8-Channel Dimmer Installation Guide

Supported Model

- C4-DIN-8DIM-E 8-Channel Dimmer

Introduction

The Control4® 8-Channel Dimmer controls up to eight (8) devices from one module in the Control4 system. It installs in a panelized backbox using typical wiring standards and communicates to the Control4 system using a CAT5 Ethernet connection.

Box Contents

- 8-Channel Dimmer
- Warranty Card
- *8-Channel Dimmer Installation Guide* (this document)
- *8-Channel Dimmer Wiring Guide*
- *8-Channel Dimmer Operation and Configuration Guide*

Specifications and Supported Fixtures

The specifications are described below.

Model Number	C4-DIN-8DIM-E
Power Requirements	100-277VAC, 50/60 Hz
Line Feeds (Circuits)	1 or 2
Power Consumption	4W
Supported Load Types	Incandescent, Halogen, Electronic Low Voltage Transformers (ELV); Magnetic (Iron Core) Low Voltage Transformers (MLV); Fluorescents; Compact Fluorescents; LEDs; Motors.
Control Communcations	Ethernet

Module Load Ratings in Control4 Panel			
	120V	**240V**	**277V**
Module Max with Two Line-Ins	3200W	6000W	6000W
Line-In 1 Max	1920W	3840W	3840W
Line-In 2 Max	1920W	3840W	3840W
Module Max with One Line-In	1920W	3840W	4400W

Module Load Ratings in Standard DIN Rail Panel			
	120V	**240V**	**277V**
Module Max with Two Line-Ins	1920W	3840W	N/A
Line-In 1 Max	1000W	2000W	N/A
Line-In 2 Max	1000W	2000W	N/A
Module Max with One Line-In	1920W	3840W	N/A

Individual Channel Load Ratings				
		120V	**240V**	**277V**
Incandescent, Tungsten, Halogen, Electronic (Solid State) Low Voltage Transformers (ELV), Magnetic (Iron Core) Low Voltage Transformers (MLV)	Max Dimmable:	1000W	2000W	2300W
	Max Non-dimmable:	500W	1000W	1150W
	Min:	2W	2W	2W
Fluorescent, Compact Fluorescent (CFL)	Max Dimmable:	500W	1000W	1150W
	Max Non-dimmable:	250W	500W	575W
	Min:	2W	2W	2W
LED	Max Dimmable:	200W	400W	460W
	Max Non-dimmable:	200W	400W	460W
	Min:	2W	2W	2W
Motors	Max Dimmable:	N/A	N/A	N/A
	Max Non-dimmable:	1/8 HP	1/8 HP	1/8 HP
	Min:	N/A	N/A	N/A

Connectors	
Sixteen (16) Line Voltage Screw Terminals (Line 1, Line 2, Line 3, Line 4, Neutral, Earth Ground, Loads 1-8, Aux In, Aux Out, unused)	One (1) 26AWG to 12AWG (.12mm² to 4mm²) per terminal
One (1) Ethernet	RJ-45
Environmental	
Operational Temperature	32˚ F - 104˚ F (0˚ C - 40˚ C)
Humidity	5% - 95% Non-condensing
Storage	-4˚ F - 158˚ F (-20˚ C - 70˚ C)
Dimensions	
H x W x D	8.5" x 4.3" x 2.3" (215 mm x 109 mm x 57 mm)
DIN Module Width	12M
Weight	2.8 lbs (1.3 kg)
Shipping Weight	3.2 lbs (1.4 kg)

Warnings and Considerations

WARNING! Turn OFF electrical power to all circuit breakers feeding into the panel before installing or servicing this product. Improper use or installation can cause SERIOUS INJURY, DEATH or LOSS/DAMAGE OF PROPERTY.
ATTENTION! Coupez le courant électrique pour tous les disjoncteurs d'alimentation dans le panneau avant d'installer ou de réparer ce produit. Une mauvaise utilisation ou installation 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 étre protègè par un disjoncteur (20A max.)

WARNING! DO NOT rely solely upon the device's contact with a metal panel for adequate grounding. Use the device's ground terminal to make a secure connection to the safety ground of the electrical system.

ATTENTION! NE COMPTEZ PAS uniquement au contact de l'appareil avec un panneau métallique de mise à la terre. Utilisez la borne de mise à la terre de l'appareil pour d'établir une connexion sécurisée au système électrique.

