

### About SwitchLinc's Certification

The SwitchLinc has been thoroughly tested by ITS ETL SEMKO, a nationally recognized independent third-party testing laboratory. Products bearing North American ETL Listed mark signifies that the product has been tested to and has met the requirements of a widely recognized consensus of U.S. and Canadian product 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.



### Smarthome Limited Warranty

Smarthome 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, Smarthome 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 Smarthome's liability with respect to this product.

For repair or replacement during the warranty period, call Smarthome customer service to receive an RA# (return authorization number), properly package the product (with the RA# clearly printed on the outside of the package) and send the product, along with all other required materials to:

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

**SMARTHOME™**  
MAKING LIFE MORE CONVENIENT, SAFE AND FUN

### Limitations:

THE ABOVE WARRANTY IS IN LIEU OF AND SMARTHOME DISCLAIMS ALL OTHER WARRANTIES, WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF 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 ONE YEAR PERIOD OF THE EXPRESS WARRANTY ABOVE. NO OTHER REPRESENTATION OR CLAIM OF ANY NATURE BY ANY PERSON SHALL BE BINDING UPON SMARTHOME OR MODIFY THE TERMS OF THE ABOVE WARRANTY AND DISCLAIMER.

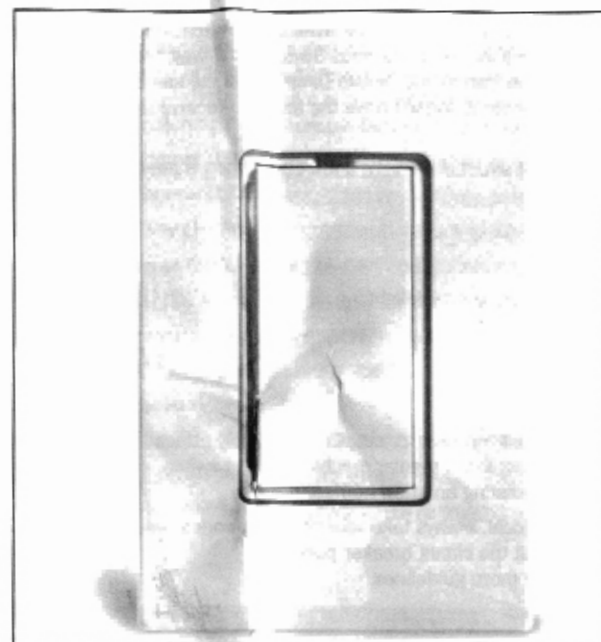
IN NO EVENT SHALL SMARTHOME BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES RESULTING FROM THE POSSESSION OR USE OF THIS PRODUCT, INCLUDING WITHOUT LIMITATION DAMAGE TO PROPERTY AND, TO THE EXTENT PERMITTED BY LAW, PERSONAL INJURY, EVEN IF SMARTHOME KNEW OR SHOULD HAVE KNOWN OF THE 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, which may vary from state to state.

ControlLinc, TesterLinc, SignalLinc, LampLinc, ToggleLinc, BoosterLinc, ApplianceLinc, KeypadLinc, FilterLinc, ProbeLinc, SwitchLinc, TempLinc, IR Linc & SmarthomeLive are trademarks by Smarthome, Inc.

© Copyright 2004 Smarthome, 16542 Millikan Ave., Irvine, CA 92606-5027  
800.SMART.HOME - 949.221.9200- www.smarthome.com

rev 012904



**SwitchLinc™**

**Deluxe Dimmer**

600-Watt Dimmer Switch

For models:  
#2387W & #2387I  
(and Remote Control Dimmer #2383W/I)

**SMARTHOME™**  
MAKING LIFE MORE CONVENIENT, SAFE AND FUN

## Congratulation!

You've just purchased the highest quality wall dimmer available. SwitchLinc Deluxe Dimmer is built upon the same design and chassis as our famous SwitchLinc 2-Way, SwitchLinc PLC, and SwitchLinc Plus wall switches. The SwitchLinc Deluxe Dimmer has the same appearance as other SwitchLinc wall switches, except it doesn't have the ability to receive signals from remote transmitters.

Use SwitchLinc Deluxe Dimmer for situations where a low-cost switch is needed, without any automation functions. Great for:

- Hallways
- Garages, basements, attics
- Kitchens (general purpose, spot, and task lighting)
- Outdoors
- Bedrooms
- And many more!

