

INSTEON® I/O Linc
Low Voltage / Contact Closure Interface
Owner's Manual
2450



INSTEON

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About I/O Linc

I/O Linc allows you to monitor and control any low voltage device (such as alarm sensor, electric door strike, etc.) as part of your INSTEON home automation network. With one dry-contact sensor input you can control many INSTEON devices throughout the house. Plus, use the built-in single-pole double-throw (SPDT) switch to connect to any low-voltage-powered device for continuous or momentary operation.



Key I/O Linc Features

- Installs and links to other INSTEON devices in minutes
- Contains 1 sensor input and 1 output relay (NO/NC)
- Monitors and controls pool valves, electric door strikes, garage doors, and more using your INSTEON or X10 network
- 4 output relay modes allow you to control many different types of devices
- Controls INSTEON lights and appliances using standard sensor
- Indicates INSTEON setup mode activity with a Status LED and beeper
- Two-year warranty

What is Included with I/O Linc

- I/O Linc – INSTEON Low Voltage / Contact Closure Interface
- 1.5mm flathead screwdriver
- Quick-Start Guide

Installation

Tools You Will Need

- Sensor wire: 16 – 28 gauge wire fits but 20 – 22 gauge is recommended

Preparing to Install I/O Linc

CAUTION

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

I/O Linc 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. I/O Linc is not designed nor approved for use on power lines other than 120V 60Hz. Attempting to use I/O Linc on non-approved power lines may have hazardous consequences.

Prior to installing I/O Linc, please review the entire installation procedure and take the following precautions:

- Use indoors or in a properly insulated and weatherproof electrical box only
- Don't plug I/O Linc into an outlet controlled by a switch because if the switch is inadvertently turned off, I/O Linc won't have power
- Don't plug I/O Linc into a filtered power strip or AC filter
- Don't stack INSTEON home automation devices together by plugging them into each other. Stacked devices may overheat and stop functioning. Also avoid using the pass-through outlets on INSTEON devices for other heat-generating power supplies.
- Don't use I/O Linc to control devices that preserve, maintain, or contribute to human or animal safety or life support
- If you are using I/O Linc to control a garage door, you should only remotely close a garage door when you can be sure it is safe. Use of safety beam devices can further increase the safety of remote garage door control and are usually required by law. Smarthome is not responsible for any damage from proper or improper functioning of the device(s).

If you have any questions, please call:

INSTEON Support Line

866-243-8022

I/O Linc Screw Terminals

5V	GND	S	N/C	N/O	COM
5 Volt	Ground	Sense	Normally Closed	Normally Open	Common

Terminals:

- **5 Volt** – Provides 5 Volts @ 10mA (if needed)
- **Ground** – Used with Sense terminal for detecting sensor status
- **Sense** – Used with Ground terminal for detecting sensor status

NOTE: Applying more than 5 Volts can damage the I/O Linc sensor input.

- **Normally Closed** – When the I/O Linc output relay is closed, its Normally Closed and Common terminals are connected

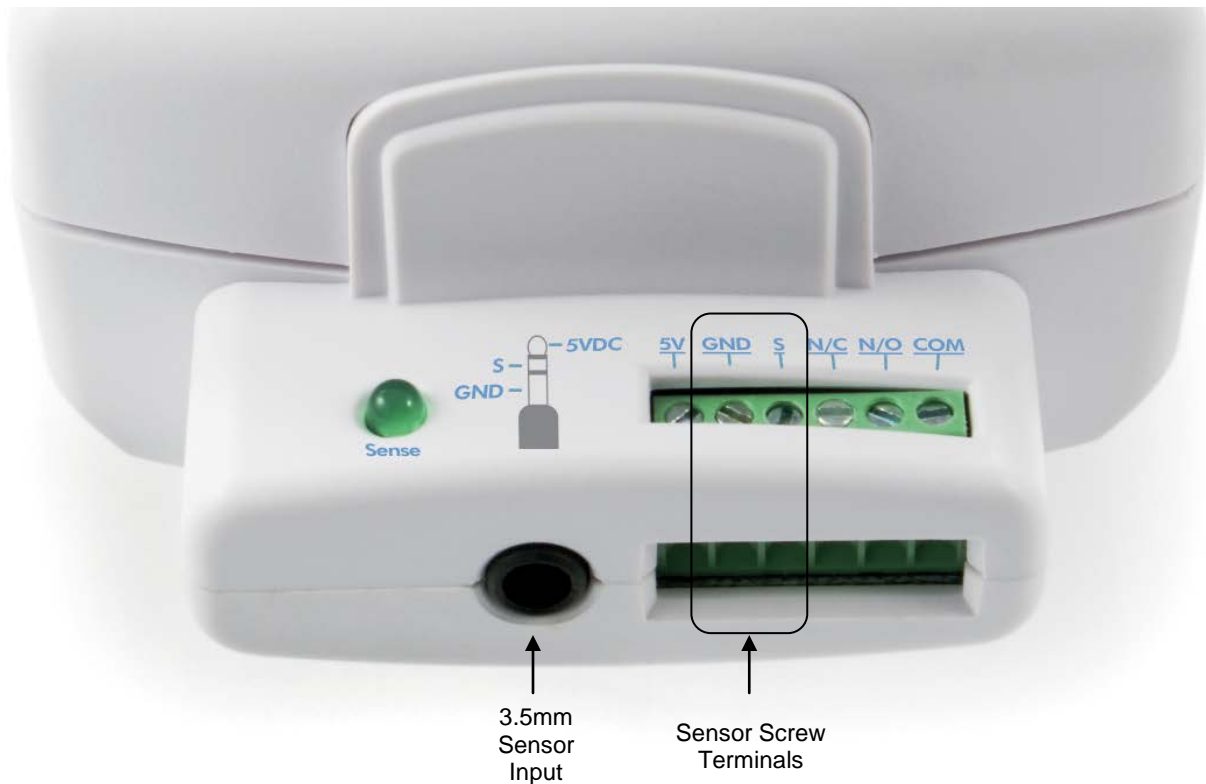
- **Normally Open** – When the I/O Linc output relay is open, its Normally Open and Common terminals are connected
- **Common** – When the I/O Linc output relay opens and closes, its Common terminal will alternate between being connected to its Normally Open and Normally Closed terminals

