KeypadLinc™
Wall-Mounted Controller with Integrated Dimmer

Now Includes BoosterLinc Signal Boosting
(6-Button Models only)

For models:
#12073W & #12074W with Amber LEDs
#12073WB & #12074WB with Blue LEDs
#12073WW & #12074WW with White LEDs
Congratulations!
Thanks for purchasing the KeypadLinc™ Wall Mounted Controller, the finest high
quality powerline-controllable keypad available. This amazingly flexible controller is
packed with some of the most advanced features available, allowing you to send
any standard X10/PLC (Powerline Carrier) command, including PRE-SET DIM com-
mands! From controlling a single light to triggering elaborate multi-room scenes, this
KeypadLinc Wall-Mounted keypad can do it all.

Two versions are available:
The 6-Button KeypadLinc Controllers includes Smarthome’s BoosterLinc™ technol-
yogy. When enabled, the BoosterLinc feature acts like a real-time repeater of
X10/PLC signals. It will boost powerline signals to allow an unlimited expansion of
your automation system. Once installed and enabled, PLC signals will be boosted to
improve reliability to other receivers.
The 8-Button KeypadLinc Controllers do not include the BoosterLinc feature.

This manual covers the programming of both types of KeypadLinc Controllers. Only
the steps involving the programming of the dimmer’s primary address will be slightly
different between the two versions.

KeypadLinc Features
• Includes Smarthome's BoosterLinc technology (6-Button models only)
• Built-in 450-watt dimmer control circuit
• Wires in just like a standard wall switch*
• Any button can be programmed to control the integrated dimmer
• Responds to 64 scene addresses, each with different fade-on/off rates and dim-
ming levels
• Any button can be programmed to send any address or command
• Status LED/ Set Button shows powerline activity and facilitates programming
• Programmable "toggle" ability, allowing up to 4 different command functions from
one button (ON, OFF, BRIGHT, DIM, etc.)
• User-adjustable dimming Fade-On/ Off Rate and On-Level
• Programs and operates like other Smarthome 2-Way products
• All settings are held in non-volatile memory (no code wheels to set)
• Easy, flexible programming
• High-quality construction designed for years of use

* Requires a neutral connection

KeypadLinc Models
Model 12063W - Custom 6-Button KeypadLinc
Model 12064W - Custom 8-Button KeypadLinc
Model 12073W, 12073WB, 12073WW - Custom 6-Button KeypadLinc with Dimmer
Model 12074W, 12074WB, 12074WW - Custom 8-Button KeypadLinc with Dimmer
Quick Reference Guide

Use these quick start instructions to make a change to an existing KeypadLinc or after you have read through the detailed programming instructions beginning on page 6. These instructions show the basic steps for the most common programming functions without all the explanations and details.

If this is your first time installing or using KeypadLinc, we recommend you skip this section for now.

CAUTION!!
Read and understand these instructions before installing! This device is intended for installation in accordance with the National Electric Code and local regulations. For indoor use only. Connect only copper or copper-clad wire to this device. Before installing the control, disconnect power at the circuit breaker or remove the fuse to avoid shock or damage to the control or to the installer. It is recommended that a qualified electrician perform this installation. Retain these instructions for future reference.

| Setting the Dimmer’s Primary Address | 1. Press and hold the set button for 3 seconds A-1
|                                       | 2. Transmit the address within 30 seconds
|                                       | (6-Button mode only)
|                                       | 3. Send an “ON” to enable BoosterLinc Mode
|                                       | OR
|                                       | Send an “OFF” to disable BoosterLinc Mode
|                                       | (see page 6 for more detailed instructions)

| Setting the Fade-On/Off Rate | 1. Adjust the dim level 2 Seconds
|                             | (Brighter = faster dimming)
|                             | 2. Double tap the Set Button (press it TWICE quickly)
|                             | (see page 7 for more detailed instructions)

| Setting the On Dim Level | 1. Adjust the dim level to the desired level 100%
|                         | 2. Tap the Set Button ONCE
|                         | (see page 7 for more detailed instructions)

| Toggle Mode Address Programming | 1. Enter Setup mode (hold any two keys for 5 seconds)
|                                | 2. Press the button to be set
|                                | 3. Confirm button’s light is Blinking
|                                | 4. Send the address and command (to set the mode)
|                                | Bright: Non-dimmable module
|                                | ON: Dimmable module
|                                | Dim: 2-Way non-dimmable module
|                                | OFF: 2-Way dimmable module
|                                | B: Controls a SmartHome scene-enabled modules
|                                | (see page 12 for more detailed instructions)

| Non-Toggled Mode Address Programming | 1. Enter Setup mode (hold any two keys for 5 seconds)
|                                       | 2. Press the button to be set
|                                       | 3. Confirm button’s light is Steady on
|                                       | 4. Send unit code 1 for one command or
|                                       | send unit code 2 for two commands
|                                       | 5. Send the 1 or 2 addresses or commands
|                                       | (see page 14 for more detailed instructions)
Preparation
Before installing KeypadLinc, please familiarize yourself with the following and take
the necessary precautions listed here:
• Be sure that the circuit breaker is turned off to the circuit being controlled.
  Installing KeypadLinc with the power on will expose you to dangerous voltages.
• KeypadLinc Wiring Diagram on page 5 will help you to determine the wire colors
  of the connections to the KeypadLinc and Multi-Way Companion Switch. Note:
  While the neutral connection is optional on the Multi-Way Companion Switch,
  the KeypadLinc requires a neutral connection.
• Wiring for 3-way, 4-way, & up switch circuits follow conventional (standard, non-
  remote) wiring practice (plus the requirement for a neutral). Wiring the
  SwitchLinc Multi-way Companion Switch requires the Line (Black) wire be acces-
  sible 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 will simply causes the nightlight LED not to function.
• When using a KeypadLinc with Integrated Dimmer and a Multi-way Companion
  Switch, one of the buttons on the KeypadLinc MUST BE assigned to the primary
  address of the Integrated Dimmer in order for the companion switch to operate.
• The KeypadLinc may feel warm during operation. The amount of heat generated
  is within approved limits and poses no hazards. To minimize heat build-up,
  ensure that the area surrounding the rear of the KeypadLinc has adequate venti-
  lation (i.e., clear away excess insulation).
• Installation should be performed only by a qualified electrician, or by a home-
  owner who is familiar and comfortable with electrical circuitry. If there are any
  questions, consult an electrician or contact Smarthome's Tech Support depart-
  ment for guidance.

