Lux Combo Dimmer Switch Installation Guide

Supported model

- C4-L-CDSW Control4 Lux Combo Dimmer Switch

Introduction

The Control4® Lux Combo Dimmer Switch is a device that provides control of two loads, one dimmable load and one switched load. The Combo Dimmer Switch 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 Combo Dimmer Switch
- Warranty card
- Temporary button(s)
- *Control4 Lux Combo Dimmer Switch Installation Guide* (this document)

Required faceplates and mounting plate for installation

The Control4 Lux Combo 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 combo dimmer switch. Part numbers for faceplates and mounting 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-UDIM			
Power requirements	120 or 230V AC +/-10%, 50/60 Hz			
Power consumption	120V: 1.90W all LEDs Off, 2.64W all LEDs On 230V: 4.20W all LEDs Off, 4.93W all LEDs On			
Load types and ratings				
Supported load types	Dimming: Incandescent, halogen, electronic (solid state) low voltage (ELV) transformers, magnetic (iron core, inductive) low voltage (MLV) transformers¹, fluorescents, compact fluorescents, LEDs Switch mode: above load types and also motors			
Maximum load1 (dimmer)	Incandescent	LED	CFL/Fluorescent	Motor
120V	250W	50W	TBD	-
230V	240W	50W	TBD	-
Maximum load2 (switch)	Incandescent	LED/CFL	MLV	Motor
120V	2A / 240W	50W	TBD	2A
230V	2A / 460W	50W	TBD	2A
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 spec-trum radio			
Wallbox volume	5.75 cubic inches			
Weight	0.05 kg (0.12 lb.)			
Shipping weight	0.08 kg (0.18 lb.)			

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! (1) When dimming magnetic (MLV) loads, each transformer must be loaded to at least 50% of its maximum load.

Installation instructions

1. Ensure that the location and intended use meet the following criteria:
   - Do not exceed the load capacity requirements of the dimmer switch. 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.
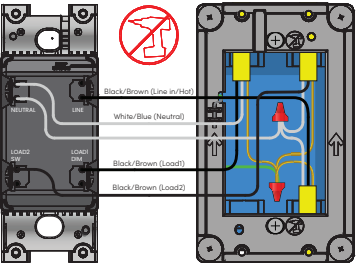
NOTE: The wall box wiring shown in this document is an example. Your wire colors and functions may differ in color. If you are unsure which wire is Line In, Load, Neutral, Ground, or Traveler; test and identify the wires before installation.

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 switch to check the proper length.

4. Identify your wiring application, and then see the appropriate wiring diagram in the "Sample Wiring Configurations" section below.
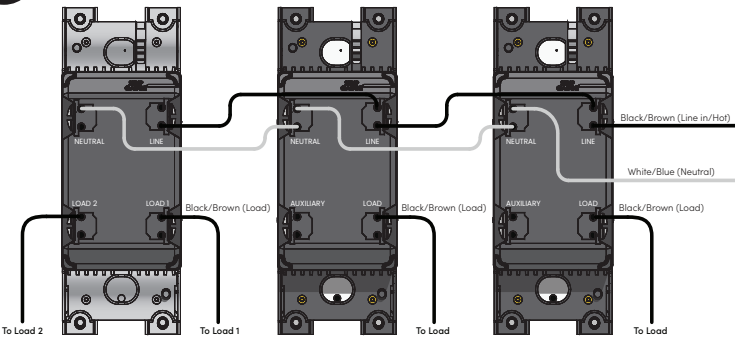5. Connect the ground wire lead from the mounting plate to ground in the box

IMPORTANT! As described in the section *Warnings and Considerations*, DO NOT rely solely upon the mounting plate's contact with a metal wall box for adequate grounding.

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 switch. 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.

TIP: When installing this device in a multi-gang scenario, the Lux multi-gang faceplate kits come with jumpers to easily connect multiple devices.

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 switch 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 switch and cause mechanical malfunction and difficulty mounting the buttons and faceplate.
10. Starting with the bottom button, 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 on the device 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-faceplate-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 switch will illuminate green indicating that the device has power. To set up this dimmer switch for use with a Control4 system, refer to the *Composer Pro User Guide*.

To operate this dimmer switch as a stand-alone device if it is not programmed into a Control4 system:
- Click the top button to toggle the dimmed load.
- Click the bottom button to toggle the switched load.

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 switch 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*

LED feedback for the dimmed load is show in the top 3 LEDs.
LED feedback for the switched load is shown in the bottom 3 LEDs.

