Lux Keypad Dimmer Switch Installation Guide

Supported model

- C4-L-KDS Control4 Lux Keypad Dimmer Switch

Introduction

The Control4® Lux Keypad Dimmer Switch acts as a dimmer, a switch, and a configurable keypad. It operates independently or as part of a Control4 home automation system. It installs in a standard wall box using typical wiring standards and communicates to the Control4 system using a wireless connection.

Box contents

- Control4 Lux Keypad Dimmer Switch
- Warranty card
- Temporary button(s)
- Control4 Lux Keypad Dimmer Switch Installation Guide (this document)

Mounting Plate required for install

The Control4 Lux Keypad Dimmer Switch requires a faceplate and mounting plate designed to fit your install (1 gang, 2 gang, etc) and are required before you install the dimmer. Part numbers for faceplates and plates:

- Lux Faceplate and Mounting Plate, 1 gang (C4-L-FP1-XX)
- Lux Faceplate and Mounting Plate, 2 gang (C4-L-FP2-XX)
- Lux Faceplate and Mounting Plate, 3 gang (C4-L-FP3-XX)
- Lux Faceplate and Mounting Plate, 4 gang (C4-L-FP4-XX)

Specifications and supported load types

Model number	C4-L-KDS					
Power requirements	120-277V AC +/-10%, 50/60 Hz					
Power consumption	120V: 1.32W all LEDs off, 1.84W all LEDs on 240V: 3.50W all LEDs off, 4.20W all LEDs on 277: 5.62W all LEDs off, 6.26W all LEDs on					
Load types and ratings						
Supported load types	**Dimmer mode:** Incandescent, halogen, electronic (solid state) low voltage (ELV) transformers, magnetic (iron core, inductive) low voltage (MLV) transformers, fluorescents, compact fluorescents, & LEDs **Switch mode:** All Dimmer mode load types plus motors **No-neutral configuration:** Incandescent lights from 10W to 50W at 120V and 25W to 100W at 240V & 277V.					
Maximum load	Incand.	LED	FL / CFL	ELV	MLV	Motor*
120V	600W	500W	TBD	500W	500W	1/2 HP
240V	600W	500W	TBD	500W	500W	1/2 HP
277V	600W	500W	TBD	500W	500W	1/2 HP
Environmental						
Operational temperature	0 to 40 ˚C (32 to 104 ˚F)					
Humidity	5% to 95% non-condensing					
Storage	-20 to 70 ˚C (-4 to 158 ˚F)					
Miscellaneous						
Control communications	Zigbee, IEEE 802.15.4, 2.4 GHz, 15-channel spread spectrum radio					
Wallbox volume	5.75 cubic inches					
Weight	0.05 kg (0.12 lb.)					
Shipping weight	0.08 kg (0.18 lb.)					

*Motors are supported in Switch mode only.

Warnings and considerations

WARNING! Turn OFF electrical power before installing or servicing this product. Improper use or installation can cause SERIOUS INJURY, DEATH or LOSS/DAMAGE OF PROPERTY.
ATTENTION! Coupez l'alimentation électrique avant d'installer ou de réparer ce produit. Une mauvaise installation ou utilisation peut entraîner des blessures graves, décès ou perte / dommages à la propriété.

WARNING! This device must be protected by a circuit breaker (20A max).
ATTENTION! Cet appareil doit être protégé par un disjoncteur (20A max.)

WARNING! Ground this device in accordance with the National Electric Code (NEC) requirements. DO NOT rely solely upon the mounting plate's contact with a metal wall box for adequate grounding. Use the mounting plate's ground wire to make a secure connection to the safety ground of the electrical system.
ATTENTION! Mettez cet appareil à la terre conformément aux exigences du National Electric Code (NEC). NE PAS compter uniquement sur le contact du support de montage avec un boîtier arrière métallique pour une mise à la terre adéquate. Utilisez le fil de terre du support de montage pour établir une connexion sécurisée à la terre de sécurité du système électrique.

IMPORTANT! This device must be installed by a licensed electrician in accordance with all national and local electrical codes.

IMPORTANT! If you are unsure about any part of these instructions, consult a qualified electrician.

