 signals could have triggered SwitchLinc	Monitor for recurrence and remove reason if you can determine what it is. If necessary perform a factory reset.

SwitchLinc is not receiving signals from X10 controllers	SwitchLinc and the controller are on opposite power line phases	Install a SignalLinc™ phase coupler to properly bridge the two power line phases
	The controller is plugged into a power strip.	Power line signals can't travel through power filters. Plugging the controller directly into a wall outlet works best.
	Other modules are loading down the signal	Move the other modules or the controller to another outlet

If you have tried these solutions, reviewed this Owner's Manual, and still cannot resolve an issue you are having with SwitchLinc, please call: 800-762-7845

Certification

This product has been thoroughly tested by Intertek ETL SEMKO, a nationally recognized independent third-party testing laboratory. The North American ETL Listed mark signifies that the device has been tested to and has met the requirements of a widely recognized consensus of U.S. and Canadian device safety standards, that the manufacturing site has been audited, and that the manufacturer has agreed to a program of quarterly factory follow-up inspections to verify continued conformance.

FCC & Industry Canada Compliance Statement

This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS-210. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Changes or modifications to this unit voids the user's authority to operate this product and the manufacturer's warranty

The digital circuitry of this device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15B of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in residential installations. 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 and television reception. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause such interference, which can be verified by turning the device off and on, the user is encouraged to eliminate the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna of the device experiencing the interference
- Increase the distance between this device and the receiver
- Connect the device to an AC outlet on a circuit different from the one that supplies power to the receiver
- Consult the dealer or an experienced radio/TV technician

WARNING: Changes or modifications to this device not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Limited Warranty

Seller warrants to the original consumer purchaser of this product that, for a period of two years from the date of purchase, this product will be free from defects in material and workmanship and will perform in substantial conformity to the description of the product in this Owner's Manual. This warranty shall not apply to defects or errors caused by misuse or neglect. If the product is found to be defective in material or workmanship, or if the product does not perform as warranted above during the warranty period, Seller will either repair it, replace it, or refund the purchase price, at its option, upon receipt of the product at the address below, postage prepaid, with proof of the date of purchase and an explanation of the defect or error. The repair, replacement, or refund that is provided for above shall be the full extent of Seller's liability with respect to this product. For repair or replacement during the warranty period, call the INSTEON Support Line at 800-762-7845 with the Model # and Revision # of the device to receive an RMA# and send the product, along with all other required materials to:

Smarthome
ATTN: Receiving
16542 Millikan Ave.
Irvine, CA 92606-5027

Limitations

The above warranty is in lieu of and Seller disclaims all other warranties, whether oral or written, express or implied, including any warranty or merchantability or fitness for a particular purpose. Any implied warranty, including any warranty of merchantability or fitness for a particular purpose, which may not be disclaimed or supplanted as provided above shall be limited to the two-year of the express warranty above. No other representation or claim of any nature by any person shall be binding upon Seller or modify the terms of the above warranty and disclaimer.

Home automation devices have the risk of failure to operate, incorrect operation, or electrical or mechanical tampering. For optimal use, manually verify the device state. Any home automation device should be viewed as a convenience, but not as a sole method for controlling your home.

In no event shall Seller be liable for special, incidental, consequential, or other damages resulting from possession or use of this device, including without limitation damage to property and, to the extent permitted by law, personal injury, even if Seller knew or should have known of the possibility of such damages. Some states do not allow limitations on how long an implied warranty lasts and/or the exclusion or limitation of damages, in which case the above limitations and/or exclusions may not apply to you. You may also have other legal rights that may vary from state to state.

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