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

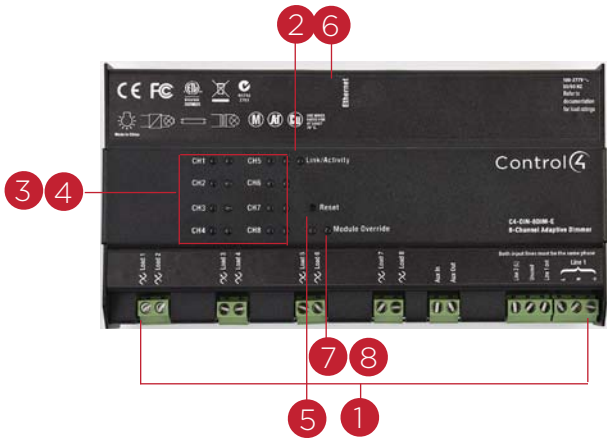
IMPORTANT! The panel used with this device is air cooled. Install the panel in a location where the vented cover is not blocked. At least 12 inches (30cm) clearance is required away from the front of the panel. Some local codes may require as much as 30 inches clearance.

IMPORTANT! Only install this device indoors.

IMPORTANT! Using this product in a manner other than outlined in this document voids your warranty. Further, Control4 is NOT liable for any damage incurred with the misuse of this product. See "Troubleshooting."

IMPORTANT! Changes or modifications not expressly approved by Control4 could void the user's authority to operate the equipment.

Figure 1. Front View



1 Line Voltage Terminals
2 Link/Activity LED
3 Channel Status LEDs
4 Channel Buttons
5 Reset Button (recessed)
6 Ethernet RJ-45 Port
7 Module Status LED
8 Module Override Button

Pre-Installation Instructions

Before You Install in a Control4 Panel

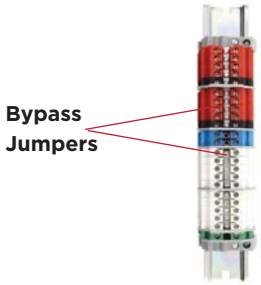
1 Use Composer Pro to add the 8-Channel Dimmer to a project, define its location in a panel, and print the Panel, Module, and/or Load Schedule Reports. See the *Composer Pro User Guide* for details.

2 Install the panel following the instructions in the *5-Slot and 2-Slot Panel Installation Guide*.

3 Install and wire the Terminal Block for the 8-Channel Dimmer (C4-DIN-TB-8DIM) following the instructions in the *Terminal Block Installation Guide* and in the location defined by the Composer Pro Panel Reports.

4 Verify that all bypass jumpers are securely installed in the Terminal Block assemblies. Each 8-Channel Dimmer Terminal Block assembly should have four (4) bypass jumpers installed, connecting each black Terminal Block to four (4) red Terminal Blocks, and connecting each set of five (5) white Terminal Bocks together.

Figure 2. Terminal Block Bypass Jumpers



5 Turn on the circuit breaker(s) feeding the Terminal Block. Verify that the circuit breaker(s) do not trip. If a breaker trips, do not proceed with installation until the problem has been resolved.

6 Turn OFF the circuit breakers for all lines coming into the panel.

7 Remove the two (2) bypass jumpers that connect each black terminal to four (4) red terminals by unscrewing all five (5) screws in each bypass jumper until the entire bypass jumper can be pulled out. (Do NOT remove the bypass jumpers connecting the white Terminal Blocks together.)

IMPORTANT! Store the bypass jumper for possible later use. The bypass jumper should be reinstalled any time the load will be serviced. Test the circuit with the jumper installed prior to removing the jumper again. Damage to the module caused by miswiring is not covered by the warranty.

Before You Install in a Third-Party DIN Rail Panel

1 Install the third-party panel according to the third-party instructions.

2 Install the panel in a well-ventilated area.

IMPORTANT! Test all wiring for short circuits before installing the module. Damage to the module caused by miswiring is not covered by the Control4 warranty.

IMPORTANT! These modules generate heat! Installing the 8-Channel Dimmer in a standard DIN Rail panel requires derating of the modules per the load ratings above. For best results, a ventilated DIN Rail panel should be used.