Installing I/O Linc

- 1) Plug I/O Linc into an unswitched outlet near your sensor
The white I/O Linc Status LED will turn on
- 2) If using a sensor, connect one of its leads to the I/O Linc Ground terminal and the other to the Sense terminal
The green Sensor Status LED will turn on and off when you open and close the sensor
- 3) If you are planning to use the I/O Linc output relay, it is recommended to wait until after setting up the I/O Linc output relay before connecting it. See *I/O Linc Output Relay Modes*.

Setting Up the I/O Linc Sensor Input

You can connect a sensor to the I/O Linc either using the screw terminals or a sensor that utilizes a 3.5mm connection.

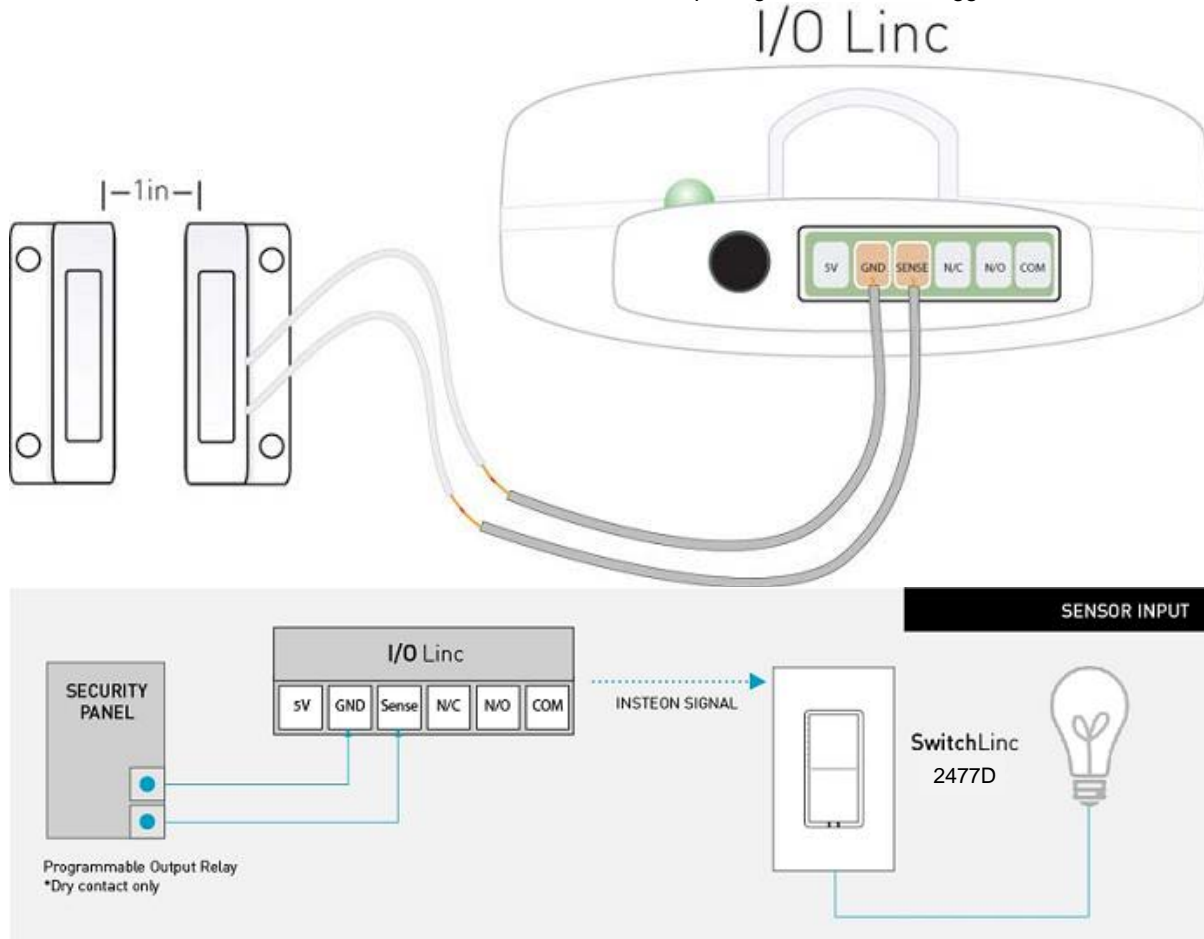


Linking the I/O Linc Sensor Input to an INSTEON Responder

Any device that is Linked to I/O Linc (the load) using these instructions will be controlled when:

- The I/O Linc connected to the sensor is either opened or closed
- The I/O Linc Set button is tapped

NOTE: During linking, you will have the option to turn on remote INSTEON devices when either the connected sensor is closed or when it is opened. Once this is programmed, the opposite action will trigger an OFF command. For example, if you program an ON command to be sent when the I/O Linc connected sensor is closed, opening the sensor will trigger an OFF command.



- 1) Put your sensor into the state you want to use to trigger I/O Linc to send an ON command. For example, if you want closing the sensor to send an ON command, close the sensor.
The Sensor Status LED will turn on if the sensor is closed and off if the sensor is open
- 2) Set I/O Linc to linking mode by pressing & holding the Set button until it beeps (3 seconds)
The I/O Linc Status LED will begin blinking
You will have 4 minutes to complete the next step before linking mode automatically times out.
- 3) Press & hold the Responder's Set button for 3 seconds
The I/O Linc Status LED will stop blinking and turn on solid
