4 Channel Universal Dimmer, 1 Feed, DIN Rail Mount



- 4 channels of forward or reverse phase dimming
- Auto load detection
- 120 to 240VAC, 50/60 Hz operation
- Selectable non-dim mode
- Extreme stability in noisy environments
- Short circuit and overcurrent protection
- Primary air-gap relay
- · Override input
- Cresnet® wired communications
- Setup via front panel or software
- Programmable functionality using a Crestron® <u>Control</u> System
- 12M wide DIN rail mounting
- CEC Title 24 2013 Compliant

The Crestron® DIN-1DIMU4 is a 4-channel universal lighting control module designed to support dimming of both forward and reverse phase type loads. A single model supports both 120V and 220-240V electronic and magnetic low-voltage, incandescent, neon/cold cathode, 2-wire dimmable fluorescent, and non-dimmable lighting loads up to 5A per channel, 10A total.

Auto Load Detection

Each channel of the DIN-1DIMU4 is capable of auto-detecting the dimmable load type connected to it and selecting the appropriate operating mode to control that load. Reverse phase (trailing edge) mode supports incandescent and electronic low-voltage load types, while forward phase (leading edge) mode handles magnetic low-voltage, neon, and other inductive load types. A non-dim mode is also selectable for switching of non-dimmable lighting fixtures. Any channel may be set for any mode, allowing one dimmer module to handle any combination of lighting types on four separately controlled circuits.

Phase-Synchronous Detection Circuitry

Proprietary zero cross filter technology provides superior immunity to noise on the power line, reducing lamp flicker, and compensating for fluctuations in line voltage and frequency.

Short Circuit Protection

Built-in OCP (overcurrent protection) prevents failure of the DIN-1DIMU4 caused by excessive loading or improper wiring of the outputs.

Primary Air-Gap Relay

When all four channels are turned fully off, a primary internal relay automatically opens providing air-gap isolation to allow safe servicing and changing of light bulbs on all controlled circuits.

Override Input

An override input is provided to allow an external contact closure to momentarily override the control system program and set each channel output to its override preset level. Levels can be adjusted and saved locally from the front panel or remotely via software.

DIN Rail Installation

The DIN-1DIMU4 is designed to snap onto a standard DIN rail for installation in a wall mount enclosure. Wiring connections are made using screw terminals positioned along the bottom, clearly accessible from the front for easy installation and servicing. All setup controls and indicators are positioned on the center front panel. When installed in an enclosure utilizing 45 mm cutouts, the DIN-1DIMU4's front panel stays accessible while the connections are concealed.

Cresnet® Wired Communication

The DIN-1DIMU4 communicates with a Crestron® <u>Control</u> <u>System</u> using the Cresnet control network. A pair of Cresnet ports is provided on the DIN-1DIMU4 allowing for easy daisy-chaining of several DIN Rail Series automation control modules.