IMPORTANT! Use this device only with copper or copper-clad wire. Do not use aluminum wiring. This product has not been approved for use with aluminum wiring.

IMPORTANT! Using this product in a manner other than outlined in this document voids your warranty. Further, Snap One is NOT liable for any damage incurred with the misuse of this product. See "Troubleshooting."

IMPORTANT! Do NOT use a power screwdriver to install this device. If you do, you may overtighten the screws and strip them. Also, overtightening the screws may interfere with proper button operation.

IMPORTANT! This is an electronic device with intricate components. Handle and install with care!

IMPORTANT! When used in conjunction with an Auxiliary Keypad (C4-L-KA-xx), the wire connecting the Auxiliary Keypad to the dimmer must not exceed 45 m (150 ft.) at 120V AC and 30 m (100 ft.) at 240/277V AC.
IMPORTANT! When dimming magnetic (MLV) loads, each transformer must be loaded to at least 50% of its maximum load.

IMPORTANT! If wiring the dimmer in no-neutral configuration, do not attach to MLV loads.

Installation instructions

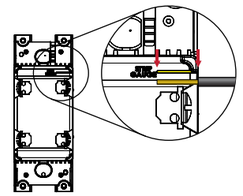
1 Ensure that the location and intended use meet the following criteria:

- Do not exceed the load capacity requirements of the dimmer. Refer to the load ratings in the specifications above for details.
- Install in accordance with all national and local electrical codes.
- The range and performance of the Zigbee wireless control system is highly dependent on the following: (1) distance between devices; (2) layout of the home; (3) walls separating devices; and (4) electrical equipment located near devices. To learn more about Zigbee Best Practices, see ctrl4.co/zigbee-bp.

2 Turn off the local electrical power by either switching off the circuit breaker or removing the fuse from the fuse box. To ensure the wires do NOT have power running to them, use an inductive voltage detector.

NOTE: A trained electrician must perform the installation. The wall box wiring shown in this document is only an example.

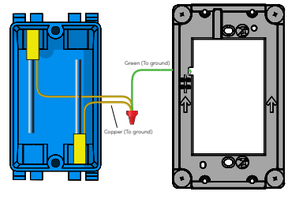
3 Prepare each wire. Wire insulation should be stripped back 1/2 of an inch (12.7 mm) from the wire end. You can use the strip gauge on the back of the dimmer to check the proper length.



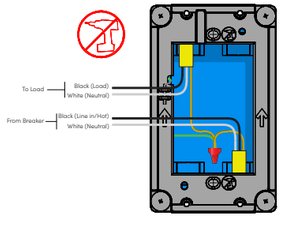
4 Identify your wiring application, and then see the appropriate wiring diagram in the "Sample Wiring Configurations" section below.

IMPORTANT! Grounding this device is required!

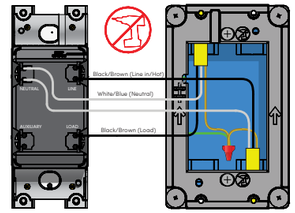
5 Connect the ground wire lead from the mounting plate to ground in the box



6 Install the mounting plate to the wall box and pull the rest of the wires through the mounting plate.



7 Identify and connect the wires to the back of the dimmer. Insert the wire into the terminal and secure it by hand-tightening the set screw.



NOTE: The faceplate and mounting plate package includes labels for international wiring standards. Make sure to label the wires to meet local electrical codes.

IMPORTANT! The AUXILIARY connection is not used for a traditional traveler. It cannot directly power a lighting load. It must be used only to connect to a Control4 Auxiliary Keypad. See "Sample Wiring Configurations."

TIP: When installing this device in a multi-gang scenario, the Lux multi-gang faceplate kits come with jumpers to easily connect multiple devices (see diagram on next page).

8 Fit the wires back into the wall box. Bend the wires in a zigzag pattern so that they easily fold into the wall box,.

9 Align the dimmer and mounting plate (the load rating label should be at the bottom) and fasten it with screws. Tighten the screws until the back side of the metal mounting plate is even with the wall surface, but no further. Overtightening can warp the dimmer and cause mechanical malfunction and difficulty mounting the buttons and faceplate.

