

DIN-1DIMU4

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® [Control 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® [Control System](#) 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

Power

Main Power	120 - 240VAC, 50/60Hz
Input Channels	1

Load Ratings

Dimmer Channels	4
Maximum per Channel	5A @ 120 to 240VAC, 50/60 Hz; 600 W @ 120VAC; 1150 W @ 230VAC; 1200 W @ 240VAC
Module Total	10A @ 120 to 240VAC, 50/60 Hz; 1200 W @ 120VAC; 2300 W @ 230VAC; 2400 W @ 240VAC
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
Minimum Load	15 W per channel for Incandescent loads; 50 W per channel for Magnetic Low Voltage loads with Halogen or LED Lamps; 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

Communications

Cresnet	Cresnet secondary mode
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Connectors

NET	(2) 4-pin 3.5 mm detachable terminal blocks, paralleled; Uses 0.6 W (0.03A @ 24VDC) when line power is not available; Cresnet® secondary port
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 Rating: 10mA (per module) at 24V
Live	(2) Captive screw terminals, brown; Line power connections; Accept up to 12 AWG (2.5 mm²) wires

Neutral	(5) Captive screw terminals, blue; Neutral connections; Accept up to 12 AWG (2.5 mm²) wires
DIMMED LIVE 1-4	(4) Captive screw terminals, red; Dimmer channel outputs 1 - 4; Accept up to 12 AWG (2.5 mm²) wires
Ground	(5) Captive screw terminals, green; Ground connections; Accept up to 12 AWG (2.5 mm²) wires

Controls and Indicators

NET ID	(2) 7-Segment green LED digits and (2) miniature pushbuttons; For setting Cresnet ID; digits also display output levels and protection/error codes
SETUP	(1) Red LED and (1) recessed miniature pushbutton; For enabling setup mode and touch-settable ID
OVR	(1) Red LED and (1) miniature pushbutton; For enabling override mode and saving override presets
PWR	(1) Green LED; Lights to indicate AC line power is connected to either LIVE terminal, flashes when only powered by Cresnet
NET	(1) Yellow LED; Indicates communication with the control processor
RESET	(1) Recessed miniature pushbutton; Resets internal processor
FWD 1-4	(4) Red LEDs; Lights when a corresponding channel is operating in forward-phase mode
REV 1-4	(4) Red LEDs; Lights when a corresponding channel is operating in reverse-phase mode
AUTO 1-4	(4) Red LEDs; Lights when a corresponding channel is set to auto-detect the load type
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
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

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Available Accessories

For a list of available accessories, visit the [DIN-1DIMU4](#) 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.

The specific patents that cover Crestron products are listed online at www.crestron.com/legal/patents.

Certain Crestron products contain open source software. For specific information, please visit www.crestron.com/opensource.

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