Echoflex

Tunable White Dimming Controller



Type(s)
Project
Date

Notes

GENERAL INFORMATION

The Tunable White Dimming controller, model ELED2, is designed for lighting fixtures with adjustable intensity and tunable white color control. Two 0–10 V outputs and a 20 A relay ensure single fixture or entire zone control can easily be accommodated with one controller. The ELED2 delivers versatile control for commercial lighting applications with nationwide energy code compliance

All ELED2 models deliver common lighting control sequences based on occupancy state, switch action, timeclock, gateways, ambient light, and correlated color temperature (CCT) levels.

Echoflex products include preset functionality allowing spaces to be lit with *lighting scenes* that provide desired light intensity and color temperature. A lockout feature allows timeclocks to schedule a controller's response to specific sensor types or stations based on time-of-day.

The ELED2 provides control of electrical circuits from 120 VAC through to 277 VAC and the ELED2H operates from 240 VAC to 347 VAC.

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

Tunable White Dimming Controller

MODEL	DESCRIPTION
ELED2-BU 120-277	Tunable White Dimming Controller, 1/2 in nipple mount, 120–277 VAC
ELED2H-AU 240-347	Tunable White Dimming Controller, 1/2 in nipple mount, 240–347 VAC

FEATURES

- Designed for LED fixtures with two 0–10 V channels delivering dimming and tunable white color temperature control
- Integrated daylight harvesting control supporting open and closed loop applications
- Multiple embedded preset values allow lighting scene recall
- Lockout feature allows masking of sensor inputs based on time-of-day events
- Occupancy state options of automatic partial-ON control or vacancy control with manual ON, partial/full-OFF
- Central Command support for BEMS gateway or timeclock control
- Dynamic CCT set point, dim-to-warm, or manual control of tunable white color temperature LED fixtures
- Pre-linking and pre-commissioning available when sold as a system through Echoflex
- Easy commissioning options include embedded Simple Tap technology plus Garibaldi Pro, Echoflex's remote commissioning software
- Easy installation on electrical junction boxes with 1/2 in nipple mount
- Energy code compliant



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SPECIFICATIONS

HARDWARE

- Power supply: (ELED2)120–277 VAC or (ELED2H) 240–347 VAC at 50/60 Hz, 1 pole
- Power consumption: (ELED2) 950 mW max. (no load), (ELED2H) 500 mW max. (no load)
- Inputs: LEARN and CLEAR buttons
- Outputs: 2 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:
 - ELED2: 16 A at 120-277 VAC
 - ELED2H: 16 A at 240-347 VAC
- Standard / Magnetic ballast:
 - ELED2: 20 A at 120-277 VAC
 - ELED2H: 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

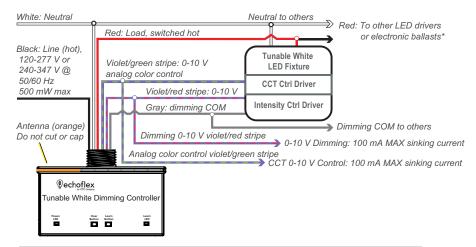
REGULATORY AND COMPLIANCE

- 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: D2-14-25	Light Sensor and correlated color temperature
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 DIAGRAMS



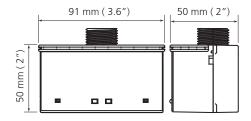
*Maximum Switching Load						
ELED2 20 A @ 120	22 20 A @ 120-277 V, electronic ballast or LED driver					
ELED2H 20 A @ 240-277 V, electronic ballast or LED driver						
ELED2H 16 A @ 347 V, electronic ballast or LED driver						
Max. Dimming Load	100 mA sinking					
Max. Impulse Voltage	4000 V					
Internal Relay	Type 1.C					
Dimming Output	Class 1 circuit independently mounted control for panel-mount/surface-mount					

PHYSICAL

Tunable White Dimming Controller Weight and Dimensions[†]

MODEL	HEIGHT		WIDTH		DEPTH		WEIGHT	
	mm	in	mm	in	mm	in	g	OZ
ELED2(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 51 mm (2.0 in)





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