



LED Dimming Driver

Hi-lume Premier 0.1% Constant Voltage Driver (L3D0)

Architectural Dimming

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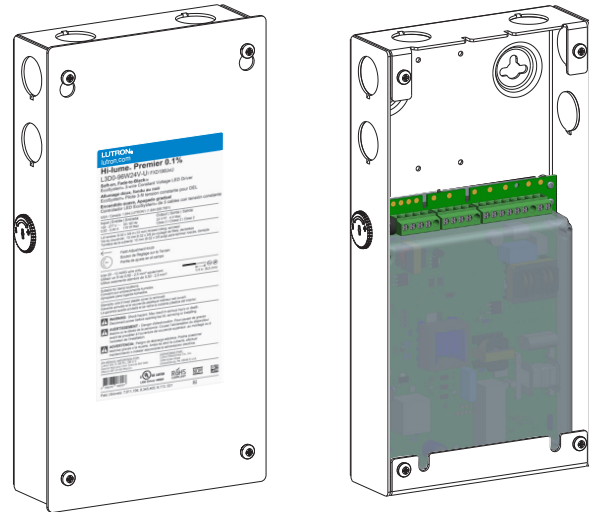
Hi-lume Premier 0.1% EcoSystem/3-wire Constant Voltage 24 V_{DC} LED Driver with Soft-on, Fade-to-Black

The Hi-lume Premier 0.1% Constant Voltage Driver (L3D0) is a high-performance LED driver capable of controlling up to 96 W of 24 V_{DC} constant voltage loads. This driver provides smooth and continuous dimming down to 0.1% low-end. It is ideal for use with strip lighting in applications such as coves, under or over cabinet lighting and pathway lighting. The driver is UL[®] Listed with an integrated wiring compartment and can be mounted up to 150 ft (45 m) away from the load.

Features

- Continuous, flicker-free dimming from 100% to 0.1%¹.
- Soft-on, Fade-to-Black operation for EcoSystem controls: fades smoothly between 0% and 0.1% when turned on and off for an incandescent like experience.²
- PWM dimming meets IEEE1789 over the entire dimming range.
- UL[®] Listed for United States and Canada (cULus[®]).
- NOM certified for Mexico.
- Field Adjustment Knob offers customer low-end light output tuning for better fixture-to-fixture matching.
- Guaranteed dimming performance when used with Lutron controls:
 - HomeWorks QS, Energi Savr Node units with EcoSystem controls, GRAFIK Eye QS with EcoSystem controls, PowPak with EcoSystem dimming modules, PowPak with EcoSystem wireless fixture controls, and Quantum systems, allowing for integration into a planned or existing EcoSystem lighting control solution.
 - Lutron 3-wire controls and interfaces.
- Protected from miswires of input power, up to 277 V_{AC}, to EcoSystem control inputs.
- Rated lifetime of 50,000 hours at 40 °C (104 °F) ambient temperature and maximum loading.
- FCC Part 15
 - Class A (277 V_{AC})
 - Class B (120 V_{AC})

NOVA FLEX[®]



Hi-lume Premier 0.1% Constant Voltage Driver (L3D0)
 NF-PS-L3D0-96W-24V
 5.5 in (140 mm) W x 2.0 in (51 mm) H x 10.5 in (267 mm) L

- Inrush limiting allows full loading of circuit breakers without nuisance tripping.
- 100% end-of-line performance tested at a Lutron factory.
- RoHS compliant.
- Restores all settings after power failure.
- Barrier provided for Class 2 separation in the wiring compartment.
- Redundant connections on line and control terminals for easy daisy chain wiring.
- Redundant connections on output terminals allow for easy wiring of two LED load home runs.
- Class 2 output designed to withstand hot swap.
- For more information please visit: www.lutron.com

¹ Light output at 0.1% depends on installation and light engine efficacy.

² Soft-on, Fade-to-Black dimming technology is not available for 3-wire controls.



Specifications

Regulatory Approvals and Compliance

- Lutron Quality Systems registered to ISO 9001.2015
- Manufacturing facilities employ ESD reduction practices that comply with the requirements of ANSI/ESD S20.20
- Meets ANSI C62.41 category A surge protection standards up to and including 4 kV
- FCC Part 15
 - Class A (277 V~)
 - Class B (120 V~)
- CAN ICES-005 (A) (277 V~)
- CAN ICES-005 (B) (120 V~)
- LED drivers need to meet certain performance criteria in order for the completed luminaires to comply with the ENERGY STAR® Luminaires V2.0 Specification. All models meet these performance criteria throughout their entire load compatibility regions. Consult Application Note #599 “ENERGY STAR® Luminaires V2.0 and Lutron Drivers” for availability dates of compliant products.
- LED drivers need to meet certain performance criteria in order for the completed luminaires to comply with Title 24 requirements as detailed in CEC-400-2015-037-CMF. All models meet both commercial (at 120 V~/277 V~) and residential (at 120 V~) performance criteria throughout their entire load operating regions. Consult CEC-400-2015-032-CMF Section 6.2.7 for important information on meeting start-up time requirements with fade-in lighting.
- Meets UL® 8750/CSA C22.2 No. 250.13-14, “Light Emitting Diode (LED) Equipment For Use in Lighting Products”
- NOM certified
- Class 2 output; meets UL® 1310/CSA C22.2 No. 223-M91

Performance

- Dimming Range: 100% to 0.1%¹
- LED lighting turns on to any dimmed level without flashing to full brightness
- Operating Voltage: 120 V~ to 277 V~ at 50/60 Hz
- Rated lifetime of 50,000 hours at 40 °C (104 °F) ambient temperature and maximum loading
- For rated warranty, ambient temperature (ta) not to exceed 40 °C (104 °F) (maximum rated temperature)^{2,3}
- Patented thermal fold back protection
- Non-volatile memory restores all driver settings after power failure
- Typical standby power consumption: 0.25 W at 120 V~ and 0.4 W at 277 V~
- Open-circuit protected output
- Short-circuit and overload-protected output
- Output: 24 V== constant voltage at high-end
- Output Load Range: 2 W to 96 W at high-end
- PWM dimming frequency: meets IEEE1789 at all dim levels
- Power Factor: > 0.90 at maximum power
- Total Harmonic Distortion (THD): < 20% at maximum power
- NEMA 410 – 2011 compliant
- Inrush Current Limiting Circuitry: decreases circuit breaker tripping, switch arcing and relay failure; allows full loading of switch leg
- Inrush Current: < 2 A
- Device turn-on time: < 100 ms from electronic off and, < 500 ms from power off
- L3D0-96W24V-U driver is programmed by Lutron manufacturing and is NOT configurable by the Lutron QwikFig configuration system
- NOM Thermal Classification: Class B