- 4) Confirm that linking was successful by tapping the Set button on I/O Linc
The responder will respond appropriately

Unlinking an INSTEON Responder from I/O Linc

- 1) If the responder is a multi-scene device, tap the Scene button you wish to remove control from until its LED illuminates
- 2) Set I/O Linc to linking mode by pressing & holding the Set button until it beeps (3 seconds)
The I/O Linc Status LED will begin blinking
- 3) Set I/O Linc to unlinking mode by pressing & holding the Set button until it beeps again (3 seconds)
The I/O Linc Status LED will continue blinking
You will have 4 minutes to complete the next step before unlinking mode automatically times out.

4) Press & hold the Responder's Set button for 3 seconds

The I/O Linc Status LED will stop blinking and turn on solid

5) Confirm that unlinking was successful by tapping the Set button on I/O Linc

The responder will no longer respond

Triggering the I/O Linc Output Relay from its Sensor Input

To enable / disable this feature, follow these instructions. This feature is disabled by default.

1) Set I/O Linc to linking mode by pressing & holding the Set button until it beeps (3 seconds)

The I/O Linc Status LED will begin blinking

2) Triple-tap the Set button on I/O Linc to enable/disable the output relay from its sensor input

I/O Linc will beep and its Status LED will turn on solid

NOTE: Regardless of whether the I/O Linc sensor input is programmed to send an ON command when the sensor is closed and an OFF command when the sensor is opened, or vice versa, the output relay will:

- Close when an INSTEON ON command is sent (as a result of a sensor)
- Open when an INSTEON OFF command is sent (as a result of a sensor)

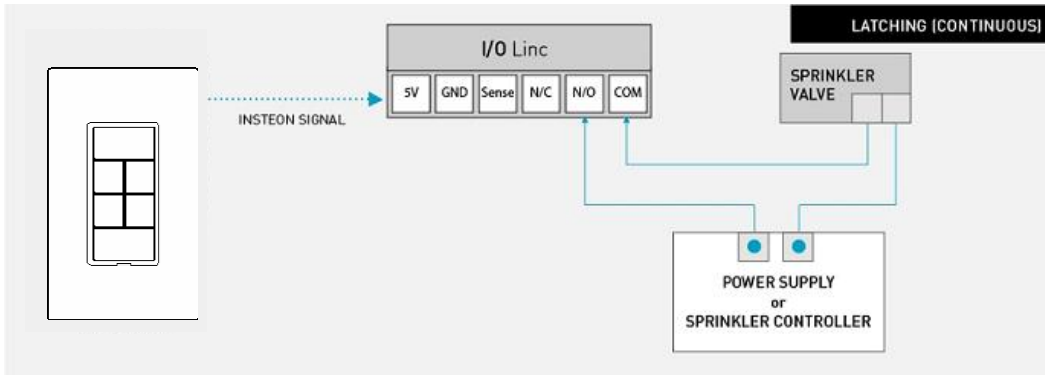
Setting Up The I/O Linc Output Relay

I/O Linc Output Relay Modes

Once you've completed installation, choose which output relay mode best suits your application and proceed to *Linking an INSTEON Controller to Control the I/O Linc Output Relay*.