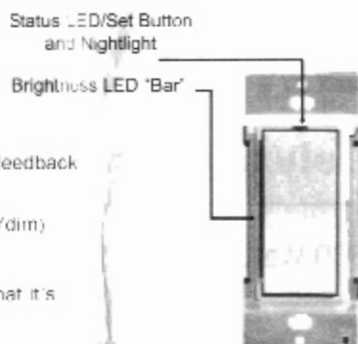
SwitchLinc Deluxe Dimmer dimmers are easy to install. They simply attach into a regular wall box and connect to home wiring just like a regular mechanical light switch. SwitchLinc Deluxe Dimmer can be installed in both existing and new homes.

When working with anything electrical, always take your time and work slowly. Make sure the power to the circuit is turned off at the circuit breaker panel.

Check the Preparation section for more guidelines.

## Key Features

- Wires in just like a standard wall switch\*
- All settings are held in non-volatile memory
- Very easy to set up
- High quality micro switches give the user tactile feedback when pressed (no mushy feel)
- True rocker action (top = on/bright, bottom = off/dim)
- 8-level LED "Bar" shows brightness of circuit
- Status LED/ Set Button acts as a night light so that it's easy to find in a dark room
- \* Requires a neutral connection



## Other SwitchLinc Models

Our powerline controlled SwitchLincs give you the ability to remotely control the switch from anywhere in your home or from anywhere in the world! They use the popular X10 powerline control system to remotely turn on, dim or turn off lights and most other loads. We offer several models all matching the SwitchLinc Deluxe Dimmer appearance.

SwitchLinc 2-Way Dimmer (600 Watt) #2380W/I - (White or Ivory)

SwitchLinc 2 Way Dimmer (1,000 Watt) 2381W/I - (White or Ivory)

SwitchLinc Relay 2 Way (15 Amps) #23883W/I - (White or Ivory)

SwitchLinc PLC Dimmer (600 Watt) #2384W/I - (White or Ivory)

SwitchLinc Relay PLC (15 Amps) #23885W/I - (White or Ivory)

SwitchLinc Plus Dimmer (600 Watt) #2386W/I - (White or Ivory)

SwitchLinc Multi-Way Companion Switch #2382W/I - (White or Ivory)

(Note: 2382 does not have LED brightness bar)

SwitchLinc RX Plus Dimmer (600 Watt) #2386W2 White or #2386I2 Ivory

SwitchLinc RX PLC Dimmer (600 Watt) #2384W2 White or #2384I2 Ivory

SwitchLinc RX Dimmer (600 Watt) 2387W2 White or 2387I2 Ivory

### CAUTION!!

Read and understand these instructions before installing. This device 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. To reduce the risk of overheating and possible damage to other equipment, do not install a SwitchLinc to control a receptacle or fluorescent lighting fixture. For indoor use only. Connect only copper or copper-clad wire to this device. Before installing, disconnect power at circuit breaker or remove fuse to avoid shock or damage to the control. It is recommended that a qualified electrician perform this installation. Retain these instructions for future reference. Dimming an inductive load (such as a ceiling fan) below the minimum voltage set by the manufacturer of the load device could cause damage to the load device from overheating. If the manufacturer of the load device does not recommend dimming, DO NOT use SwitchLinc Deluxe Dimmer with that device (use SwitchLinc Relay 2-Way #23883W/I or PLC #23855W/I). USER ASSUMES ALL RISKS ASSOCIATED WITH DIMMING AN INDUCTIVE LOAD.

Gradateurs commandant une lampe à filament de tungstène - afin de réduire le risque de surchauffe et la possibilité d'endommagement à d'autres matériels, ne pas installer pour commander une prise, un appareil à moteur, une lampe fluorescente ou un appareil alimenté par un transformateur.