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Specifications		Neutral	(5) Captive screw terminals, blue;
Power			Neutral connections; Accept up to 12 AWG (2.5 mm²) wires
Main Power Input Channels	120 - 240VAC, 50/60Hz 1	DIMMED LIVE 1-4	(4) Captive screw terminals, red; Dimmer channel outputs 1 - 4; Accept up to 12 AWG (2.5 mm²) wires
Load Ratings	4	Ground	(5) Captive screw terminals, green; Ground connections;
Dimmer Channels	7		Accept up to 12 AWG (2.5 mm²) wires
Maximum per	5A @ 120 to 240VAC, 50/60 Hz; 600 W @ 120VAC; 1150 W @ 230VAC; 1200 W @ 240VAC	Controls and Indicators	
•		NET ID	(2) 7-Segment green LED digits and(2) miniature pushbuttons;For setting Cresnet ID; digits also display
Module Total	10A @ 120 to 240VAC, 50/60 Hz; 1200 W @ 120VAC; 2300 W @ 230VAC; 2400 W @ 240VAC	CETUD	output levels and protection/error codes
		SETUP	(1) Red LED and (1) recessed miniature pushbutton;For enabling setup mode and touch-
Load Types	Forward Phase (leading edge) or Reverse Phase (trailing edge) Electronic Low Voltage, Incandescent, Neon/Cold Cathode, Magnetic Low Voltage, Dimmable 2-Wire Fluorescent, and Non- Dim Lighting		settable ID
		OVR	(1) Red LED and (1) miniature pushbutton; For enabling override mode and saving override presets
Minimum Load	15 W per channel for Incandescent loads; 50 W per channel for Magnetic Low Voltage loads with Halogen or LED Lamps;	PWR	(1) Green LED; Lights to indicate AC line power is connected to either LIVE terminal, flashes when only powered by Cresnet
	50 W for AC Dimmable LED loads operated in Auto/Forward-Phase Mode; 15 W for AC Dimmable LED loads operated in Reverse-Phase Mode	NET	(1) Yellow LED; Indicates communication with the control processor
		RESET	(1) Recessed miniature pushbutton; Resets internal processor
Cresnet	Cresnet secondary mode	FWD 1-4	(4) Red LEDs; Lights when a corresponding channel is operating in forward-phase mode
Connectors		REV 1-4	(4) Red LEDs;
NET	(2) 4-pin 3.5 mm detachable terminal blocks, paralleled;		Lights when a corresponding channel is operating in reverse-phase mode
	Uses 0.6 W (0.03A @ 24VDC) when line power is not available; Cresnet® secondary port	AUTO 1-4	(4) Red LEDs; Lights when a corresponding channel is set to auto-detect the load type
OVERRIDE	(2) 2-pin 3.5 mm detachable terminal blocks, paralleled; Sensing input for external low-voltage contact closure; Activates override mode when a closure is present; Minimum Closure Pating: 10mA (per	NON-DIM 1-4	(4) Red LEDs; Lights when a corresponding channel is operating in non-dim mode
		Channel Mode Select 1-4	(4) Recessed miniature pushbuttons; Used to select each channel's operating mode
Live	Minimum Closure Rating: 10mA (per module) at 24V (2) Captive screw terminals, brown; Line power connections;	LOADS 1-4	(4) Red LEDs and (4) miniature pushbuttons; Status indication and local control of each channel



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Environmental

Temperature

32° to 104°F (0° to 40°C)

Humidity

10% to 90% RH (noncondensing)

Heat Dissipation

60 BTU/hr @ 240V with 2 channels at 5A 50 BTU/hr @ 120V with 2 channels at 5A

Construction

Enclosure

Aluminum with polycarbonate label overlay

Mounting

35 mm DIN EN 60715 rail mount, DIN 43880 form factor for enclosures with 45 mm front panel cutout, occupies 12 DIN module spaces (216 mm)

Sufficient ventilation is required to maintain an ambient temperature not exceeding 104°F (40°C), the unit dissipates significant heat when fully loaded;

Maintain 4 in. (102 mm) spacing (minimum) or 6 in. (153 mm) spacing (recommended) above and below for proper ventilation and heat dissipation

Dimensions

 Height
 3.71 in. (95 mm)

 Width
 8.48 in. (216 mm)

 Depth
 2.35 in. (60 mm)

Weight

2.23 lb (36 oz)

Compliance

FCC Part 15 Class B, IC Class B, CE, UL® Listed for US and Canada

To search for product certificates, refer to support.crestron.com/app/certificates.

Model

DIN-1DIMU4

4 Channel Universal Dimmer, 1 Feed, DIN Rail Mount

Available Accessories

For a list of available accessories, visit the $\frac{\text{DIN-1DIMU4}}{\text{product page}}$

This product may be purchased from select authorized Crestron dealers and distributors. To find a dealer or distributor, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/How-To-Buy/Find-a-Representative or contact us for additional information by visiting www.crestron.com/contact/our-locations for your local contact.

The original language version of this document is U.S. English. All other languages are a translation of the original document.

The product warranty can be found at www.crestron.com/warranty.

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