Installation Instructions
The KeypadLinc can be easily installed in a new or existing home. The following illus-
trations do not show the "outgoing" power wires. In a most homes, the wiring circuits
are installed in a "daisy-chain" fashion. Typically the wires run from the circuit break-
er box to the first switch, then the next switch box, and so on. Normally, "pig-tail"
connections will split off these cables inside the wall outlet boxes.

Common wiring colors:
  • HOT (or LINE) is usually black wire
  • LOAD is usually a black wire
  • NEUTRAL is usually a white wire.
  • Electrical GROUND is a copper or green wire.
  • TRAVELERS (in a 3- or 4-way switch) are usually red.
These are the most common colors used over the last few decades. Depending on
the age of the building and local electrical codes, the colors could be different.
Knowing which wire is HOT or LINE is important so having a tester available will be
helpful to the success of the project.
Step-by-step Instructions
1. Disconnect the power for the existing switches at the circuit breaker or fuse panel. Verify that the power has been removed by trying to turn on the lights controlled by the switches.
2. Remove the trim plate from the existing switches.
3. Unscrew and pull the existing switches from the wall box.
4. Disconnect the wires from the existing switches.
5. If the KeypadLinc is being installed into a 3/4/5-way circuit, the SwitchLinc Multi-way Companion Switch must be installed in the wall box where power comes into the circuit. Follow the instructions included with the Multi-way Companion Switch to identify the “Hot,” “Neutral,” “Ground,” and “Traveler” wires.
6. Orient KeypadLinc so the LED is at the top, and make the connections according to the “KeypadLinc Wiring Diagram” below.
7. 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. If the Yellow traveler wire isn’t used, place a wire cap on it.
8. Gently place the wires and the KeypadLinc into the wall box (with LED at top of device) and screw into place.
9. Before installing the faceplates, restore power to the circuit. Once power is applied to the KeypadLinc, the green Status LED will come on after a few seconds.
10. After testing KeypadLinc, install the faceplate (sold separately).

**Tip:** For additional help installing 3-way circuits, see page 5 in the Multi-way Companion Switch manual.
Setting it Up
The KeypadLinc does not use code wheels or dials to set programming addresses. Instead, it accepts the first address on the powerline once the programming mode is started. Any PLC/X10 transmitter can be used to set the primary address. The settings are stored in non-volatile memory that will be retained in the event of a power failure.

You will need a transmitter to set the button's addresses or functions. To get the maximum number of programming options, we recommend a ControLinc Duo (Smarthome item #4071) or a Maxi Controller (#4020). These controllers have separate keys for the addresses (1,2,5,etc.) and the commands (ON, OFF, etc.). Many PLC/X10 transmitters have buttons with combined functions. That is, their buttons combine the address with a command (1-ON, 1-OFF). When single-button controllers are used, the setup choices will be limited. In some of the programming steps, it may be necessary to send only the address.

Integrated Dimmer's Primary Address Programming
The integrated dimmer in KeypadLinc is designed to control incandescent or low-voltage (magnetic transformer) lighting. Connecting the red load wire (explained in the installation section) and using the integrated dimmer is optional. The KeypadLinc will function normally without a load connected and the red wire capped off.

Activating the BoosterLinc Mode
The 6-Button KeypadLinc Controllers includes the programming and intelligence found in Smarthome's plug-in BoosterLinc signal booster. This feature allows it to boost PLC/X10 signals on the AC line and improve the overall reliability of the automation system in the home. The signal boosting can be disabled if desired or if there are other Smarthome BoosterLinc-enabled products on the same circuit breaker. Please see page 16 for important information on this feature.

Setting the Primary Address
The dimmer ships from the factory with "A1" and BoosterLinc Mode disabled. The Dimmer is assigned to button "A" on an 8-button KeypadLinc and the two larger buttons on a 6-button KeypadLinc. (See the diagram on page 16.) If KeypadLinc is reset, it will revert back to "A1". Any of the 256 addresses can be programmed.

1. Press and hold the Status LED/ Set Button for approximately 3 seconds until the load comes on, then release. The green Status LED/ Set Button begin blinking.
2. Within 30 seconds, transmit the desired primary address (housecode and unit code) from any transmitter.
3. Set the BoosterLinc Feature
   a) Send an "ON" command immediately after the house and unit code to activate the BoosterLinc mode. OR
   b) Send an "OFF" command immediately after the house and unit code to disable the BoosterLinc mode.

The light(s) controlled by the KeypadLinc will blink and the Status LED/ Set Button will stop flashing.

Important: If you plan on sending status request signals to the integrated dimmer of KeypadLinc Controllers or any 2-way Smarthome product, make sure that each is programmed with a different primary address. Otherwise, their simultaneous responses to a status request may collide with one another.
Assigning a Button to Locally Control the Integrated Dimmer (optional)

Once the integrated dimmer has been assigned a primary address, you may want to change the button(s) that control it. By default, all 6-Button KeypadLinc Controllers that began shipping in April 2004 will automatically update the top ON and bottom OFF control buttons when the dimmer’s address is changed. Follow these steps to assign a button. This may be overridden by following these steps:

1. Push and hold ANY 2 buttons for at least 5 seconds. When all of the lights under the buttons begin blinking, release the buttons.
2. Press the button to be assigned to the integrated dimmer.
3. Make sure the button is in the Toggle Mode by observing the button’s light; it should be blinking. If it is not blinking, press the button a second time.
4. Using a transmitter, send the same unit code address that was sent during the setting of the integrated dimmer’s primary address (previous page).
5. Send an ON command.

For 6-button KeypadLinc users, you may want to use the two large buttons to control the load. You’ll need to program each button separately where one sends the address + Off and the other sends the address + On. See Non-Toggle Mode Button Programming on page 14 for instructions to set up each key.

Setting the Integrated Dimmer's Fade-On/Off Rate (Optional)
The “Fade-On/Off Rate” is the speed that KeypadLinc brings the brightness of the connected light(s) up or down when activated manually or it receives remote control command to its primary address. From the KeypadLinc, the rate is adjustable between .1 and 9 seconds, (the factory default rate is 2 seconds).