## Preparation

Before installing SwitchLinc, please familiarize yourself with the following and take the necessary precautions listed here:

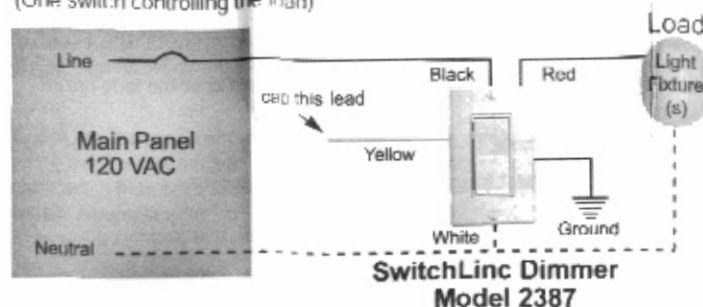
- Be sure that power to the load being controlled has been disconnected by removing the fuse or turning the circuit breaker off. Installing SwitchLinc with the power on may expose you to dangerous voltages and may damage the product.
- Refer to the SwitchLinc Wiring Diagrams on page 5 to determine the wire colors of the connections to SwitchLinc. Note: All SwitchLincs require a neutral connection.
- Wiring for 3-way, 4-way, and up switch circuits follow conventional (standard, non remote) wiring practice (plus the requirement for a neutral). Wiring "slave" switches requires the Line (Black) wire be accessible and be the same 110V leg of the house wiring. The White wire on the "slave" switch is to be connected to NEUTRAL ONLY. If neutral is not available, cap the White wire (which simply causes the LED not to function).
- SwitchLinc may feel warm during operation. The amount of heat generated is within U.L. approved limits and poses no hazards. To minimize heat build-up, ensure that the area surrounding the rear of the SwitchLinc has adequate ventilation (i.e., clear away excess insulation).
- Installation should be performed only by a qualified electrician, or by a homeowner who is familiar and comfortable with electrical circuitry.

## Installation

1. Remove the power from the existing switch/device.
2. Remove the faceplate from the existing switch/device.
3. Unscrew and pull the device out of the wallbox.
4. Disconnect the wires from the device.
5. Using a wire tester or voltmeter, identify and mark "Hot," "Neutral," "Ground," and "Traveler" (if applicable) wires that were connected to the device.
6. Before making any connections to SwitchLinc, gently pull the Status LED/ Set Button on the SwitchLinc until a click is heard. This will open the "air gap" and isolate the SwitchLinc from the electricity when the circuit breaker is turned back on.
7. Orient SwitchLinc so the LED is at the top, and make connections according to the "SwitchLinc Wiring Diagram" below. Wire remote dimmer switches according to the "SwitchLinc Multi-Way Wiring Diagram".
8. After all connections have been made, ensure that all wire connectors are firmly attached and that there is no exposed copper except for the Ground wire.
9. Gently place the wires and switch into the wallbox (with LED at top of device) and screw into place.
10. Before installing the faceplate, restore power to the circuit, and press in the SwitchLinc Status LED/Set Button top until it is even with the front plastic trim ring. Once the set button is pressed in, power will be supplied to the SwitchLinc. After a few seconds the green Status LED will come on.
11. After testing SwitchLinc for proper operation, install the faceplate (sold separately).

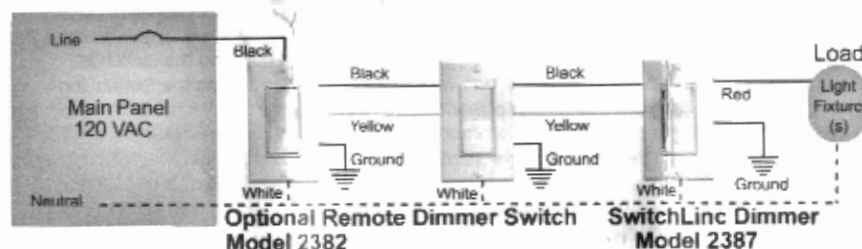
## SwitchLinc Wiring Diagram

(One switch controlling the load)



## SwitchLinc Multi-Way Wiring Diagram

(Two or more switches controlling the load)



## Setting the ON-Level

The Default ON-Level is the default brightness level to which SwitchLinc will adjust the light when the switch is turned on locally. This is ideal for situations where lighting is normally too bright. For example, you only have a 100-watt bulb on hand and the area is well lit with only a 60-watt bulb. Please note that you should never use a bulb whose wattage is greater than the fixture's rating. Set the ON-Level for the room lighting by following these steps:

### Setting a fixed brightness level:

1. Adjust the brightness of the light to the desired level by pressing and holding SwitchLinc's rocker.
2. Tap the Status LED/Set Button ONCE.

