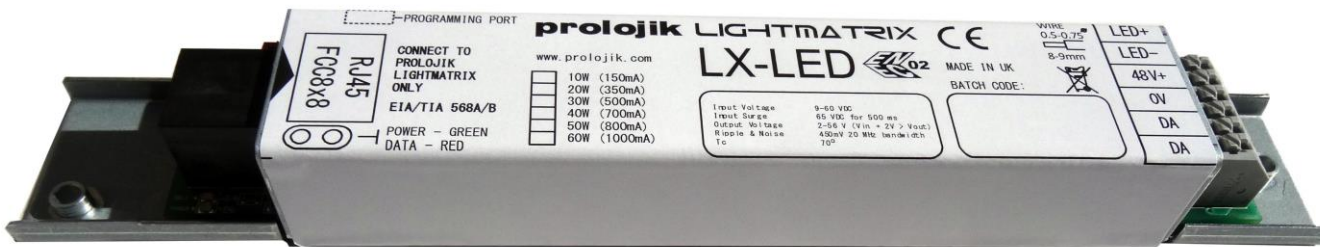


LX-LED

The LX-LED range of constant current LED drivers is designed for operation with the Prolojik LightMatrix™ architecture. The driver will connect to the LX848 via a single CAT5e or 6 cable to provide networked power and control over an SELV structured cabling architecture.



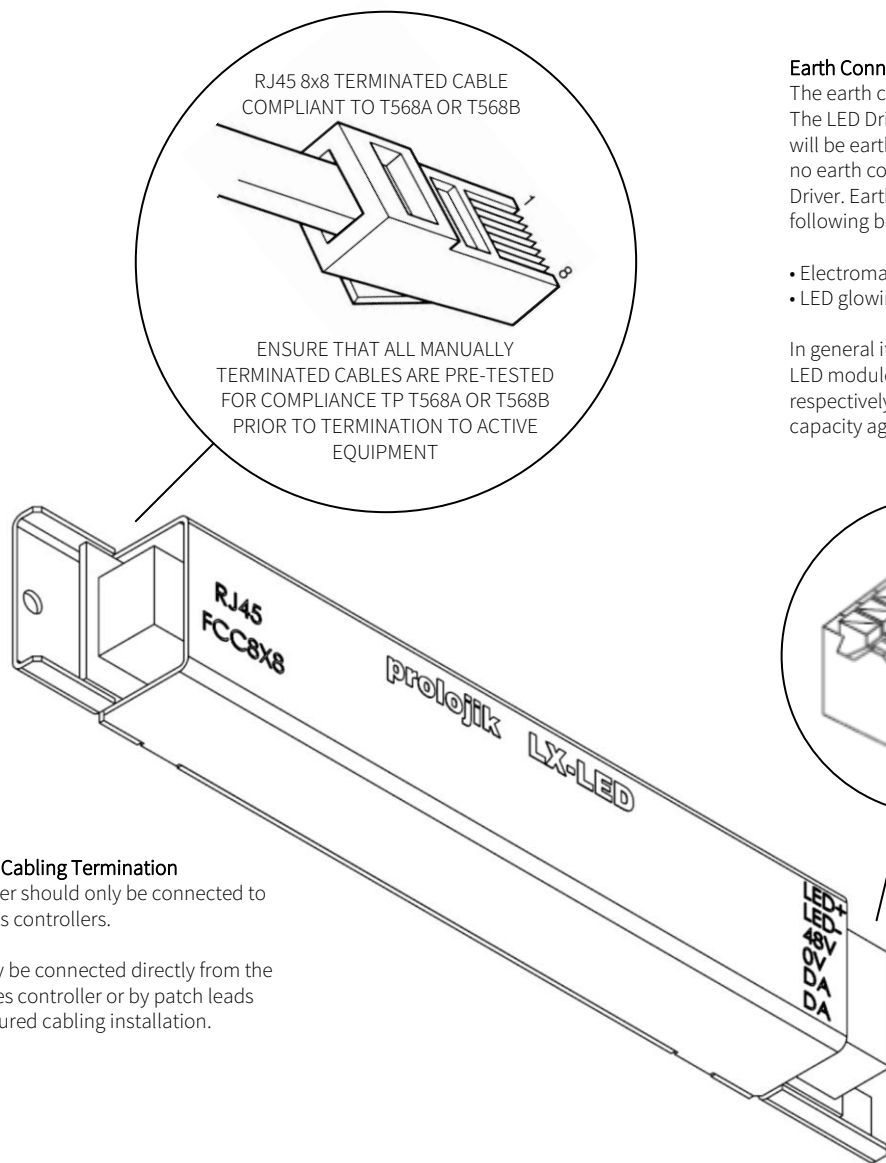
Key Features:

- PoE power and DALI controllable LED driver
- Constant Current Output
- LED Drive Current up to 1000 mA
- LED Strings from 2 V to 56 V
- High Efficiency up to 97%
- Open or Short Circuit LED Protection
- DALI port with SELV isolation
- Auxiliary 48V DC port with fuse protection for peripherals
- T5 form-factor
- Dual colour status LED
- 3 Year Warranty

Prolojik LightMatrix™ LED drivers are available in the following configurations:

Model	Wattage	Current	Regulation	Efficiency
LX010	10.2W	150mA	5%	97%
LX020	19.6 W	350 mA	5%	97%
LX030	33.6 W	500 mA	5%	97%
LX040	39.2 W	700 mA	5%	97%
LX050	50.0 W	800 mA	5%	97%
LX060	60.0W	1000mA	5%	97%





RJ45 8x8 TERMINATED CABLE
COMPLIANT TO T568A OR T568B

ENSURE THAT ALL MANUALLY
TERMINATED CABLES ARE PRE-TESTED
FOR COMPLIANCE TP T568A OR T568B
PRIOR TO TERMINATION TO ACTIVE
EQUIPMENT

Earth Connection

The earth connection is conducted as protection earth (PE). The LED Driver can be earthed via enclosure. If the LED Driver will be earthed, protection earth (PE) has to be used. There is no earth connection required for the functionality of the LED Driver. Earth connection is recommended to improve following behaviour:

- Electromagnetic interferences (EMI)
- LED glowing at standby

In general it is recommended to earth the LED Driver if the LED module is mounted on earthed luminaire parts respectively heat sinks and thereby representing a high capacity against earth.

Structured Cabling Termination

LX LED driver should only be connected to LX800 series controllers.

Cables may be connected directly from the LX 800 series controller or by patch leads via a structured cabling installation.

LED Termination

The wiring can be in stranded wires with ferrules or solid with a cross section of 0.2–1.5 mm². Strip 8.5–9.5 mm of insulation from the cables to ensure perfect operation of the push-wire terminals.

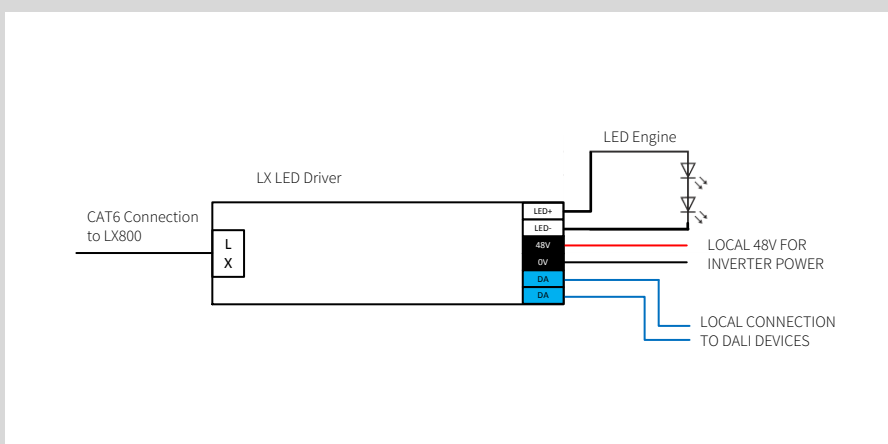
Use one wire for each terminal connector only.