Latching (Continuous)

When the relay is either opened or closed, it will remain in that state until it is triggered. This is the factory default setting. An ON command can be programmed to either open or close the relay; an OFF command will do the opposite. For example, if the relay is programmed to open in response to an ON command, an OFF command will close the relay.

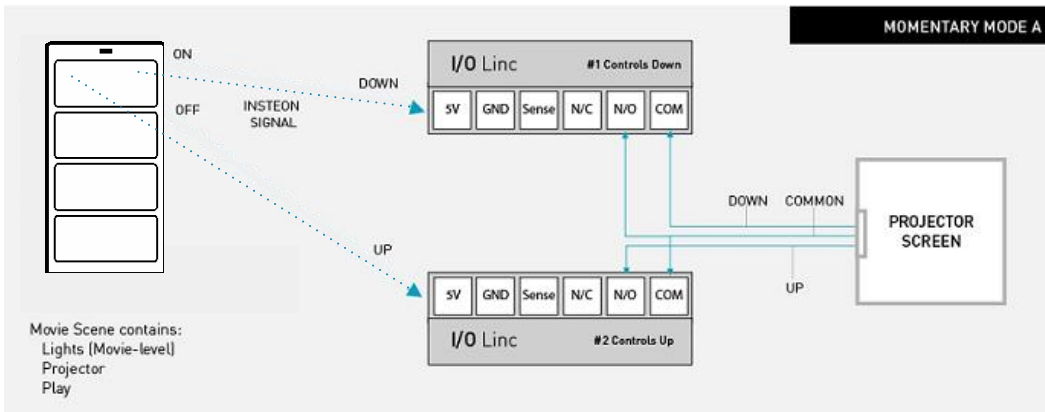


In this example, a KeypadLinc is programmed to control sprinklers. When KeypadLinc sends an ON command, I/O Linc will close the relay, turning on the sprinklers. They will remain on until KeypadLinc sends an OFF command, opening the I/O Linc relay and turning off the sprinklers.

NOTE ABOUT MOMENTARY MODES: The relay will remain open until triggered. Once triggered, the relay will remain closed for the momentary duration (default: 2 seconds) and then it will automatically open. To change the momentary duration, see *Setting the I/O Linc Momentary Duration*.

Momentary A

Either an ON or OFF command can be programmed to trigger the I/O Linc relay. The other command will be ignored. For example, if an ON command is programmed to trigger the relay, an OFF command will be ignored.



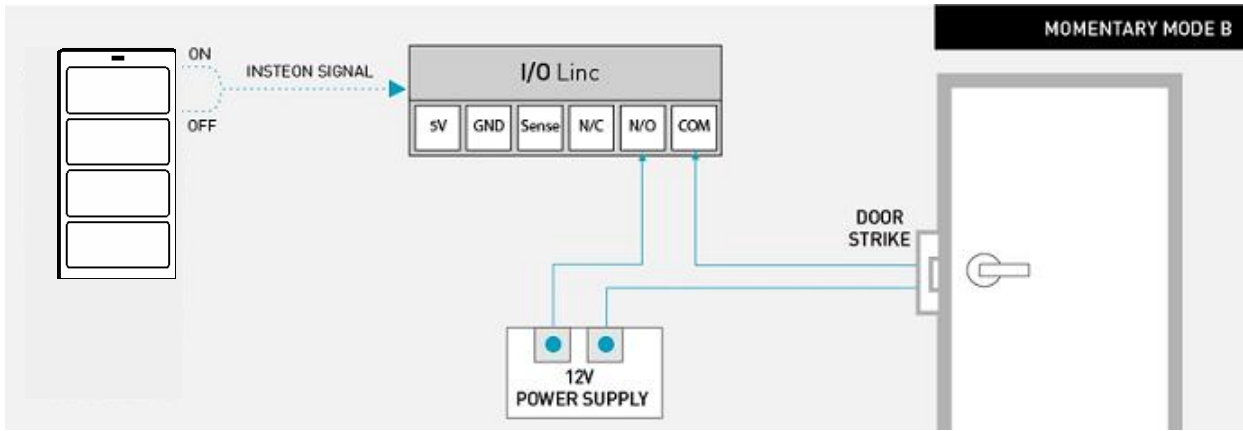
In this example, a Mini Remote “Movie Time” scene is set to control two I/O Lincs which each control a direction for the projection screen. When the scene is activated (on), the lights go to the ideal movie-watching brightness, the projector is powered on, the Blu-ray player is set to play, and the projection screen is lowered.