1. Press the button assigned to the integrated dimmer to turn on the connected lights or send a PLC signal to the KeypadLinc to turn on the load.
2. Adjust the brightness of the load (at the KeypadLinc or remotely with dim commands) so that the brighter the load, the faster the fade-on/off rate.
3. Tap the Status LED/Set Button TWICE
The light(s) will blink indicating that it has set the new fade-on rate.

Setting the Integrated Dimmer's ON-Level (Optional)
The ON-Level is the brightness level that the KeypadLinc integrated dimmer will adjust to when activated manually or it receives remote control ON command to its primary address. It can be set to resume to the same brightness level each time or to the previous brightness level it was before being turned off.

Setting a fixed brightness level:
1. Adjust the brightness of the load (at the KeypadLinc or remotely with dim commands) to the desired level.
2. Tap the Status LED/Set Button ONCE.
The light(s) will blink indicating that it has set the new on-level.

Setting the Resume Dim mode:
1. Turn the light off.
2. Tap the Status LED/Set Button ONCE.
Integrated Dimmer’s Advanced Primary Address Programming

The Integrated Dimmer’s Fade-On/Off Rate and Default On-Level can be remotely set using a ControLinc Duo (Smarthome #4071), a Maxi-Controller (#4020) or an equivalent transmitter capable of sending Housecode and Unit Code without ON or OFF. These procedures and all the following ones will not work with a transmitter that sends the address with a command. Transmitters in which one button is pressed to turn on or off a load will not work.

Remotely Setting the Fade-On/Off Rate (Optional)

1. Transmit the “clear” sequence:

2. Send the house/unit code for the integrated dimmer followed by the PRESET DIM from the table below. (Alternatively, send BRIGHT or DIM signals to change the light’s brightness to a comparable level.)

3. Send the following command sequence to lock-in the new fade-on/off rate:

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

Remotely Setting the Default On-Level (Optional)

This is the alternative method of adjusting the integrated dimmer’s default on-level.

1. Transmit the “clear” sequence:

2. Send the house/unit code for the lamp module and adjust the dim level or send preset dim level.

3. Send the following command sequence to lock-in the new on-level:

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

Tip: Whenever the CLEAR sequence is sent, you will have 4 minutes to make your adjustments.

Tip: If you have trouble communicating to the KeypadLinc, there may be a lot of signal activity on the powerline. Unplug transmitters whose signals that might be intercepted by KeypadLinc during the programming sequences. RF transceivers, computer controllers, and X10 thermostats should be unplugged to avoid interference.

<table>
<thead>
<tr>
<th>Preset Dim Level</th>
<th>Fade-On/Off Rate in Seconds</th>
<th>Preset Dim Level</th>
<th>Fade-On/Off Rate in Seconds</th>
<th>Preset Dim Level</th>
<th>Fade-On/Off Rate in Seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>0.1</td>
<td>65%</td>
<td>25.0</td>
<td>29%</td>
<td>150.0</td>
</tr>
<tr>
<td>97%</td>
<td>0.2</td>
<td>61%</td>
<td>28.0</td>
<td>26%</td>
<td>180.0</td>
</tr>
<tr>
<td>94%</td>
<td>0.3</td>
<td>58%</td>
<td>30.0</td>
<td>23%</td>
<td>210.0</td>
</tr>
<tr>
<td>90%</td>
<td>0.5</td>
<td>55%</td>
<td>32.0</td>
<td>19%</td>
<td>240.0</td>
</tr>
<tr>
<td>87%</td>
<td>2.0</td>
<td>52%</td>
<td>34.0</td>
<td>16%</td>
<td>270.0</td>
</tr>
<tr>
<td>84%</td>
<td>4.5</td>
<td>48%</td>
<td>36.5</td>
<td>13%</td>
<td>300.0</td>
</tr>
<tr>
<td>81%</td>
<td>8.5</td>
<td>45%</td>
<td>39.0</td>
<td>10%</td>
<td>330.0</td>
</tr>
<tr>
<td>77%</td>
<td>19.0</td>
<td>42%</td>
<td>41.0</td>
<td>6%</td>
<td>360.0</td>
</tr>
<tr>
<td>74%</td>
<td>21.5</td>
<td>39%</td>
<td>44.0</td>
<td>3%</td>
<td>420.0</td>
</tr>
<tr>
<td>71%</td>
<td>23.5</td>
<td>35%</td>
<td>47.0</td>
<td>0%</td>
<td>480.0</td>
</tr>
<tr>
<td>68%</td>
<td>32%</td>
<td>32%</td>
<td>50.0</td>
<td></td>
<td>540.0</td>
</tr>
</tbody>
</table>
Scene Address Programming
The KeypadLinc with Integrated Dimmer can be a member of up to 64 scenes. A scene address is a single address (just like a primary address), and is set at the time scene membership is programmed. Using a single command to trigger a scene is much less complicated than using an intelligent computer controller to initiate a macro that in turn sends dozens of commands over the next few minutes to turn on multiple receivers and set brightness levels (for dimming-enabled modules).

When an ON signal is transmitted to scene-enabled modules, all members pro-
mammed to that address will turn on to their independent ON-levels and at their independent fade-on rates for that scene. Transmitting an OFF for a scene address will turn off all modules that are members of that scene. Modules will react to dim and bright commands after the scene address is sent, however, they will ignore All Light On and All Units Off commands for the scene address' house code.

KeypadLinc with Integrated Dimmer is compatible with these other scene-enabled Smarthome products:
- SwitchLinc 2-Way and Plus Dimmers
- LampLinc™ 2-Way & Plus Modules
- SwitchLinc Relay 2-Way
- ApplianceLinc™ 2-Way & Plus Modules
- ToggleLinc™ 2-Way and Plus Dimmers and Switch

The scenes for all these modules can be setup simultaneously using the same programming sequence. Signals sent by transmit-enabled Smarthome products, like those above, will be received and understood by the KeypadLinc!

Transmitters that can set up scenes
Scenes can be programmed with a ControLinc, a Maxi-Controller or any transmitter capable of sending Housecode and Unit Code address without an ON or OFF command. Transmitters in which one button is pressed to turn a load on or off WILL NOT WORK. When using one of these equivalent transmitters, be careful when pressing the buttons. Programming will be ignored if some commands are not sent in the proper sequence. "Fat-Fingering" or accidentally pressing the same button twice may prevent the programming from being accepted.

Smarthome TouchLinc™ Touchscreens have a built-in wizard to help automate the scene setting process.

