

Type(s) Project

> Date Notes

GENERAL INFORMATION

The Echoflex Tri-Zone Dimming Controller, model ELED3 is a wireless lighting controller designed for today's wide variety of LED fixtures. It includes 0–10 V output channels for three dimming zones and a robust relay for ON/OFF control of the larger controlled space.

The ELED3 is ideal for spaces where multiple daylighting or dimming zones are required for energy code compliance. Typical applications include spaces with side lighting or skylights like open office areas, classrooms, boardrooms, and conference rooms.

The controller supports both open or closed-loop photo sensing applications assigning two outputs as daylighting channels. The primary daylighting channel includes a set point while the secondary daylighting channel uses an offset from set point, both values configurable. Using Simple Tap, the primary daylighting channels set point can be quickly set based on the natural light in the space. The secondary channel will automatically lag the primary channels daylighting response providing consistent dimming across the day-lit area. The third channel always operates independently from the daylighting routine, as can all channels when daylighting is not required.

The controller is a nipple mount power-pack style controller operating lights based on room occupancy state, manual switch operation, ambient light level and gateway commands.

Echoflex ELED products include preset functionality that allows spaces to be lit with lighting scenes. Presets can be activated from scene stations, wireless timeclocks or gateways. A lockout feature allows timeclocks to schedule a controller's response to specific sensor types or stations based on time-of-day.

APPLICATIONS

- Education: Classrooms, learning assistance
- Restaurants: Dining rooms, banquet halls
- Healthcare: Exam rooms, clinical environments
- Commercial office: Conference and meeting rooms
- Retail: Showcase displays

ORDERING INFORMATION

Tri-Zone Dimming Controller

| MODEL | DESCRIPTION |
|-------------------|---|
| ELED3-BU 120-277 | Tri-Zone Dimming Controller, 1/2 in nipple mount, 120–277 VAC |
| ELED3H-AU 240-347 | Tri-Zone Dimming Controller, 1/2 in nipple mount, 240–347 VAC |

FEATURES

- Three outputs for 0–10 V dimming control
- Integrated daylight harvesting control with photo inhibit mode
- Occupancy state options of automatic partial-ON control or vacancy control with manual-ON, partial/full-OFF
- Automatically detects dimming loads to easily shift between switching and dimming functions
- Multiple embedded preset values allow lighting scene recall
- Lockout feature allows masking of sensor inputs based on time-of-day events
- Used with battery-free wall switches, photo sensors and occupancy sensors
- Pre-linking and pre-commissioning available when sold as a system through Echoflex
- Central Command support for Building Energy Management System (BEMS) gateway or timeclock control
- Easy installation on electrical junction boxes with 1/2 in nipple mount
- Easy commissioning options include embedded Simple Tap technology plus Garibaldi Pro, Echoflex's remote commissioning software
- Doubles as a telegram repeater
- Energy code compliant factory defaults



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SPECIFICATIONS

HARDWARE

- Power supply: (ELED3)120–277 VAC or (ELED3H) 240–347 VAC at 50/60 Hz, 1 pole
- Power consumption: (ELED3) 950 mW max. (no load), (ELED3H) 500 mW max. (no load)
- Inputs: LEARN and CLEAR buttons
- Outputs: Two Tri-Color LED indicators, Learn and Power
- Maximum dimming load: 0–10 V with 100 mA sinking current

SAFETY STANDARDS MAXIMUM LOAD: TYPE AND RATING

- Electronic ballast or LED driver:
 - ELED3: 16 A at 120-277 VAC
 - ELED3H: 16 A at 240-347 VAC
- Standard / Magnetic ballast:
 - ELED3: 20 A at 120–277 VAC
 - ELED3H: 20 A at 240-347 VAC

COMMUNICATIONS

- 902 MHz (U) radio frequency
- Wireless range of up to 24 m (80 ft) commercial office spaces (typical), up to 100 m (330 ft) line-of-sight
- Integrated whip antenna

ENVIRONMENTAL

- Operating temperature: -5°C to 50°C (23°F to 122°F) ambient
- Relative humidity: 5%–93% non-condensing, indoor use only

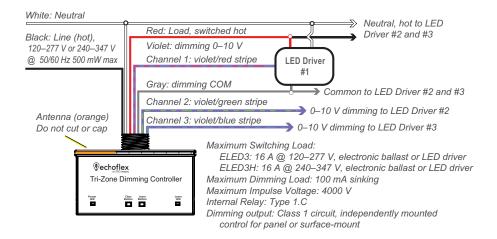
REGULATORY AND COMPLIANCE

- California Energy Commission Title 24 CEC
- Washington State Energy Code WSEC
- ANSI / ASHRAE / IES Standard 90.1
- International Energy Conservation Code IECC
- New York City Energy Conservation Code NYCECC
- UL Standards: UL 924, UL 60730, UL 2043 Plenum rated
- Certified to CAN/CSA Std. E60730
- FCC Part 15.231 Remote Control Transmitter
- Industry Canada RSS-210

Remote Devices Supported

| MODEL | DESCRIPTION | | | |
|---------------------|--|--|--|--|
| EEP: F6-02-02 | Light and Blinds Control - EU and US/Canada applications | | | |
| EEP: F6-04-01 | Keycard activated switch | | | |
| EEP: A5-06- (01-05) | Light Sensor | | | |
| EEP: A5-07-01 | Occupancy Sensor - with supply voltage | | | |
| EEP: A5-37-01 | Energy Management - Demand Response | | | |
| EEP: A5-30-02 | Window or door contact | | | |
| EEP: A5-38-08 | Central Command - switching, dimming, set point | | | |
| MSC | Structured Command, manufacturer specific, contact Echoflex for more details | | | |

WIRING DIAGRAM



PHYSICAL

Tri-Zone Dimming Controller Weight and Dimensions[†]

| MODEL | HEIGHT | | WIDTH | | DEPTH | | WEIGHT | |
|----------|--------|-----|-------|-----|-------|-----|--------|----|
| | mm | in | mm | in | mm | in | g | OZ |
| ELED3(H) | 50 | 2.0 | 91 | 3.6 | 50 | 2.0 | 397 | 14 |

 † Note: Mounts in typical flush-mount North American style two-gang electrical boxes, minimum depth 50 mm (2.0 in)

