

# CLS-EXP-DIMU

## iLux® Universal Dimmer Expansion Module

- > Works with Crestron iLux®, CLW<sup>[2]</sup>, DIN, and CLX series dimmers
- > Emulates the characteristics of the dimmer that is controlling it
- > Up to 5 Expansion Modules can be connected to a single iLux dimmer channel
- > Supports 120, 230, and 277 Volt LED<sup>[1]</sup>, ELV, MLV, NCC, incandescent, and 2-wire dimmable fluorescent loads
- > Auto-selects for forward or reverse phase
- > Includes threshold adjustment for setting minimum fluorescent dimming level
- > Built-in air gap relay at the output
- > Mounts to a wall or above a suspended ceiling
- > CEC Title 24 2013 Compliant

The CLS-EXP-DIMU enables the expansion of Crestron iLux® Integrated Lighting System (CLS-C6 series) and other Crestron® lighting dimmers to allow dimming of both forward and reverse phase type loads. Supported loads include LED<sup>[1]</sup>, electronic low-voltage, magnetic low-voltage, incandescent, neon/cold cathode, or 2-wire dimmable fluorescent. A single model supports 120, 230, or 277 Volt loads up to 16 Amps.

The CLS-EXP-DIMU simplifies installation by 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.

Any output channel of the iLux system can be used to control the CLS-EXP-DIMU to dim a fully loaded circuit. It is also compatible with CLW-Series<sup>[2]</sup> in-wall dimmers and select CLX-Series lighting control modules<sup>[3]</sup>. The metal enclosure is designed for mounting to a vertical surface<sup>[4]</sup>, and can be installed in an environmental air-handling space above a suspended ceiling. Conduit knockouts are provided on the bottom and lower sides. All connections are made via screw terminals behind the front cover.

## SPECIFICATIONS

### Load Ratings

**Dimmer Channels:** 1

**Load Rating:** 16 Amps

**Minimum Load:** 25 Watts

**Load Types:** LED<sup>[1]</sup>, electronic low voltage, incandescent, neon/cold cathode, magnetic low voltage, 2-wire dimmable fluorescent (Advance Mark 10 Powerline® or equivalent)

### Input Voltages

**Line Power:** 120 to 277 Volts AC, 50/60 Hz

**Control Input:** 120 or 230 Volts AC, 50/60 Hz, phase independent of line power and load



### Connections

**INPUT, CTRL:** (1) Captive screw terminal<sup>[5]</sup>, control input from CLS(I)-C6 Series, CLW-DIM Series<sup>[2]</sup>, CLX(I)-DIM Series, GLX-DIM6, GLXX-2DIM8, DIN-1DIM4, or DIN-1DIMU4 dimmers;

**Note:** Presents a 25 Watt load to the controlling dimmer; a maximum of 5 CLS-EXP-DIMU modules may be connected to the controlling dimmer, which cannot be wired to control any other loads besides the CLS-EXP-DIMU modules

**INPUT, NEUT:** (1) Captive screw terminal<sup>[5]</sup>, neutral connection for control input

**OUTPUT, DIM OUT:** (1) Captive screw terminal<sup>[5]</sup>, dimmed load output

**OUTPUT, HOT:** (1) Captive screw terminal<sup>[5]</sup>, line power input

**OUTPUT, NEUT:** (1) Captive screw terminal<sup>[5]</sup>, neutral connection for line power input and load

**GROUND:** (1) 3-terminal chassis ground bus bar

### Controls & Indicators

**FLUORESCENT OFF THRESHOLD:** (1) recessed screwdriver-adjustable trim pot behind removable cap, adjusts minimum brightness level

**PHASE:** (1) Yellow LED behind front panel, illuminates when operating in reverse-phase mode

**STATUS:** (1) Red LED behind front panel, illuminates when load output is on

**POWER:** (1) Green LED behind front panel, indicates line power is applied to the HOT terminal

**S1:** (1) 2-position DIP switch behind front panel; selects forward, reverse, or auto-detect dimming mode

**S2:** (1) 2-position DIP switch behind front panel; enables/disables zero-cross detection filter

### Enclosure

Surface mount<sup>[4]</sup> module with (2) integral mounting flanges, galvanized steel w/gray matte powder coat front panel, extruded aluminum heat sink, (4) 1/2" or 3/4" conduit knockouts provided on bottom and lower left & right sides

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## Environmental

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

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

**Heat Dissipation:** 200 BTU/Hr at maximum load, 16A

## Dimensions

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**Height:** 8.82 in (224 mm)

**Width:** 6.39 in (163 mm)

**Depth:** 3.18 in (81 mm)

## Weight

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3.34 lb (1.52 kg)

## Standards & Certifications

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UL Listed

CEC Title 24 2013 Compliant

## MODELS

### Available Models

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**CLS-EXP-DIMU:** iLux® Universal Dimmer Expansion Module

Notes:

1. For a list of compatible ballasts, visit [www.crestron.com/lightingcompatibility](http://www.crestron.com/lightingcompatibility) (PDF)
2. CLW-Series device must have a dedicated neutral.
3. Compatible only with forward-phase dimming modules.
4. Must be oriented upright, mounted to a vertical surface, with 6 inches (153 mm) minimum spacing above and below for proper ventilation and heat dissipation.
5. Captive screw terminals accept up to two 22 to 12 AWG (0.34 to 4.0 mm<sup>2</sup>) wires per terminal.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at [www.crestron.com/salesreps](http://www.crestron.com/salesreps) or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: [patents.crestron.com](http://patents.crestron.com).

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# CLS-EXP-DIMU iLux® Universal Dimmer Expansion Module

## CAD DRAWINGS