Once the movie is over the scene is deactivated (off), so the lights fade off, etc. and the projection screen is raised. This scene is made possible because the first I/O Linc (DOWN) is programmed only to respond to “Movie Time” ON, while the second I/O Linc (UP) is programmed only to respond to “Movie Time” OFF.

NOTE: When controlling the projection screen in this manner, you will likely need to extend the I/O Linc momentary duration. See *Setting the I/O Linc Momentary Duration*.

Momentary B

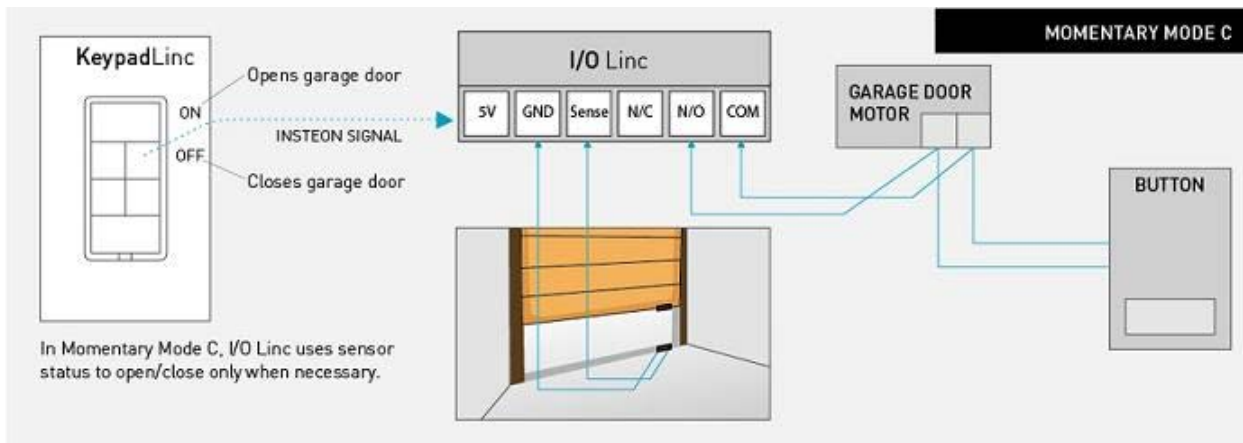
Send either an ON or an OFF command to trigger the I/O Linc relay. The I/O Linc relay will respond to both.



In this example, a Mini Remote is used to control an I/O Linc connected to a door strike. For convenience, Momentary B is used here because pressing either on or off on Mini Remote's "Unlock Front Door" scene will unlock the door.

Momentary C

Use the I/O Linc sensor input to determine whether the I/O Linc relay will trigger. An ON command's desired state can be programmed to either open or closed. I/O Linc will use the opposite for the OFF command's desired sensor state. For example, if an ON command is programmed to trigger only when the sensor is closed, an OFF command will trigger only when the sensor is open.



In this example, a KeypadLinc scene controls the garage door. With I/O Linc in Momentary C mode and wired to a sensor and the garage door motor like above, the KeypadLinc now has specific On/Off (Open/Close) control of the garage door. For example, if I/O Linc receives an ON command from the KeypadLinc and the garage door is already open, I/O Linc will ignore the command and leave the garage door open. However, if an OFF command is received, I/O Linc will close the garage.

Note: If you are using I/O Linc to control a garage door, a quick start guide specifically for this function can be found at <http://www.insteon.com/support>.

CAUTION: You should only remotely close a garage door when you can be sure it is safe, either by watching it directly or through a camera.

Once you have chosen the desired output relay mode, proceed to linking and follow the instructions for the mode you have chosen. See *Linking an INSTEON Controller to Control the I/O Linc Output Relay*.

Linking an INSTEON Controller to Control the I/O Linc Output Relay

NOTE: The following steps assume the I/O Linc output relay is still set to the factory default Latching (Continuous) Mode. If this is not the case, either set the I/O Linc output relay mode back to Latching (see *Setting the I/O Linc Output Relay Mode*) or restore I/O Linc to its factory default settings (see *Resetting I/O Linc to its Factory Default Settings*).

Once you have selected the desired output relay mode, find it below and follow the instructions to Link I/O Linc to an INSTEON Controller.

Latching (Continuous)

- 1) Tap the Set button on I/O Linc to set the relay to the desired state. For example, if you want an ON command to open the relay, set the relay to be open. If you want an ON command to close the relay, set the relay to be closed.

The I/O Linc Status LED will be dim if the relay is open or bright if the relay is closed

- 2) Set the controller to linking Mode. (For most Controllers, press & hold an On or Scene button for 10 seconds or the Set button for 3 seconds.)

You will have 4 minutes to complete the next step before linking mode automatically times out.

- 3) Press & hold the Set button on I/O Linc until it beeps (3 seconds)
- 4) Confirm that linking was successful by tapping the button you just Linked to on the Controller

The I/O Linc relay will open and close

Now that setup is complete, it is safe to connect your device to the I/O Linc output relay.