Many computer programs like Smarthome Manager (pictured), Indigo for Macintosh, HCA, and HomeSeer have tools to aid in setting up scenes and many other features. Please check with your automation software supplier for availability.
Scene Address Programming (continued)

Programming Scene Membership and On-Levels:
1. Transmit the “clear” sequence:

   O16 N16 M16 P16 M16

2. Activate the integrated dimmer by turning it on and adjusting
   the brightness at the KeypadLinc or remotely. (Hint: a scene
can trigger a module to go off by setting the dim level to 0%.)

3. Send the following command sequence:

   M16 N16 O16 P16

4. Transmit the desired scene address (house and unit code) to
   lock-in new scene.
   The light(s) will blink to indicate that it has set the new scene.

Tip:
Be careful not to “fat-finger”
the buttons as
you send the
lock-in
sequence.

Removing the integrated dimmer from a Scene:
1. Transmit the “clear” sequence:

   O16 N16 M16 P16 M16

2. Using a controller, send the primary address of the dimmer plus an ON or OFF or
   press the button on the KeypadLinc assigned to the integrated dimmer.

3. Send the following command sequence:

   O16 P16 M16 N16

4. Transmit the scene address (house and unit code) that is to be removed.
   The light(s) will blink (if they are still on) indicating that the scene has been removed.

Programming Scene Fade-On/Off Rates (optional):
The fade-on/ off rate of each in each scene is individually adjustable from .1 to 540
seconds (9 minutes). If this setting is not adjusted, the dimmer will use the fade-
on/ off rate of the primary address for the scene.

1. Transmit the “clear” sequence:

   O16 N16 M16 P16 M16

2. Using a controller, send the primary address of the integrated dimmer and adjust
   the dim level corresponding to the fade-on/ off rate time you want using the table on page 8, (brighter=faster).

3. Send the following command sequence:

   N16 O16 P16 M16

4. Transmit the scene address (house and unit code).
   The light(s) will blink indicating that the new fade-on/ off rate has been set.
Programming the KeypadLinc Controller’s Buttons
The buttons on the KeypadLinc can be programmed in one of two ways:

Toggle Mode
In this mode, the keypad can send two different commands on alternate presses. For example, pressing a button when the indicator light is off will cause an ON signal to be sent. If the indicator light is on, the keypad will send an OFF signal when pressed. Additionally, the button’s light will reflect the status of that address. If another transmitter sends a signal corresponding to an address on the keypad, the light will come on if the signal contains an ON, BRIGHT or ALL LIGHTS ON command. If the address received contained an OFF or ALL UNITS OFF command, the light will turn off. If the button was defined as an Appliance, the keypad will ignore the ALL LIGHTS ON for that address.

Please note that most modules only receive signals and don’t transmit anything. If you have a device that can be activated manually at the module, then that action would not be sent to the KeypadLinc (because most modules can’t transmit). It is possible for indicators to become out of sync with the true status of your modules. For example, if you turned on a “receiver-only” wall switch, the indicator light on the KeypadLinc would not come on because most wall switches can’t transmit. If you need the modules to transmit when manually activated, check out Smarthome’s many 2-way modules like SwitchLinc 2-Way, ToggleLinc 2-Way, and LampLinc 2-Way plug-in modules.

Non-Toggled Mode
The button will always send the same signal each time it is pressed. The signal sent can be made up of the following:

<table>
<thead>
<tr>
<th>Type</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>One address</td>
<td>F-9</td>
</tr>
<tr>
<td>Two Addresses</td>
<td>F-9, F-10</td>
</tr>
<tr>
<td>One Command</td>
<td>F-Dim</td>
</tr>
<tr>
<td>Two Commands</td>
<td>F-All Units Off, G-All Units Off</td>
</tr>
<tr>
<td>Address and Command</td>
<td>F-9, F-On</td>
</tr>
</tbody>
</table>

In the Non-Toggled Mode, the lights under each button will not light up after the button is pressed or when a signal that matches a programmed address is received. The light will only blink momentarily when the keypad is transmitting signals.

Entering Setup Mode
1. To enter Setup Mode, push and hold ANY 2 buttons for at least 5 seconds. When you see that all of the lights under the buttons are blinking, release the buttons.
2. All of the button lights will blink on and off every second when in Setup Mode.
3. The KeypadLinc allows approximately 30 seconds for setup. After that time, the KeypadLinc will turn off the blinking lights and return to its normal state.

Proceed to the button programming instructions on the next page.
Toggle Mode Button Programming
(Sending different commands on alternate presses)

In this step, it is necessary to send two signals to the keypad from a transmitter. The first transmission will contain the unit code address; the second will tell the KeypadLinc how the button is to behave.

1. Enter the Setup Mode (by holding any two buttons for 5 seconds).
2. Press the button to be programmed.
3. Make sure the button is in the Toggled Mode by observing the button’s light; it should be blinking. If it is not blinking, press the button a second time.
4. Send the first signal using a controller. The signal must be an address only; unit codes 1 to 16 without a command.
5. The second signal will set the button’s mode:

<table>
<thead>
<tr>
<th>Command</th>
<th>Mode Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRIGHT</td>
<td>Button is for an Appliance Module (Non-Lamp)</td>
</tr>
<tr>
<td>ON</td>
<td>Button is for a Lamp or Wall Switch Module.</td>
</tr>
<tr>
<td></td>
<td>When the button is pressed and held, KeypadLinc sends BRIGHT and DIM signals on alternate presses.</td>
</tr>
<tr>
<td>DIM</td>
<td>Button is for an Appliance Module that can confirm its ON/ OFF status.</td>
</tr>
<tr>
<td></td>
<td>KeypadLinc will send the ON or OFF command followed by a status request signal.</td>
</tr>
<tr>
<td></td>
<td>The button’s light will illuminate depending on the returned signal. If a device does not respond, the button’s light will not change.</td>
</tr>
<tr>
<td>OFF</td>
<td>Button is for a Lamp Module than can confirm its ON/ OFF status.</td>
</tr>
<tr>
<td></td>
<td>KeypadLinc will send the ON or OFF command followed by a status request signal.</td>
</tr>
<tr>
<td></td>
<td>The button’s light will illuminate depending on the returned signal. If a device does not respond, the button’s light will not change. When the button is pressed and held, it sends BRIGHT and DIM signals on alternate presses.</td>
</tr>
<tr>
<td>UNIT CODE 8</td>
<td>Button is for triggering scenes in scene-enabled Smarthome products.</td>
</tr>
<tr>
<td></td>
<td>Sends ON/ OFF signals on alternate button presses. If the button is pressed and held, it will aid in setting up scenes in SwitchLinc Wall Switches. See section: “Setting Scenes for Smarthome Scene-Enabled Products” on page 15.</td>
</tr>
</tbody>
</table>

The indicator light will turn off and the button is programmed.
Most transmitters have only one button to press to send an address with either an ON or OFF signal. These units will limit the button mode to regular lamp module or a lamp module with status. Investing in a Maxi-Controller, (Smarthome #4020), will provide access to all five button modes.

