

Quick-Start Guide

I/O Linc™ – INSTEON Low Voltage / Contact Closure Interface (1 In / 1 Out)

Model: 2450

Interface Sensors and Low Voltage with INSTEON



Introduction

Monitor and control any low voltage devices such as contact closures, electric door strikes and alarm sensors as part of your INSTEON home automation network. With one dry-contact input you can control multiple INSTEON devices in your network. Plus, use the built-in single-pole double-throw (SPDT) switch to connect any low voltage-powered device for continuous or momentary operation. Create your own remote-control door lock using a door strike and power supply or use a security sensor to trigger INSTEON controlled lights to turn on or off. I/O Linc acts as a repeater for all power line INSTEON signals, is compatible with INSTEON and X10 products, and has a pass through outlet for other AC devices.



Items you will Need

- 1) Small flat-head screwdriver (about 1.4mm) which is small enough to fit I/O Linc's screw terminals
- 2) Sensor wire: 20 gauge recommended

I/O Linc's Screw Terminals

5V	GND	Sense	N/C	N/O	Common
5 Volts	Ground	Sensor Input	Normally Closed	Normally Open	Switches between N/O and N/C

Use a Sensor or Button to Control an INSTEON Device

- 1) Plug your I/O Linc into an un-switched outlet near your sensor
I/O Linc's Status LED will turn on
- 2) Connect 1 sensor wire into I/O Linc's GND terminal (see Figure 1)
- 3) Connect other sensor wire into I/O Linc's Sensor terminal
- 4) Put your sensor in the state which you want to trigger I/O Linc to send an On command
I/O Linc's Sensor Status LED will turn On and Off when you open and close your sensor
- 5) Press & Hold I/O Linc's Set button until it beeps (about 3 seconds)
I/O Linc's Status LED will begin blinking
- 6) Press & hold the Set button on your INSTEON responder (the device you wish to control with I/O Linc) for at least 3 seconds
I/O Linc will beep and its Status LED will return to steady On to confirm linking
- 7) Trigger your sensor (Open and Close) to test
Remote INSTEON device should turn On and Off

Controlling I/O Linc's Output Relay from an INSTEON Device

This mode is used for controlling a normally open, momentary switch or button; for example, ringing your doorbell from an INSTEON controller.

Note: These instructions assume your output relay is set to latching mode (default).*

- 1) Plug your I/O Linc into a convenient un-switched outlet
I/O Linc's Status LED will turn on
 - 2) Using Set button, ensure relay is closed
LED will be full bright when relay is closed and dim when open
Tap Set button if the LED is dim to close relay
- Link your INSTEON Controller(s) to I/O Linc**
- 3) Press & Hold the appropriate On button on your INSTEON controller for 10 seconds
INSTEON controller's LED will begin blinking
 - 4) Press & Hold the Set button on I/O Linc for 5 seconds
I/O Linc will beep to confirm linking
 - 5) Repeat steps 3 and 4 for each INSTEON controller before proceeding to step 6
- Set your Output Relay to Momentary Mode**
- 6) Press & Hold I/O Linc's Set button for 3 seconds
I/O Linc will beep and Status LED will begin blinking
 - 7) Press & Hold I/O Linc's Set button for 3 seconds
I/O Linc will beep and Status LED will continue blinking
 - 8) Press & Hold I/O Linc's Set button for 3 seconds
I/O Linc will beep and Status LED will return to steady On to confirm it is now in momentary mode

Wire your I/O Linc to Your Switch

- 9) Connect one of your switch's wires to I/O Linc's Common terminal (see Figure 2)
- 10) Connect switch's other wire to I/O Linc's N/O terminal

Test

- 11) Test by either tapping I/O Linc's Set button or INSTEON Controller's On button
I/O Linc's relay will close, then open after 2 seconds in response
- 12) For instructions on how to setup the following features, consult I/O Linc's User's Guide
 - a. Increase the amount of time the momentary relay is closed (from 2 seconds up to 25 seconds)
 - b. Trigger your momentary closure with an Off command only
 - c. Trigger your momentary closure with both On and Off commands
 - d. Use I/O Linc's sensor input to determine whether I/O Linc's output relay will respond

* To be sure your I/O Linc is in latching mode, simply tap the Set button and wait a few seconds. If you only hear one click, it is in latching mode. If you hear two, it is in momentary and your I/O Linc will either need to be returned to latching mode or factory reset.

