SECTION 27 41 16

INTEGRATED AUDIO-VIDEO SYSTEMS AND EQUIPMENT

GUIDE SPECIFICATION

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Specifier: Please see PART 4 for a listing of products specified in this Guide Specification.

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# GENERAL

NOT USED in this Guide Specification. Specifier shall Specify PART 1 administrative and procedural requirements as needed.

# PRODUCTS

## Wired Universal Dimmer Module

Specifier Note:

*The ZUMLINK-EXP-16A-DIMU is a single-channel universal dimmer module designed to control a wide range of dimmable lighting load types. Using proprietary zero-cross filter technology, the ZUMLINK-EXP-16A-DIMU provides superior immunity to power line noise, resulting in a dramatic reduction of lamp flicker.*

### Basis of Design

#### Crestron ZUMLINK-EXP-16A-DIMU

### Device Definition

#### Single-channel Universal Dimmer Module with the following capabilities:

##### Rated 16 A at 100-277 VAC

##### Auto-Detecting universal dimming

###### Supports dimmable LED, incandescent, electronic low-voltage, magnetic low-voltage, neon / cold cathode, and 2-wire fluorescent lighting loads

###### Forward, reverse, and center phase dimming modes

###### Proprietary zero cross filter for reduced lamp flicker

###### Stability under noisy power line conditions

##### Proprietary wired lighting control via CAT5e cable

###### Lighting control supports daisy chaining of devices

##### Integration with occupancy, vacancy, and daylight sensors for energy efficient operation

##### Plenum rated NEMA Type 1 enclosure, mounts on to wall panel or above suspended ceiling

##### Built-in air gap relay

##### Meets UL 508 standard for industrial control equipment

##### Meets CEC Title 24 energy efficiency standards

##### Meets ASHRAE® 90.1 energy efficiency standards

##### ICC® International Energy Conservation Code® compliant

### Device Architecture

#### Environmental

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

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

#### Construction

##### Housing

###### NEMA Type 1, galvanized steel

Gray matte powder coated removable front cover panel

Extruded aluminum heat sink on rear

(2) integral mounting flanges

(4) ½” or ¾” conduit knockouts on bottom and lower left & right sides

##### Mounting: Surface mount

###### Must be oriented upright and mounted to a vertical surface with 6” (153 mm) minimum spacing above and below for proper ventilation and heat dissipation

#### Dimensions

##### Height: 8.80 in. (223 mm)

##### Width: 6.40 in. (162 mm)

##### Depth: 3.17 in. (80 mm)

#### Weight

##### 3.43 lb. (1.56 kg)

### Functions

#### Communications

##### Proprietary in-room control

#### Load Control

##### Dimmer Channels: 1

##### Load Rating: 16 A

##### Line / Load Voltage: 100-277 VAC, 50 / 60 Hz

##### Dimmable Load Types: Incandescent, LED, electronic low-voltage, magnetic low-voltage, neon / cold cathode, 2-wire fluorescent

### Connections

#### ZUMLINK: (2) RJ-45 orange ports for proprietary in-room lighting control system

#### 24V, OCC, GND: Occupancy sensor input; 85 mA available output current, spring clamp connector

#### 24 V, PHO, GND: Photo sensor control input; spring clamp connector

#### OVR, GND: Override control input; spring clamp connector

#### NEUT: (3) Captive screw terminals; neutral connections for feed and load; 24 to 10 AWG (0.25 to 4.0 mm^2) wire size

#### LINE: (2) Captive screw terminals; Line power feed input and pass-through; 24 to 10 AWG (0.25 to 4.0 mm^2) wire size

#### LOAD: (1) Captive screw terminal; dimmed load output; 24 to 10 AWG (0.25 to 4.0 mm^2) wire size

#### Ground: (1) 3-terminal grounding block

### Controls and Indicators

#### TEST

##### (1) Pushbutton and (1) green LED

##### Press and release the button to toggle the load output on and off

##### Press and hold to cycle the dimming level up and down

##### LED indicates the load output is energized, also used for room setup and factory reset

#### DIM MODE

##### (1) Pushbutton (behind cover)

##### Press to cycle through dimming modes

##### Auto detect (default), reverse phase, forward phase, or center phase

#### AUTO: (1) Red LED, indicates auto load type detection is selected and enabled

#### REV: (1) Red LED, indicates reverse phase mode is enabled (automatically or manually)

#### FWD: (1) Red LED, indicates forward phase mode is enabled (automatically or manually)

#### CENTER: (1) Red LED, indicates center phase mode is enabled (manually)

#### ZEROCROSS FILTER: (1) Pushbutton (behind cover), press to select zero-cross detection mode

#### BASIC: (1) Green LED (behind cover), indicates when using basic zero-cross detection

#### FILTER: (1) Green LED (behind cover), indicates when using filtered zero-cross detection (default)

#### RESET: (1) Pushbutton (behind cover), initiates hardware reset

#### LINK

##### (1) bi-color green / red LED

##### LED lights green in normal operation

##### LED lights red when a fault is detected

#### ERROR: (1) Red LED, indicates a variety of error conditions via blinking patterns

#### PWR Status: (1) Green LED (behind cover), indicates line power is applied to either LINE terminal

### Compliance

#### Regulatory Model: M202108001

#### IC, FCC Part 15 Class A digital device, UL508

# EXECUTION

NOT USED in this Guide Specification. Specifier shall Specify PART 3 On-Site work as needed.

# APPENDICES

## SPECIFIED PRODUCTS

Specifier Note: This Article includes Crestron products specified in this Guide Specification document. This Article is for reference only and should not be required in actual project manual unless included in an overall system equipment list.

### Crestron ZUMLINK-EXP-16A-DIMU

## Input / Output Connection Diagrams

### ZUMLINK-EXP-16A-DIMU