10 Starting with the bottom button and working your way up, install the temporary buttons onto the device. Orient the buttons with the light pipe on the right. Place the button's left prong onto the black post on the device's left side. Then, snap the other side into place.

TIP: This device ships with temporary buttons for basic operation until finished, engraved buttons can be ordered. Blank, unengraved buttons are also available.To remove the temporary buttons and install the engraved buttons, see the *Control4 Lux Button Installation Guide* (ctrl4.co/lux-butn-ig)

11 Install the Control4 Faceplate following the instructions in the *Control4 Lux Faceplate Installation Guide* (ctrl4.co/lux-fp-ig).

12 Turn on power at the circuit breaker or replace the fuse from the fuse box.

Operation and configuration

On initial power up, all status LEDs on the dimmer will illuminate green indicating that the device has power. To set up this dimmer for use with a Control4 system, refer to the *Composer Pro User Guide*.

To operate this dimmer as a stand-alone device (not programmed into a Control4 system) press any button to toggle the light on or off.

Button tap sequences

The button tap sequences are defined in the table below. Button tap sequences that require a single button use the **top** button. For example, the factory reset sequence is **9 taps** on the **top**, then, **4** on the **bottom**, and then, **9** on the **top**.

Function	Button Sequence
Identify	4
Zigbee channel	7-4-7
Reboot	15
Factory reset	9-4-9
Leave mesh and reset	13-4-13

Troubleshooting

If the light does not turn on:

- Ensure at least one LED on the face of the dimmer is lit.
- Ensure the light bulb is not burned out and is screwed in tightly.
- Ensure that the circuit breaker is not turned OFF or tripped.
- Check for proper wiring (see "Sample Wiring Configurations").

LED status information

—Flashing LED *—Solid LED*

Fault status

- × 1 Mosfet fault
- × 2 Short circuit fault
- × 3 Over current fault
- × 4 Line voltage fault
- × 5 Zero cross fault
- × 6 Temperature fault
- × 8 Bootup power/wiring fault
- × 1 Incorrect product fault
- × 3 Self-test fault

Zigbee status

- Not identified
- Identifying
- Found Zigbee mesh
- Did not find Zigbee mesh
- Joined Zigbee mesh

Care and cleaning

- Do NOT paint the dimmer or its faceplate.
- Do NOT use any chemical cleaners to clean the dimmer.
- Clean surface of the dimmer with a soft damp cloth as needed.

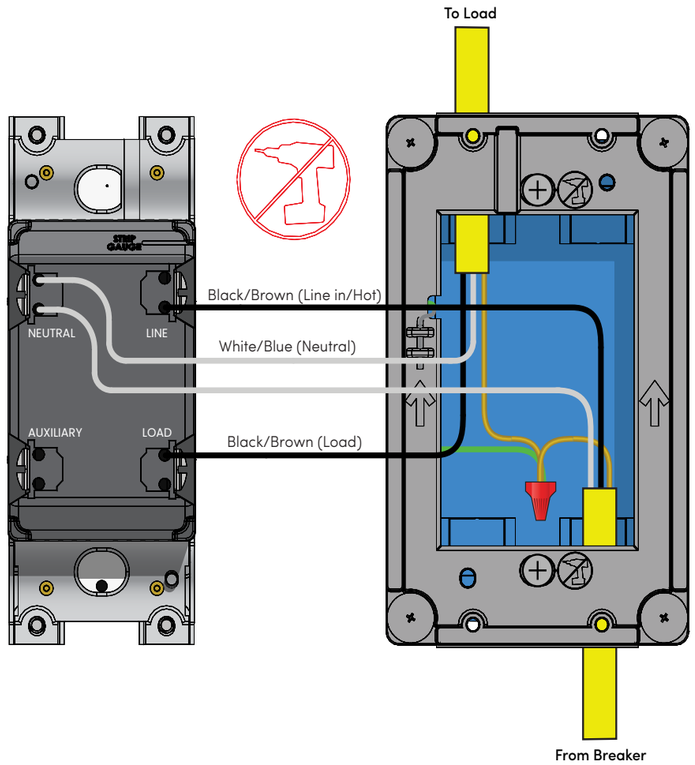
Warranty and legal information

Find details of the product's Limited Warranty at snapone.com/legal or request a paper copy from Customer Service at 866.424.4489.