Momentary A

- 1) By tapping the Set button on I/O Linc, set the relay to either open (if you want the relay to trigger from an OFF command) or closed (if you want the relay to trigger from an ON command)

The I/O Linc Status LED will be dim if the relay is open or bright if the relay is closed

- 2) Set the controller to linking Mode. (For most Controllers, press & hold an On or Scene button for 10 seconds or the Set button for 3 seconds.)

You will have 4 minutes to complete the next step before linking mode automatically times out.

- 3) Press & hold the Set button on I/O Linc until it beeps (3 seconds)
- 4) Repeat steps 1-3 for each controller you want to use to control I/O Linc. Once you have Linked all of the Controllers to I/O Linc, proceed to *Setting the I/O Linc Output Relay Mode* and follow the instructions for Momentary A.

Momentary B

- 1) Set the controller to linking Mode. (For most Controllers, press & hold an On or Scene button for 10 seconds or the Set button for 3 seconds.)

You will have 4 minutes to complete the next step before linking mode automatically times out.

- 2) Press & hold the Set button on I/O Linc until it beeps (3 seconds)
- 3) Proceed to *Setting the I/O Linc Output Relay Mode* and follow instructions for Momentary B

Momentary C

- 1) Set the sensor to the desired on state (meaning an ON command will not trigger the I/O Linc relay when the sensor is in this state). For example, if you want an ON command to open the garage door and an OFF command to close it, open the garage door in this step.

The Sensor Status LED will turn on if the sensor is closed and off if the sensor is open

- 2) Set the controller to linking Mode. (For most Controllers, press an On or Scene button for 10 seconds or the Set button for 3 seconds.)

You will have 4 minutes to complete the next step before linking mode automatically times out.

- 3) Press & hold the Set button on I/O Linc until it beeps (3 seconds)
- 4) Proceed to *Setting the I/O Linc Output Relay Mode* and follow instructions for Momentary C

Setting the I/O Linc Output Relay Mode

Once you have completed linking, follows the instructions below to change the I/O Linc output relay mode. By default, I/O Linc is set to Latching (Continuous).

- 1) Set I/O Linc to linking mode by pressing & holding the Set button until it beeps (3 seconds)

The I/O Linc Status LED will begin blinking

- 2) Set I/O Linc to unlinking mode by pressing & holding the Set button until it beeps again (3 seconds)

The I/O Linc Status LED will continue blinking

- 3) Set I/O Linc to Output Relay Programming mode by pressing & holding the Set button until it beeps a third time (3 seconds)
 - The I/O Linc Status LED will stop blinking and turn on solid*
 - I/O Linc will rotate to the next Output Relay Programming mode in the cycle: Latching → Momentary A → Momentary B → Momentary C*
- 4) If you wish to rotate I/O Linc to the next Output Relay Programming mode in the cycle, repeat steps 1-3

Setting the I/O Linc Momentary Duration

To change the amount of time the I/O Linc output relay is closed when it is in one of the momentary modes (A-C), follow these instructions. By default, the momentary duration is 2 seconds.

For Rev 1.1 and above

NOTE: Momentary duration can be set manually anywhere from 2 seconds up to 24 seconds or for 30 minutes.

- 1) Set I/O Linc to linking mode by pressing & holding the Set button until it beeps (3 seconds)
 - The I/O Linc Status LED will begin blinking*
- 2) Set I/O Linc to unlinking mode by pressing & holding the Set button until it beeps again (3 seconds)
 - The I/O Linc Status LED will continue blinking*
- 3) Tap the Set button on I/O Linc
 - I/O Linc will beep and its Status LED will continue blinking*
- 4) Press & hold the Set button on I/O Linc for the desired amount of time for its relay to be closed (when in a momentary mode) and then release
 - To set the momentary duration for 30 minutes, press & hold the Set button for any amount of time longer than 25 seconds.
- 5) Tap the Set button on I/O Linc to exit the programming mode
 - I/O Linc will beep and its Status LED will stop blinking and turn on solid*

For Rev 1.0 and below

NOTE: The momentary duration can be set manually anywhere from 2 seconds up to 25 seconds. Or you can use INSTEON home automation software (such as HouseLinc) to set the momentary duration anywhere from 0.2 seconds up to 25 seconds.

- 1) Set I/O Linc to linking mode by pressing & holding the Set button until it beeps (3 seconds)
 - The I/O Linc Status LED will begin blinking*
- 2) Set I/O Linc to unlinking mode by pressing & holding the Set button until it beeps again (3 seconds)
 - The I/O Linc Status LED will continue blinking*
- 3) Tap the Set button on I/O Linc
 - I/O Linc will beep and its Status LED will continue blinking*
- 4) Press & hold the Set button on I/O Linc for the desired amount of time for its relay to be closed (when in a momentary mode) and then release
 - The I/O Linc Status LED will continue blinking*
- 5) Tap the Set button on I/O Linc to exit the programming mode
 - I/O Linc will beep and its Status LED will stop blinking and turn on solid*

Unlinking I/O Linc from an INSTEON Controller

If you are going to discontinue using I/O Linc, it is very important that you unlink it from any linked controllers. Otherwise, the controller will retry any commands repetitively, thus slowing down the system.