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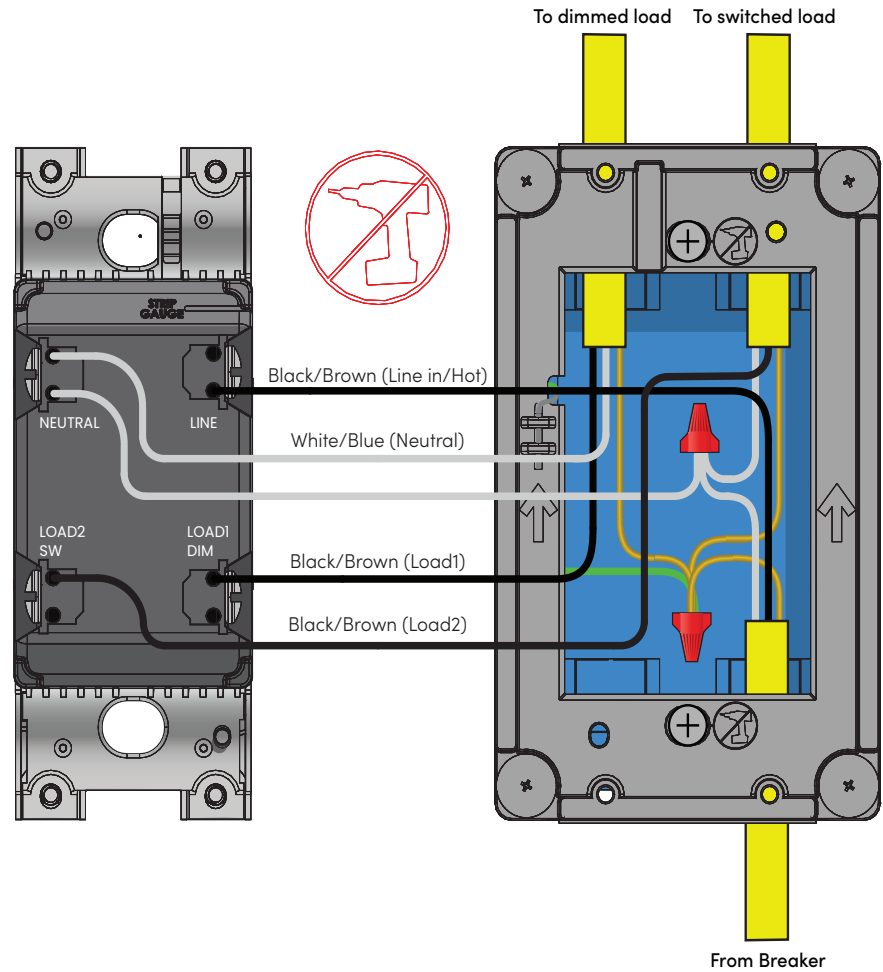- Clean surface of the dimmer switch with a soft damp cloth as needed.

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.

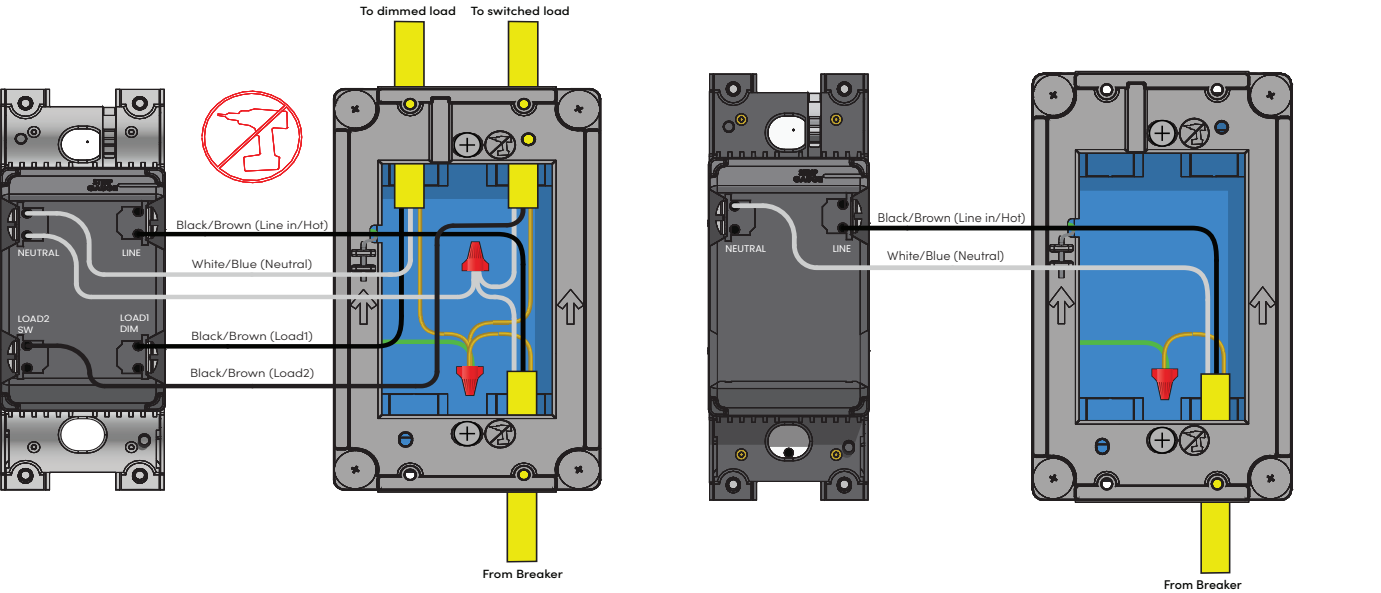Find other legal resources, such as regulatory notices and patent information, at snapone.com/legal.

Sample wiring configurations

Single device location

To dimmed load   To switched load

Black/Brown (Line in/Hot)
White/Blue (Neutral)
NEUTRAL   LINE
LOAD2 SW   LOAD1 DIM
Black/Brown (Load1)
Black/Brown (Load2)

From Breaker

Multiple device location using Configurable Keypad

The Combo Dimmer Switch does not support an Auxiliary Keypad. To control the dimmer switch from another location, use a Configurable Keypad and link the devices in Composer Pro.

To dimmed load   To switched load

Black/Brown (Line in/Hot)
White/Blue (Neutral)
NEUTRAL   LINE
LOAD2 SW   LOAD1 DIM
Black/Brown (Load1)
Black/Brown (Load2)

From Breaker

Black/Brown (Line in/Hot)
White/Blue (Neutral)
NEUTRAL   LINE

From Breaker

More information and help

LASTEST VERION OF THIS DOC
ctrl4.co/lux-cdsw-ig

CONTROL4 LUX QUICK START
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CONTROL4 LUX WIRING GUIDE
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