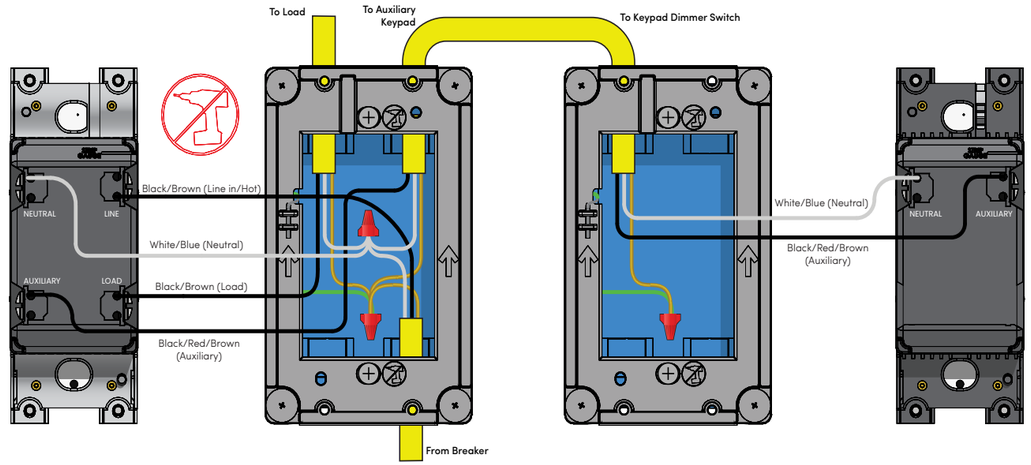
Find other legal resources, such as regulatory notices and patent information, at snapone.com/legal.

Sample wiring configurations

Single device location



Multiple device location using Auxiliary Keypad



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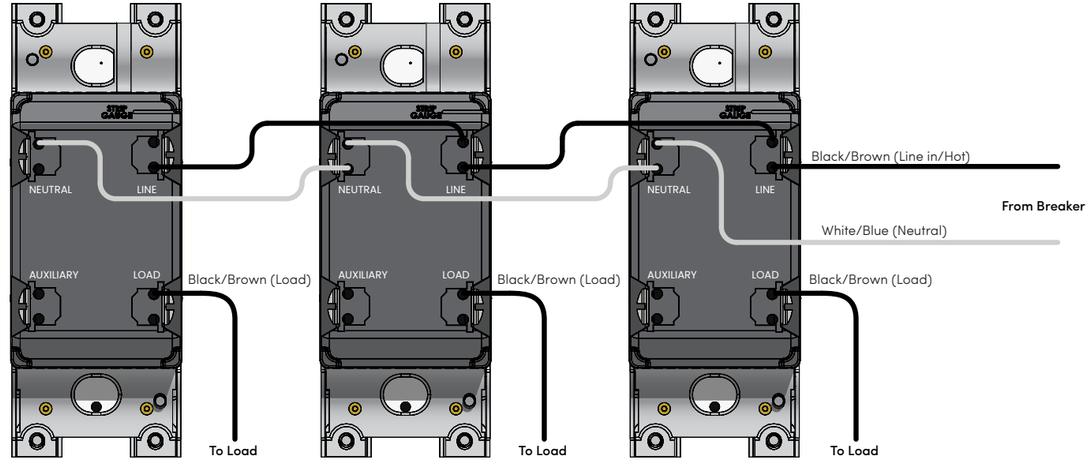
Multi-gang jumper connections



More information and help

For the latest version of this guide and to view additional materials, open the URL below or scan the QR code. Your device must be able to view PDFs.

LATEST VERSION OF THIS GUIDE — ctrl4.co/lux-kds-ig

CONTROL4 LUX QUICK START — ctrl4.co/lux-qs

CONTROL4 LUX WIRING GUIDE — ctrl4.co/lux-wiring

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