The following will work for the most common INSTEON devices:

- 1) Set the controller to unlinking Mode. (For most Controllers, press & hold an On or Scene button for 10 seconds **twice** or the Set button for 3 seconds **twice**.)
- 2) Press & hold the Set button on I/O Linc until it beeps (3 seconds)
 - The I/O Linc Status LED will turn off for about 1 second and then turn back on*

- 3) Confirm that unlinking was successful by tapping the button you just Unlinked from on the controller

I/O Linc will no longer respond

Creating An INSTEON Scene

INSTEON scenes let you activate dramatic lighting moods with the press of just one button. For example, you can set all the lights in a scene to dim to 50% or turn certain lights on while turning others off, all with the tap of a button on a Controller.

INSTEON scenes are very easy to set up – just Link more than one responder to the same On/Off or Scene button on a Controller. Then, when you press any of the Linked buttons on the Controller, all of the INSTEON devices Linked in the scene will respond as a group.

To set up an INSTEON scene, you can individually Link each device to a Controller.

Advanced Features

Restoring Power to I/O Linc

I/O Linc stores all of its settings, such as Links to other INSTEON devices, with non-volatile memory. Because settings are saved in this non-volatile memory, they will not be lost in the event of a power failure.

Resetting I/O Linc to its Factory Default Settings

The factory reset procedure will clear the I/O Linc memory and restore its factory default settings. This procedure will result in the following:

- All INSTEON Links will be cleared
 - X10 addresses will be reset (none by default)
 - Sensor input's control of output relay will be reset to disabled
 - Output relay mode will be reset to Latching
 - Momentary duration will be reset to 2 seconds
- 1) Before resetting an I/O Linc that has been Linked to an INSTEON Controller, be sure to Unlink it from the Controller. See *Unlinking I/O Linc from an INSTEON Controller*.
 - 2) Unplug I/O Linc for about 10 seconds
 - 3) While holding down the Set button, plug I/O Linc back in, making sure not to let go of the Set button
 - 4) Continue to hold down the Set button for 3 seconds

The I/O Linc Status LED will flash once and then turn off for a few seconds. I/O Linc will beep as its Status LED turns back on.

X10 Programming Options

I/O Linc is X10 ready, meaning that it can respond to X10 commands from X10 controllers and it can send X10 commands to X10 devices. However, as it ships from the factory or after a factory reset, I/O Linc will not have an X10 address set up.

Assigning an X10 Address to the I/O Linc Sensor Input

- 1) Set I/O Linc to linking mode by pressing & holding the Set button until it beeps (3 seconds)
The I/O Linc Status LED will begin blinking
- 2) Tap the Set button on I/O Linc
I/O Linc will beep and its Status LED will continue blinking

- Using an X10 controller, send either ON (for I/O Linc to send an X10 ON command when the sensor closes and an X10 OFF command when the sensor opens) or OFF (for I/O Linc to send an X10 ON command when the sensor opens and an X10 OFF command when the sensor closes)

I/O Linc will beep and its Status LED will stop blinking and turn on solid

Removing an I/O Linc X10 Address from its Sensor Input

- Set I/O Linc to linking mode by pressing & holding the Set button until it beeps (3 seconds)
The I/O Linc Status LED will begin blinking
- Set I/O Linc to unlinking mode by pressing & holding the Set button until it beeps again (3 seconds)
The I/O Linc Status LED will continue blinking
- Tap the Set button on I/O Linc
I/O Linc will beep and its Status LED will continue blinking
- Using an X10 controller, send the X10 address you want to remove followed by the OFF command three times.
For example, A1 OFF A1 OFF A1 OFF.

I/O Linc will beep and its Status LED will stop blinking and turn on solid

Assigning an X10 Address to the I/O Linc Output Relay

- Set I/O Linc to linking mode by pressing & holding the Set button until it beeps (3 seconds)
The I/O Linc Status LED will begin blinking
- Using an X10 controller, send the desired X10 address three times.
For example, A1 A1 A1.
- From the X10 controller, send either ON (to close the I/O Linc output relay with an X10 ON command and open its relay with an X10 OFF command) or OFF (to open the I/O Linc output relay with an X10 ON command and close its relay with an X10 OFF command)

I/O Linc will beep and its Status LED will stop blinking and turn on solid

- Press & hold the Set button on I/O Linc until it beeps (3 seconds)
The Status LED will begin blinking

Removing an I/O Linc X10 Address from its Output Relay

- Set I/O Linc to linking mode by pressing & holding the Set button until it beeps (3 seconds)
The I/O Linc Status LED will begin blinking
- Set I/O Linc to unlinking mode by pressing & holding the Set button until it beeps again (3 seconds)
The I/O Linc Status LED will continue blinking
- Using an X10 controller, send the X10 address you want to remove and the OFF command three times.
For example, A1 OFF, A1 OFF, A1 OFF.

