



Type(s)

Project

Date

Notes

GENERAL INFORMATION

The Horticultural Luminaire Controller (ELED1-RHL) is a wireless power pack style lighting controller designed to operate with today's dimmable luminaires. Combining a 120–277 VAC input, 0–10 V dimming capability, and a rugged load relay, this ELED1 is ideal for individual fixture or single zone horticultural lighting control. The controller provides fixture intensity and control based on manual switch action, ambient light levels, and gateway or time clock commands. The ELED1 meets industry needs for performance, savings, and easy installation.

Daylighting control with support for RAYN Growing Systems' sensors (RMS and RPS), the controller delivers responsive control of ambient light conditions for agricultural environments. Detection on the low voltage dimming interface adjusts operation to switching or dimming automatically. Energy code support is defined within factory default settings, ensuring out-of-the-box, nationwide compliance.

The ELED1-RHL includes preset functionality that allows spaces to be lit with lighting scenes. Presets can be activated from scene stations, wireless time clocks or gateways. A lockout feature allows time clocks to schedule a controller's response to specific sensor types or stations based on time-of-day.

Echoflex offers pre-commissioning on all products sold as a system through Echoflex. Simple Tap technology allows installers and facility operators to configure settings without any special tools. The controller is supported by Garibaldi Pro, Echoflex's in-field commissioning software. Garibaldi Pro makes it easy to adjust to the controller's operation on-site in real time.

APPLICATIONS

- Greenhouses
- Controlled environmental agriculture
- Indoor living plant displays
- Plant walls and atriums

FEATURES

- Individual fixture or single zone control with 0–10 V dimming
- Integrated daylight harvesting control with support of lux or PPFD sensor values
- Automatically detects dimming loads to easily adapt to switching or dimming functions
- Built-in preset values can be used to create lighting scenes driven by wall station, time clock or gateway command
- Lockout control allows scheduling of linked responsive devices
- Pre-linking and pre-commissioning available when sold as a system through Echoflex or RAYN Growing Systems
- Easy installation on electrical junction boxes with 1/2 in nipple mounting bracket
- Easy commissioning options include embedded Simple Tap technology plus Garibaldi Pro, Echoflex's in-field commissioning software
- Meets the latest revisions of California Title 24, IECC and ASHRAE 90.1 requirements

ORDERING INFORMATION

Horticultural Luminaire Controller

MODEL	DESCRIPTION
ELED1-RHL 120-277	Horticultural Luminaire Controller, 1/2 in Nipple Mount, 120–277 VAC

Equipment Profiles - Remote Devices Supported

EEP	DESCRIPTION
F6-02-01/02	Light and Blinds Control - EU and US/Canada applications
D2-14-25	Light Sensor and Correlated Color Temperature (CCT)
A5-06- (01-05)	Light Sensor
A5-07-01	Occupancy Sensor - with supply voltage
A5-37-01	Energy Management - Demand Response
A5-38-08	Central Command - switching, dimming, set point types
D2-14-56	Light, Color Temperature (CCT), and photosynthetic photon flux density (PPFD) Sensor
D2-15-5E (pending)	Greenhouse multi-sensor
MSC	Structured Command, manufacturer specific, contact Echoflex for details

SPECIFICATIONS

ELECTRICAL

- Power supply: 120–277 VAC, 60 Hz
- Power consumption: 1.0 W, fully-loaded
- Inputs: Clear and Learn buttons for resetting and device assignment
- Outputs: LED indicators, Power (red), Learn (green)
- Maximum dimming load: 0–10 V with 100 mA sinking current
- Inrush current rating: 500 A/2 ms at 277 VAC (I²t: 460 A²s at 277 VAC)
- Safety standards maximum load: Type and rating
 - Electronic ballast: 11.5 A at 120–277 VAC
 - LED driver: 11.5 A at 120–277 VAC

MECHANICAL

- Ambient operating temperature: -10°C to 60°C (14°F to 140°F)
- Relative humidity: 5–93% (non-condensing)
- Weight: 113 g (4.0 oz)
- Mounting: 1/2 in nipple mount
- Dimensions:
 - Nipple mount model: 45.8 x 63.2 x 32.6 mm (1.8 x 2.5 x 1.3 in)

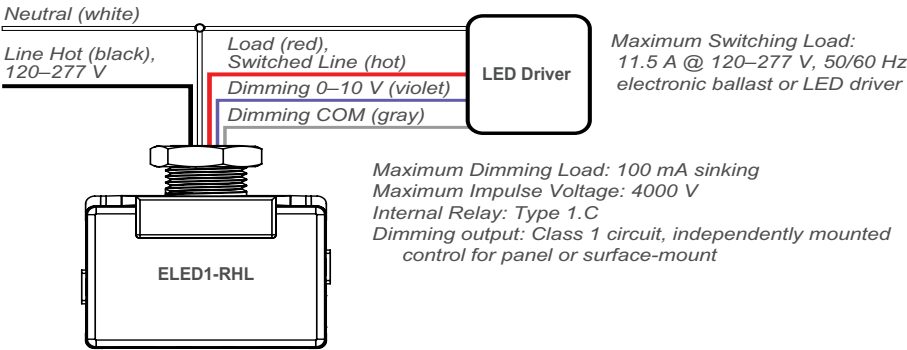
COMMUNICATIONS

- 902 MHz (U)
- 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

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
- CAN/CSA Standard E60730
- FCC Part 15.231 - Remote Control Transmitter
- IC RSS-210

WIRING DIAGRAM



PHYSICAL

Horticultural Luminaire Controller Weight and Dimensions

MODEL	HEIGHT		WIDTH		DEPTH		WEIGHT	
	mm	in	mm	in	mm	in	g	oz
Nipple Mount	45.8	1.8	63.2	2.5	32.6	1.3	113	4.0