**The light(s) will blink indicating that it has set the new brightness level.**

The Default ON Level is stored in SwitchLinc's non volatile memory and will be remembered if the power fails. It can also be changed at any time by following the procedures above. Additionally, if more brightness is needed from the light(s), press the top of the rocker switch and SwitchLinc will go to 100% brightness.

### Setting the Resume Dim Mode

SwitchLinc can be set to fade the lights on to the last level they were at when turned off. For example, if the lights were dimmed at the switch to 40%, then turned off, the next time the SwitchLinc is turned on, the lights will fade on to 40%. Follow these steps to put the SwitchLinc into the Resume Dim Mode:

1. Turn the light off.
2. Tap the Status LED/Set Button ONCE

## Setting the Dimmer's Fade-On/Off Rate (Optional)

The "Fade-On/Off Rate" is the speed that SwitchLinc brings the brightness of the connected light(s) up or down when activated. The rate is adjustable between 1 and 9 seconds, (the factory default rate is 2 seconds).

1. Adjust the brightness of the load so that the brighter the load, the faster the fade-on/off rate.
2. Tap the Status LED/Set Button TWICE

**The light(s) will blink indicating that it has set the new fade-on rate.**

## Power Restore

In the event of a power loss, SwitchLinc will automatically return the lighting circuit being controlled to its last brightness level before the power was interrupted. For example, if the lights were at 50% dim when the power was lost, it will come back on to 50% when the electricity is restored.

During a power outage or when the Status LED/Set Button is pulled out (and the switch is without power), all settings will be saved in non-volatile memory. This means the SwitchLinc will not need to be re-programmed after a power outage.

## Factory Reset (to default settings)

If the SwitchLinc begins to operate strangely, the factory reset procedure can be used to clear the EEPROM's memory and restore its factory default settings. Doing this procedure will clear the unit of all programmed fade-on rates and ON brightness levels.

Gently pull out the Status LED/Set Button on the SwitchLinc until a click is heard. This completely removes the power from the lighting circuit being controlled by the SwitchLinc.

Wait five seconds, push in and hold in the Status LED/Set Button.

Release the Status LED/Set Button after five seconds.

WAIT approximately 25 seconds until the Status LED/Set Button illuminates before using the switch. During this time, the Status LED indicator and the load controlled by the SwitchLinc will remain off. When the reset procedure is complete, the load will come on to 100% and the SwitchLinc is ready for initial programming or use.

## Helpful Hints for New Construction

By design, X10 (also known as PLC) equipment does not need much in the way of special wiring. The following are six items we recommend for all homes with PLC installations:

1. Ask the builder or electrician to run the neutral wire to each wall switch location. This wiring may be a code requirement or a regular practice in your area, but unless explicitly specified, it may get omitted. Most SwitchLincs and all KeypadLinc controllers require the neutral connection.
2. Specify the installation of deep J-boxes in all locations where PLC switches, receptacles, or transmitters will be used. While all PLC products fit in the spacing offered by all North American electrical boxes, the deep models have extra working space and make the installation go a little easier. Deep boxes only costs a few cents more than normal depth models. Look for single gang boxes that are 22cu or higher (cubic inches) and double gang boxes that are 36cu or higher.
3. If the automation switch is dimming-enabled and is going to be controlling 400 watts or more, do not place insulation around the wall box and consider using metal junction boxes. Dimmers that control high loads will dissipate heat, which may be felt through the switch faceplate. Metal boxes will more efficiently draw out the heat and spread it over all the surfaces of the box. By keeping wall insulation a few inches from the box, free air will help move the heat away.
4. Install a whole-house surge suppressor. Adding a good whole-house surge protector at the breaker will help protect against costly damage to the PLC components and other delicate electrical equipment.
5. Install a PLC phase coupler (signal bridge) or coupler-repeater (amplifier) at the incoming electrical service. A common problem with PLC signals is getting the signals between the two legs of electricity that service the home. A coupler-repeater is recommended for homes of 3,000 square feet or greater. Smaller homes will generally work well with a passive phase coupler.
6. Work with the electrician to isolate non-automation loads. Ask the electrician to place the non-PLC carrying lines on one of the two incoming lines. Having the kitchen and laundry appliances plus the heating systems on one phase will help keep potential noise off the signal-carrying lines. He probably won't be able to accommodate 100% of the loads on one phase or another, but an attempt should be made.