I/O Linc will beep and its Status LED will stop blinking and turn on solid

Troubleshooting

Problem	Possible Cause	Solution
The Status LED on I/O Linc is not turning on at all.	I/O Linc may not be getting power.	Make sure that I/O Linc is not plugged into a switched outlet that is turned off.
I/O Linc won't link or work with a controller or Responder.	The controller or responder might have been reset without unlinking I/O Linc from it.	Re-Link I/O Linc to the controller or Responder.

Problem	Possible Cause	Solution
	The controller or responder and I/O Linc may be on opposite power line phases.	Make sure two dual-band INSTEON devices are properly installed to bridge the two power line phases.
	The INSTEON signal may be too weak.	Add additional INSTEON devices or move around existing INSTEON devices. All INSTEON devices act as INSTEON network repeaters.
	Large appliances, such as refrigerators or air conditioners, may be producing electrical noise on the power line.	Install a power line noise filter (#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.	
I/O Linc is taking a long time to respond to a Controller.	The controller may be sending commands to a responder that is no longer in use. Commands for the unused responder are being resent and loading down the signal.	Unlink any unused responders from the Controller. HINT: If you are using home automation software, you can easily check scene membership and eliminate unnecessary links.
		If the above doesn't work, perform a factory reset on the Controller.
Responders are taking a long time to respond to I/O Linc.	I/O Linc may be sending commands to a responder that is no longer in use. Commands for the unused responder are being resent and loading down the signal.	Unlink any unused responders from I/O Linc. HINT: If you are using home automation software, you can easily check scene membership and eliminate unnecessary Links.
		If the above doesn't work, perform a factory. See <i>Resetting I/O Linc to its Factory Default Settings</i> .
I/O Linc is locked up.	A surge or excessive noise on the power line may have glitched it.	Unplug I/O Linc for 10 seconds and then reinstall.
		If the above doesn't work, perform a factory reset. See <i>Resetting I/O Linc to its Factory Default Settings</i> .

If you have tried these solutions, reviewed this Owner's Manual, and still cannot resolve an issue you are having with I/O Linc, please call: 866-243-8022

Specifications

General	
Brand:	INSTEON
Manufacturer Product No.:	2450, I/O Linc
UPC:	689076403542
Color:	White
Warranty:	2 years, limited
Operation	
Status LED:	White (Bright when relay closed, dim when relay open)

Sensor Status LED:	Green (On when sensor closed, Off when sensor open)
Set Button:	Toggles output relay On/Off. Also used for setup.
Momentary Duration:	Adjustable, 2 - 105 minutes
Operation Modes:	INSTEON only, X10 only, INSTEON and X10 Combo Mode
Combo mode Message Order:	INSTEON, INSTEON confirmation, X10
Multi-Way Circuit Support:	Yes
Setup Memory:	Non-volatile EEPROM
INSTEON Features	
INSTEON Addresses:	1 hard-coded out of 16,777,216 possible
INSTEON Links:	417
INSTEON Powerline Frequency:	131.65 KHz
INSTEON Minimum Transmit Level:	3.2 Vpp into 5 Ohms
INSTEON Minimum Receive Level:	10 mV
INSTEON Messages Repeated:	Yes
Mechanical	
I/O Terminals:	5V (10mA), GND, Sense, N/C, N/O, Common (28-16 gauge wire)
Input jack:	1/8" mini jack input (GND, Sense)
Input Type:	Contact closure only
Output Relay Capacity:	5A @ 30 Volts (AC or DC)
Operating Conditions:	Indoors, 32 to 104°, up to 85% relative humidity
Dimensions:	4.5" H x 2.5" W x 1.5" D
Weight:	4.6 oz
Electrical	
Supply Voltage:	120 Volts AC +/- 10%, 60 Hertz, single phase
Sensor Input:	1/8" mini jack input (GND, Sense)
Power Plug :	3-pin grounded
Pass-through Outlet:	Uncontrolled 3-prong (with ground), 120V, 15A
Power Consumption:	0.93 Watts
Certification:	Safety tested for use in USA and Canada
X10 Features	
X10 Primary Address:	Two optional (comes unassigned). One for input, one for output

Certification And Warranty

Certification

This product has been thoroughly tested by ITS 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.

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 866-243-8022 with the Model # and Revision # of the device to receive RMA # and send the product, along with all other required materials to:

INSTEON

ATTN: Receiving Dept.

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.

Protected under U.S. and foreign patents (see www.insteon.com)

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