Installation Instructions

Install in a Control4 Panel

1 The 8-Channel Dimmer should be installed in the panel next to the previously-installed 8-Channel Dimmer Terminal Block. The location of the device in the panel is defined by the Composer Pro Panel Report.

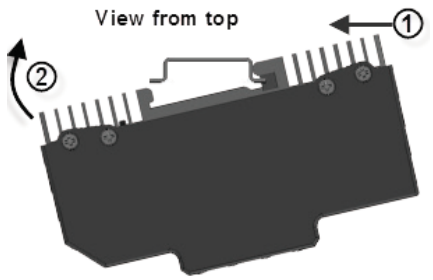
2 With the green screw terminals on the left side of the 8-Channel Dimmer, hold the Dimmer upright and angle it to the right so that the right side of the module fits onto the rail in the panel.

NOTE: The 8-Channel Dimmer installs with the Line Voltage Connector on the left side and the Ethernet port on the right side.

3 With the right side already in place, push forward on the left side of the 8-Channel Dimmer to snap it onto the rail (see Figure 3).

NOTE: To remove the module, push the module toward the left side, pull out from the left side, and remove it from the right side of the rail.

Figure 3. Snap on the 8-Channel Dimmer - Control4 Panels



4 Wire the module according to the wiring diagrams in the *8-Channel Dimmer Wiring Guide* and the reports from Composer Pro.

NOTE: Wiring between the Terminal Blocks and the module will be easiest when stranded wire is used. All wires between the Terminal Block and the 8-Channel Dimmer must use the same gauge wire as the field wiring connected to the Terminal Block.

- At the terminal block side, strip the wires 0.35 in. (9 mm) and tighten to 7 lb-in (0.8Nm).
- At the module side, strip the wires 0.3 in. (7 mm) and tighten to 5.3 lb-in (0.6Nm).

5 On the right side of the 8-Channel Dimmer, connect the Ethernet CAT5 cable to the RJ-45 port.

6 Install the other modules in the panel as defined in the Panel Reports from Composer Pro and their respective installation guide.

7 Turn the circuit breakers back ON and test all connected loads by clicking the channel override buttons.

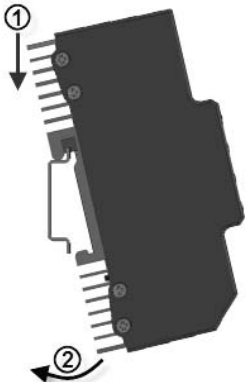
Install in a Third-Party Panel

1 With the green screw terminals facing down, hold the 8-Channel Dimmer lengthwise and angle it up so that the top side of the module fits onto the rail.

NOTE: The 8-Channel Dimmer installs with the Line Voltage Connectors facing down and the Ethernet port facing up.

2 With the top side already in place, rotate the 8-Channel Dimmer down to snap it onto the rail (see Figure 4).

Figure 4. Snap on the 8-Channel Dimmer - Third-Party Panels



NOTE: To remove the module, pull the module out from the bottom, rotate the module up, and lift it off.

3 Wire the module according to the wiring diagram in the *8-Channel Dimmer Wiring Guide* and the reports from Composer Pro.

- Strip the wires 0.3 in. (7 mm) and tighten to 5.3 in-lb (0.6Nm).

4 On the top of the 8-Channel Dimmer, connect the Ethernet CAT5 cable to the RJ-45 port.

5 Install the other modules in the panel as defined in the panel reports from Composer Pro and their respective installation guide.

6 Turn the circuit breakers back ON and test all connected loads by clicking the channel override buttons.

Wiring Diagrams

The wiring diagrams show the wiring details for Control4 8-Channel Dimmers. Refer to the *8-Channel Dimmer Wiring Guide* to view those diagrams.

Operation and Configuration

Refer to the *8-Channel Dimmer Operation and Configuration Guide* for setup, operation, and troubleshooting information.

Regulatory/Safety Information

To review Regulatory information for your particular Control4 products, see the information located on the Control4 website at: http://www.control4.com/regulatory/.

Warranty

For complete warranty information, including details on consumer legal rights as well as warranty exclusions, review the Warranty card or visit www.control4.com/warranty.

About this Document

Part Number: 200-00207, Rev B 3/01/2013

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