Warning: before using confirmation, make sure the module being controlling is capable of sending STATUS ON/OFF signals (sometimes called Status Request). If it cannot, the KeypadLinc light will not correctly indicate the status and the button cannot toggle since it has no way of knowing the status of the receiver (because the remote module can’t transmit back).

The following items have two-way abilities and respond to a Status Request signal:

<table>
<thead>
<tr>
<th>Item</th>
<th>Manufacturer’s #</th>
<th>Smarthome #</th>
</tr>
</thead>
<tbody>
<tr>
<td>SwitchLinc 2-Way Wall Switches</td>
<td>2380, 2381, 2383</td>
<td></td>
</tr>
<tr>
<td>ToggleLinc™ 2-Way Wall Switches</td>
<td>23890, 23893</td>
<td></td>
</tr>
<tr>
<td>SwitchLinc Relay 2-Way Wall Switch</td>
<td></td>
<td>23883</td>
</tr>
<tr>
<td>SwitchLinc Timer Wall Switch</td>
<td></td>
<td>12083</td>
</tr>
<tr>
<td>KeypadLinc with Integrated Dimmer</td>
<td>12073W, 12074W</td>
<td></td>
</tr>
<tr>
<td>LampLinc™ 2-Way</td>
<td></td>
<td>2000STW, 2000STW3</td>
</tr>
<tr>
<td>ApplianceLinc™ 2-Way</td>
<td></td>
<td>2002STW, 2001STW3</td>
</tr>
<tr>
<td>I/O Linc™ Relay Controller</td>
<td>1624</td>
<td></td>
</tr>
<tr>
<td>X10 2-Way Lamp Module</td>
<td>LM14A</td>
<td></td>
</tr>
<tr>
<td>X10 2-Way Appliance Module</td>
<td>AM14A</td>
<td></td>
</tr>
<tr>
<td>ACT 2-Way Switches</td>
<td>RS-114/115</td>
<td>2270A, 2271A</td>
</tr>
<tr>
<td>Motion Sensing Floodlights</td>
<td>PR511</td>
<td>4080XT</td>
</tr>
<tr>
<td>RF Transceiver Modules</td>
<td>RR-501</td>
<td>4005</td>
</tr>
</tbody>
</table>

1. The I/O Linc automatically echos back commands. Using confirmation settings in KeypadLinc is unnecessary.

Note about signals transmitted by Leviton "Green-Line" products

Some of Leviton’s newest X10 transmitters do not communicate properly to some receivers, including KeypadLinc Controllers. They receive signals normally, but all receivers may not understand their transmitted signals. We have tested some of their products for compatibility with KeypadLinc and found that signals sent from the Leviton transmitters to the KeypadLinc are not recognized as valid X10 signals. We do not recommend using the Status Request feature with Leviton 2-way and transmitting products ending in "-1TW". Signals from KeypadLinc to all Leviton products are understood.

For those technically inclined, Leviton has updated the way in which these controllers send their X10 signal. They have eliminated the "3-cycle gap" between the two frames of X10 data.
Non-Toggle Mode Button Programming
(Sending the same commands with each keypress)

In the Non-Toggled mode, the keypad will send the same signals each time the but-
ton is pressed. Each button can be programmed to send one or two signals. See page 11 for more information.

1. Enter the Setup Mode (by holding any two buttons for 5 seconds).
2. Press the button to be programmed.
3. Make sure the button is in the Non-Toggle mode by observing the button’s light; it should be constantly lit. If it isn’t constantly lit, press the button a second time. If other button lights come on when a button is pressed, it means that button is part of a Group. The other buttons indicators will have no effect on the programming of the selected button. See “Setting Up Groups” on page 15.
4. From a controller you must tell the KeypadLinc how many commands will be put on the button:
   - One Address
   - One Command
   - Two Addresses
   - Two Commands
   - Address and Command

5. Send the one or two addresses or commands to be programmed into the button. The indicator light will turn off and the button is programmed.

Special Case: BRIGHT/DIM of Last Button Pressed
KeypadLinc can send BRIGHT or DIM signals for the last unit code sent from another button on the KeypadLinc, regardless of the House Code.

1. Enter the Setup Mode (by holding any two buttons for 5 seconds).
2. Press the button to be programmed.
3. Make sure the button is in the Non-Toggle mode by observing the button’s light; it should be constantly lit. If it isn’t, press the button a second time.
4. Send unit code 1 to indicate One Address/Command.
5. Send BRIGHT or DIM (the controller can be set to any house code). The indicator light will turn off and the button is programmed.
Setting Up Groups

Buttons can be programmed in Groups that will allow the indicator lights under the button to stay illuminated after the button is pressed. When another button in that Group is pressed, the KeypadLinc sends the programmed signal, turns off the indicator of the previous button and turns on the indicator of the recently pressed button.

Groups help identify which mode is in operation at the moment:
- ON/OFF
- Dinner Time, Reading, Movie Time, OFF
- Morning or Night scene
- Family Home vs. Family Away
- Status of Flags (rain recently vs. dry and run sprinklers)

How to program Groups:
1. Make sure all of the buttons to be Grouped are defined as Non-Toggle (see p.14).
2. Enter the Setup Mode.
3. Select the buttons for the Group (up to four).
4. If you make a mistake and want to remove a button, just push it. The light will go off and it is no longer in the Group.
   After 30 seconds, all the indicators will flash and the KeypadLinc exits the setup mode.

To remove a button previously programmed into a Group:
1. Enter Setup Mode.
2. Select the button to be removed from the Group by pressing it once. The other Group buttons are illuminated.
3. Push the button a second time, it will then begin blinking.
   After 30 seconds, all the indicators will flash and the KeypadLinc exits the setup mode.