Wiring a Sensor to I/O Linc to Control INSTEON Devices

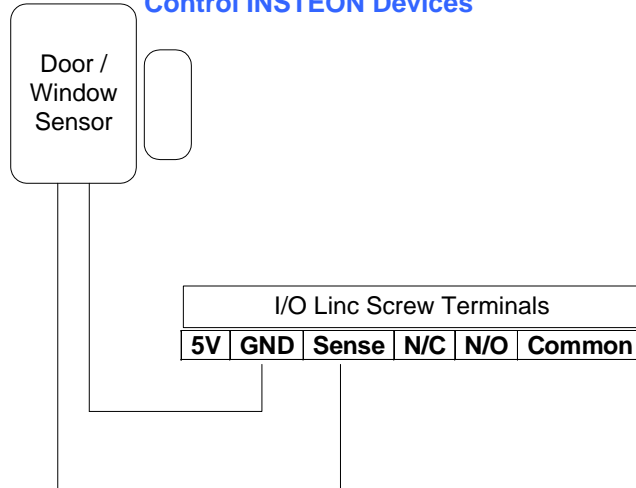


Figure 1

Controlling a Doorbell with I/O Linc

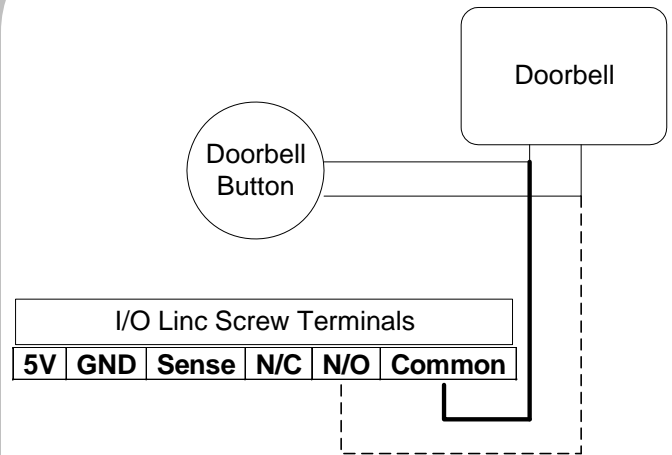


Figure 2

More Features

Note: Most of the feedback in this section is a change in blinking and is omitted for brevity.

Remove a device (Unlink) from I/O Linc's control

- 1) Press & hold I/O Linc's Set button for at least 3 seconds
- 2) Press & hold I/O Linc's Set button again for an additional 5 seconds
- 3) Press and hold Set button on responder for at least 3 seconds (if multi-button responder, tap button of choice before pressing Set button)

Remove (Unlink) I/O Linc from a controller's button

- 1) Press & hold Controller's button of choice for at least 10 seconds
- 2) Press & hold Controller's button of choice for another 12+ seconds
- 3) Press & hold I/O Linc's Set button for 3+ seconds

Link/Unlink Sensor Input to/from Output Relay (default unlinked):

- 1) Press & hold I/O Linc's Set button for at least 3 seconds
- 2) Quickly tap the Set button 3 times
I/O Linc will beep and its LED will return to steady on to confirm

Factory Reset: Removes all INSTEON links (warning, you may wish to unlink I/O Linc from other devices before performing this step)

- 1) Unplug I/O Linc (doesn't matter whether anything is plugged into I/O Linc)
- 2) Wait 10 seconds
- 3) While pressing and holding the Set button, plug unit back in, continue holding the Set button
- 4) While continuing to hold the Set button, wait 5 seconds until the white LED flashes once
- 5) Release Set button
- 6) Wait 10 seconds before doing anything else

Questions?

Click: For Advanced Features and X10 compatibility, refer to I/O Linc's User's Guide: http://wiki.smarthome.com/index.php?title=I/O_Linc_-_INSTEON_Low_Voltage_-_Contact_Closure_Interface_Owner%27s_Manual

Call: Friendly tech support @ 1-800-SMARTHOME (800-762-7846)