

DIN-1DIMU4

DIN Rail Universal Dimmer

The 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 120 and 220-240 Volt electronic and magnetic low-voltage, incandescent, neon/cold cathode, 2-wire dimmable fluorescent, and non-dimmable lighting loads up to 5 Amps per channel, 10 Amps 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

Crestron's 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 (over current protection) prevents failure of the DIN-1DIMU4 caused by excessive loading or improper wiring of the outputs.

Master Air-Gap Relay

When all four channels are turned fully off, the internal master relay automatically opens providing air-gap isolation to allow safe servicing and changing of light bulbs on all four 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®

The DIN-1DIMU4 communicates with a **DIN-AP2** 2-Series Automation Processor, or other Crestron 2-Series control system, via 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.

> 4 channels of forward or reverse phase dimming



- > Auto load detection*
- > 120 to 240 Volt 50/60 Hz operation*
- > Selectable non-dim mode*
- > Extreme stability in noisy environments*
- > Short circuit and overload protection*
- > Master air-gap relay*
- > Override input*
- > Cresnet communications*
- > Setup via front panel or software*
- > Programmable functionality via DIN-AP2*
- > 12M wide DIN rail mounting*

SPECIFICATIONS

Load Ratings

Dimmer Channels: 4

Maximum Per Channel: 5 Amps @ 120 to 240 Volts AC, 50/60 Hz;
600 Watts @ 120 Volts AC;
1150 Watts @ 230 Volts AC;
1200 Watts @ 240 Volts AC

Module Total: 10 Amps @ 120 to 240 Volts AC, 50/60 Hz;
1200 Watts @ 120 Volts AC;
2300 Watts @ 230 Volts AC;
2400 Watts @ 240 Volts AC

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, & Non-Dim Lighting

Input Voltage

Line Power: 120 to 240 Volts AC, 50/60 Hz

Connections

NET: (2) 4-pin 3.5mm detachable terminal blocks, paralleled;
Cresnet slave port

OVERRIDE: (2) 2-pin 3.5mm 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 24 Volts

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NEUTRAL: (5) Captive screw terminals†, blue
DIMMED LIVE 1 - 4: (4) Captive screw terminals†, red;
Dimmer channel outputs 1 - 4
Ground: (5) Captive screw terminals†, green

Controls & 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, normally indicates AC line power is connected to either LIVE terminal, blinks 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, illuminate when a corresponding channel is operating in forward-phase mode

REV 1 - 4: (4) Red LEDs, illuminate when a corresponding channel is operating in reverse-phase mode

AUTO 1 - 4: (4) Red LEDs, illuminate when a corresponding channel is set to auto-detect the load type

NON-DIM 1 - 4: (4) Red LEDs, illuminate 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 for status indication and local control of each channel

Enclosure

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

Power Requirements

Cresnet Power Usage: 0.6 Watts (0.03 Amps @ 24 Volts DC) when line power is not available

Environmental

Temperature: 32° to 104°F (0° to 40°C)

Humidity: 10% to 90% RH (non-condensing)

Heat Dissipation: 60 BTU/hr @240 Volts with 2 channels at 5 Amps;

50 BTU/hr @ 120 Volts with 2 channels at 5 Amps

Dimensions

Height: 3.71 in (9.42 cm)

Width: 8.49 in (21.55 cm)

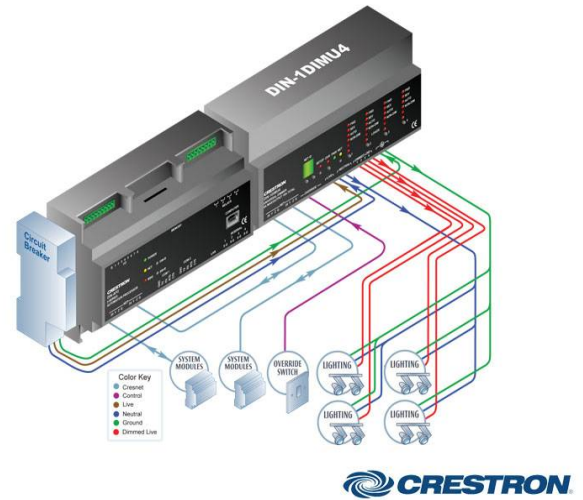
Depth: 2.35 in (5.95 cm)

Weight

2.1 lb (912 g)

Typical DIN-1DIMU4 Application

DIN-1DIMU4 Example Application



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