NOTE: If a single button is left in a Group, KeypadLinc will automatically dissolve the group so that the remaining button does not need to be removed from the group.

### Special Notes About Groups

<table>
<thead>
<tr>
<th>Only Non-Toggle buttons can join a Group</th>
<th>Up to four Groups are permitted on one keypad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to four buttons can be in one Group</td>
<td>A button can't be the only member of a Group</td>
</tr>
<tr>
<td>A button can only be in one Group at a time</td>
<td>Received PLC signals will not affect the Group's indicator lights</td>
</tr>
</tbody>
</table>

Setting Scenes for Smarthome Scene-Enabled Products

In the Toggle Mode Programming section setup, a button could be defined to activate a scene using scene-enabled Smarthome switches and plug-in modules. The button can also be used to help in setting up the scene's programming.

1. Push and hold the button for setting up the scene for 3 seconds.
2. The button will begin to blink and send the Scene Clear sequence. The button light will continue to blink and remain in scene setup mode for about 4 minutes.
3. Adjust the lighting level of each scene-enable switch or module to the desired level.
4. Return to the KeypadLinc and push the blinking button.
5. The KeypadLinc will send the command sequence to lock-in the scene. The button will stop blinking and the KeypadLinc will be ready to use.
6. The Smarthome scene-enabled units that were enrolled in that scene will momentarily blink their lights (if they are still on).

For more information on how scenes work, please refer to the section, "Scene Address Programming" in the product's owner's manual.
Factory Reset
If KeypadLinc begins to operate strangely, the factory reset procedure can be used to clear the EEPROM’s memory.
1. Gently pull the Set Button out to remove power for five seconds.
2. Push and hold in the Set Button for five seconds, then release.
3. When the Status LED and load comes on, the KeypadLinc is reset.
All of the programming will be defaulted to the assignments below.

Hints for using the BoosterLinc Mode
• Unlike the Plug-in BoosterLinc (#4827), KeypadLinc does not repeat signals from single-phase onto three-phase electricity.
• KeypadLinc is able to boost signals that are weak, but not totally gone. If the receiver circuit can’t detect the signal, it won’t be boosted.
• While the BoosterLinc feature in KeypadLinc works well in homes that don’t have a phase coupler (sometimes called a signal bridge), it works better when a coupler is installed. We recommend a SignaLinc™ Plug-In Phase Coupler (#4816A2 or 4816B2) or Hardwired SignaLinc™ Phase Coupler (4816H). The BoosterLinc feature is compatible with traditional coupler-repeaters.
• Multi-gang wall boxes that contain multiple BoosterLinc-enable products, only one unit should have the BoosterLinc feature enabled. The other units should have their BoosterLinc feature disabled.
• It is unlikely that more than one BoosterLinc-equipped product will be required on a single line serviced by the same circuit breaker.
• Having too many BoosterLinc-enabled products installed (and the BoosterLinc feature turned on) may cause false-positive signals. If you notice strange happenings or unusual events with your automation system, disable the BoosterLinc mode.
• The BoosterLinc feature in KeypadLinc has been tested and found to be compatible with all current X10 powerline products. However, it does interfere with Smarthome’s Insteon™ future powerline carrier technologies. Disabling the BoosterLinc mode when using Insteon-based products may be necessary.
Troubleshooting & Technical Support

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keypad does not take programming signals &amp; exits the Setup Mode.</td>
<td>Signals being received at the KeypadLinc are too weak.</td>
<td>Move the transmitter to a different outlet. Consider installing a signal bridge or coupler-repeater.</td>
</tr>
<tr>
<td>KeypadLinc signals are not triggering all the modules.</td>
<td>The signal strength at the receiving modules is too weak to work reliability.</td>
<td>1. Make sure the receiving module is not plugged into a power strip or noise filter. 2. Other electrical devices near the receiver may be absorbing the signal. Unplug them and test again. You may need a filter on some devices to keep them from absorbing the signals on the AC line. 3. Install a signal bridge or coupler-repeater (amplifier).</td>
</tr>
<tr>
<td>Keypad is sending ALL LIGHTS ON to some non-lamp modules.</td>
<td>Appliance modules and non-lamp modules will ignore the ALL LIGHTS ON command. To control these devices in groups, create a macro in your home automation controller to send individual signals after ALL LIGHTS ON is received.</td>
<td></td>
</tr>
<tr>
<td>When a button is selected for programming other buttons light up.</td>
<td>The selected button is part of a “Group.”</td>
<td>When this happens, it does not affect the programming of the button, but it can be distracting the first few times. See page 15 for instructions on how to remove buttons from a group.</td>
</tr>
<tr>
<td>After pressing a button, the indicator light just blinks &amp; the load does not respond.</td>
<td>The keypad is detecting an PLC signals on the line.</td>
<td>To prevent signal collisions, the KeypadLinc will hold off sending the signal until the line clears.</td>
</tr>
<tr>
<td>The keypad is detecting electrical noise.</td>
<td>Look for sources of electrical noise. Turn off motorized devices, dimmers, &amp; fluorescent lights. When the noise clears, the KeypadLinc will send the signal.</td>
<td></td>
</tr>
<tr>
<td>Buttons don’t light up when PLC signals are received by the KeypadLinc.</td>
<td>The button may be defined as Non-Toggle.</td>
<td>Only buttons that are defined as “Toggle” will respond to incoming signals. Group lights will not respond to signals received.</td>
</tr>
<tr>
<td>The lights on the keypad do not match the status of the load.</td>
<td>The signal may not have been strong enough.</td>
<td>Consider installing a signal bridge or coupler-repeater to improve signal strength throughout the house.</td>
</tr>
<tr>
<td>KeypadLinc is locked up and not responding.</td>
<td>The module has been controlled locally or the connected load is malfunctioning.</td>
<td>When modules are controlled locally, like turning off a wall switch, it does not transmit out its status. The KeypadLinc does not know that the module has been controlled locally (turned on or off).</td>
</tr>
<tr>
<td>KeypadLinc 12063 &amp; 12064 are only transmitters. They do not have any switching or load control circuitry.</td>
<td>Use a KeypadLinc with an integrated dimmer to install in place of an existing mechanical switch. You can also use a transmit-only KeypadLinc, but you’ll need a Fixture Relay Module (#2250/ 2251) to control the load.</td>
<td></td>
</tr>
</tbody>
</table>

If these solutions have been tried, the manual has been reviewed and you still cannot resolve an issue you’re having with the KeypadLinc:

- Search our on-line knowledge base at: http://smarthome.custhelp.com
- E-mail tech@smarthome.com
- Call our Technical Support Dept. at 949-221-9200
Custom Keypad Labels
The KeypadLinc button labels can be changed so you can customize its appearance. You can use the pre-printed labels that shipped with your KeypadLinc or create your own using the enclosed blank labels.

Visit the Smarthome Web site to download replacement label files or templates to allow label creation in word processors that can read the Microsoft® Word format and Adobe® Photoshop. All can be found at:

http://www.smarthome.com/12063W.HTML

While we encourage you to customize your KeypadLinc, please be gentle in removing the keys. The buttons on the KeypadLinc 8 require extra special care in removing the keycaps. Using a small, flat edged screwdriver, ONLY pry up on the sides of the keys from the middle of the keypad (as shown below). Make sure you are centered on the key as there is a small "lip" to pull up on located there. Should any damage occur to your KeypadLinc during the labeling, please contact Smarthome Customer Service at 1-800-762-7846 and we will be happy to replace your unit.

To remove keys on the right side, gently pry up on the middle of their left edges.

To remove keys on the left side, gently pry up on the middle of their right edges.
How Powerline Signals Travel Around A Home
and How To Improve Reliability
Most homes in North America have two lines of 120 volts coming into the home from the utility company. This split-single phase electricity is divided out at the home's breaker box into the circuits that feed light switches, plug-in outlets, and appliances. Half of the electricity outlets and wall switches are fed by one of the 120-volt lines and the second 120-volt line feeds the other half. The intermittent operation of PLC/X10 modules usually happens when the transmitter is sending signals on one line and the receiver module is plugged into an outlet on the other line. For the signals to get to the receiver, it must leave the home, travel to the utility company transformer then come back in on the other AC line. By the time the signal gets back to the home, travels through the electrical meter and circuit breaker box, there may not be enough signal left to trigger the module.

The first order of business will be to install a coupler-repeater, also known as amplifier. A coupler-repeater will 'see' the incoming signal, re-generate it, and blast it out over both lines of the 120 volts. We recommend that any home larger than 3000 square feet install a coupler-repeater. In smaller homes, a passive phase coupler also known as a signal bridge may give satisfactory results.

Changing the Front Plastics
The white plastic trim pieces on the front of the KeypadLinc may be changed if needed. The kit consists of three pieces, however, they come assembled together for easier installation. If the individual pieces come apart, refer to the image on the right for the correct assembly order.

1. Remove the keycap covers following the instructions on page 18. Set them aside as they will be placed onto the new trim piece.
2. Remove the four Phillips screws on the front.
3. Gently pull the trim and button support pieces away from the KeypadLinc.
4. Place the new trim and button support pieces onto the KeypadLinc. The assembly has a cut out at the top for the Status LED/Set Button.
5. Replace the four screws.
6. Replace the keycap covers.

Color Change Kit Assembly Order
How To Improve Reliability (continued)

Once the signal has been amplified, it's time to preserve it. Since PLC signals go everywhere in the home, some electrical devices will have more of an effect on the signal strength than other devices. PLC signals are like water pressure in pipes, it actually goes everywhere it can, not just to the receiving module. In the last 20 years, an explosion of electrical devices has invaded our homes. Computers, video gear, and fancy high-end electronics are more present than in years past. The more complicated the electrical power supply is in a device, the more likely it is to absorb PLC signals. Engineers who design power supplies build in traps to filter out and kill electrical noise. Unfortunately, the PLC signals looks like electrical noise to these devices. The result is that a large percent of the transmitted signal is lost to these devices leaving less for the receivers. The most common sources of signal loss are:

- Televisions
- Computer systems
- Audio/Video gear
- Computer UPS's and power strips
- Power supplies for laptops and cell phones

Testing for the problem is simple. If a device is suspected of causing signal absorption, unplug the device and then re-transmit the signal. It is very important that the device is unplugged and not just turned off! If the controlled product begins working after the appliance is unplugged, then a filter will be needed on that device to keep PLC signals from being absorbed and raise the signal strength of the entire home. Smarthome has many filters that will fix the problem. An average home will need between three and five filters. If you are in the business of installing automation systems and not in the 'call-back' business, include some of these in your bid as part of the standard package.

Smarthome’s BoosterLinc™ can solve localized problems

SignaLinc Repeater is ideal for improving the home automation signal strength throughout all the outlets in a home. But, as the PLC signals travel down a circuit and away from the repeater, it will weaken by the same factors listed above. Additionally, the signal will get weaker as it passes installed PLC transmitters. Each PLC transmitter contains a tuned circuit that when it's not sending signals it's absorbing them! In addition to plug-in transmitters, LampLinc™ 2-Way, SwitchLinc™ 2-Ways, ToggleLinc™ 2-Ways, ApplianceLinc™ 2-Ways, KeypadLinc™ Controllers, or any module with 2-way abilities will load down the available signal. With so many transmitters installed, the signal is loaded down to a point where some modules will be unable to receive a signal. Installing multiple 2-way devices on one branch circuit may necessitate the use of local amplifier like Smarthome’s BoosterLinc.
Helpful Tools
If you’re investing in home automation, there are a few tools that will make your projects run smoother:

Maxi-Controller
This plug-in transmitter has the ability to send individual PLC commands. The buttons are separated into Addresses and Command functions. To use this controller, you have to press the address (for example, “5”), then the command (ON, OFF, BRIGHT, etc.). Many of the features found in Smarthome products need to be programmed with individual button presses. Using a controller that sends the address and command with one button press will not work. For more info visit: www.smarthome.com/4020.html

Signal Meter
This is an invaluable tool when it comes to installing and diagnosing problems. By knowing the signal’s strength at a specific location, you can make sure that the signal will always trigger that module. Generally, it is ideal to have at least 100mV at each location. Conservative installers will want even more; perhaps 250mV just in case the homeowner installs a new big-screen TV after final installation. The extra margin will still give the receivers enough signal strength to be reliably triggered. These units can also be used to measure the effects of signal absorption mentioned earlier. Plug in the signal meter and measure the signal’s strength, then unplug any devices that are plugged into that and nearby outlets. If 10% or greater change is observed, install a filter (like FilterLinc™) on that device.

Voltmeter or Voltage Tester
During the installation of a home automation wall switch or controller, it may be necessary to identify the wires inside the wall box. Knowing for sure which wire is the HOT or LINE wires can reduce the guesswork when installing a single switch and it is absolutely necessary when working with 3-way lighting circuits. A voltmeter is ideal for this application. Many of the digital models can also read current so you’ll know how much power is being drawn by the switch’s load.

A simpler measurement tool, available at most home improvement centers, is a voltage sensor. This device, often costing less than $20, can sense voltage when placed near a wire. The tip of the voltage sensor can tell if voltage is on the wire without touching the bare copper conductor or breaking the insulation.

When using these tools, be certain to read and understand the safety instructions. Often when these tools are used, the power to the circuit will need to be turned on. When working around live electrical wires, take your time and concentrate on the task.
Glossary of Terms
PLC- Power Line Control - A control signal that is embedded onto the electricity lines. X10 signals are a form of PLC signals.
X10 Address - The Address part of a PLC signal contains the House and Unit code. An Address can be Unit codes 1 to 16 and House codes A - P. There are 256 total PLC addresses. Examples of PLC Addresses are A-1, B-5, P-15, O-9.
X10 Command - The Command is action part of a PLC signal. It tells the module what to do after it sees its address. Examples of a command are ON, OFF, Bright, DIM, PREdim, All Light ON, and All Units OFF. There are other rarely used commands, but these are the most common ones.
Toggle Mode - Causes KeypadLinc to send two different commands on alternate presses. If the button's light is off, when pressed, it will send an ON signal. If the button's light is on, it will send an OFF command when pressed.
Non-Toggle Mode - KeypadLinc will send the same signal each time the button is pressed regardless of the load's status or the indicator light.
Status & Status Request - Some receivers have the ability to report their on/off/dim status when asked. These modules contain a transmitter that can send PLC signals. When KeypadLinc sends a Status Request command, the module will reply with its status (On, Off, Predim at some %).
Resume Dim Level - Allows KeypadLinc to come on at its previous dim level.
PreDim Level - One of 32 brightness levels the KeypadLinc can instantly (or slowly) change the light's brightness to a predefined brightness level.
Scenes in KeypadLinc - The integrated dimmer can be set up to respond to multiple PLC signals. When received, the KeypadLinc will turn on its load to a predefined brightness level. When KeypadLinc transmits a scene signal to other KeypadLinc, SwitchLinc, and LampLinc, the lighting mood instantly changes.
Maxi Controller - A PLC transmitter that has separate buttons for the unit codes and the commands. In some of the advanced setup functions for the KeypadLinc, it is necessary for only a unit code to be sent. The Smarthome's ControLinc Duo #4071, X10 SC-503, and Leviton 6320 are examples of Maxi-Controllers. We recommend having a Maxi Controller to set up the KeypadLinc.
X10 Keypress - This is a PLC signal that only contains the house and unit code without a command. The Maxi-Controller, some TouchLinc LCD controllers, and home automation interfaces can produce a keypress command.
Appliance Module - A receiver device that can be used with any type of load, including lighting. It will never contain dimming control as it always has a hard contact relay. An Appliance Module will ignore the All Lights ON command.
Lamp Module - A receiver that is used to only control lighting devices. It may contain dimming control or it may have a hard contact relay. A Lamp Module will respond to the All Lights ON command. KeypadLinc with Dimmer is defined as a lamp module so it will respond to the All Lights On for the primary address housecode.
Hot or Line - The wire in the junction box that contains the incoming electricity from the electrical panel. It is usually black and may be tied with a wire nut to other black wires in the rear of the box.
Neutral - While not used on a mechanical switch to control a load, KeypadLinc will need a neutral wire to operate. Generally, the neutral wires are white and located in the rear of the junction box. There may be two or more wires tied together by a wire nut.
Load - The wire in the junction box that goes to the light(s). Usually, there is just one load wire in a junction box and it is commonly black. No voltage is present on the wire when the switch is off.
Specifications

Load types: Permanently installed incandescent & inductive loads
Single pole or multi-location (w/ Multi-Way Companion Switches)

Operation: Dimming Triac

Maximum load: 450 watts (200 watts if ganged with other dimmers)
On-Level: 1 of 31 possible (3.2%-100%) or resume dim
Fade-on/Off Rate: 0.125 to 9 seconds if programmed locally
                         0.125 seconds to 9 minutes if programmed remotely
Addresses: 1 PLC (X10) Base (Primary) Address of 256 possible
            Up to 64 PLC (X10) Scene Addresses of 255 possible

Minimum PLC transmit level: 2V
Minimum PLC receive level: 10mV
Maximum PLC signal rejection: 200mV
Status indicator: Green LED

Dimensions -
Front Bracket          Main Body
(Width)                (Width)                1.73"                  1.73"
(Height)               (Height)               4.14"                  2.76"
(Depth)                (Depth)                1.68"                  1.40"

Weight: 4.3 oz.
Operating temperature range: 32°F to 158°F (0° to 70°C)
Input power: 125 VAC, 60 Hz

Max. # of KeypadLinc Controllers per multiple gang box: 4
Max. # of KeypadLinc Controllers per circuit: 10 (with more than 6, a coupler-repeater is recommended)
Mounts in single or multiple-ganged J-box

Invest in better Home Automation Products

Unlike most electric items, many PLC-based products haven’t changed much over the years.

Our Marketing and Customer Service teams surveyed our customers, like you, and our engineers have invented new and better wall switches and plug-in modules. We include more features, higher load handling, and better signal sensitivity for a superior user experience. While in some cases, they cost more; we hope you’ll agree that not having to replace a dead module every couple years is worth the added expense and reduced aggravation. Please visit a retailer or distributor for the complete line of automation products from Smarthome Design. Check out our web site at:
http://www.smarthome.com/smarthomedesignstore.html
About KeypadLinc Controller’s Certification

KeypadLinc 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

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.

SwitchLinc, KeypadLinc, SignaLinc, LampLinc, PowerLinc, ToggleLinc, BoosterLinc, ApplianceLinc, ControLinc, TesterLinc, FilterLinc, ProbeLinc, TempLinc, TouchLinc, IR Linc, Insteon & SmarthomeLive are trademarked by Smarthome, Inc.

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