LED Connection

Wiring guidelines

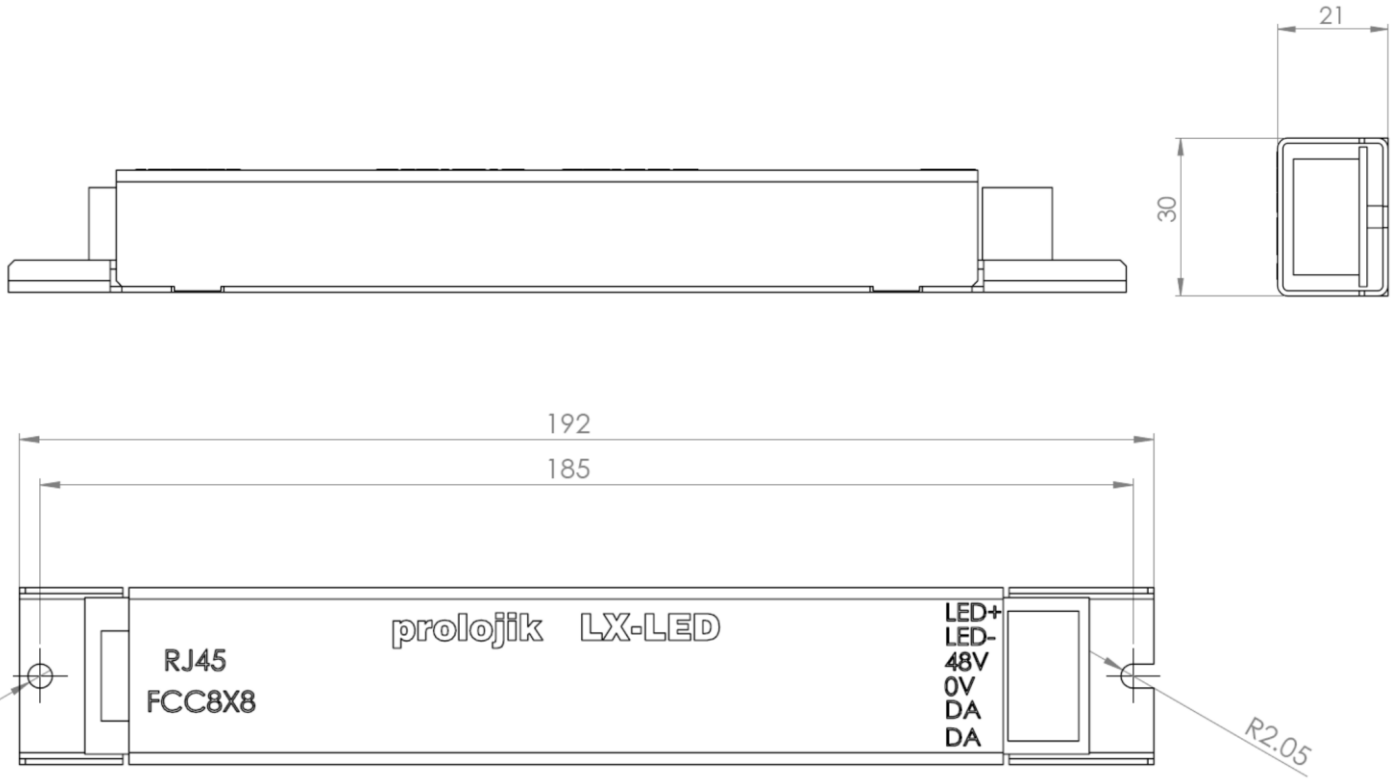
If forward voltage of LED module exceeds 50V utilise both outputs to achieve required forward voltage. **Ensure termination polarity is verified.**

- The cables should be run separately from the mains connections and mains cables to ensure good EMC conditions.
- The LED wiring should be kept as short as possible to ensure good EMC.
- The max. secondary cable length is 2 m (4 m circuit).
- Secondary switching is not permitted.
- The LED Driver has inverse-polarity protection on the secondary side.
- Whilst the driver is designed to be resilient to short circuit and open circuit faults, incorrect polarity may damage LED modules with no inverse-polarity protection.



Important

Prolojik maintains a policy of ongoing improvement, and the information herein is subject to change without notice



Specifications

Input

Input Voltage: 9-60 VDC
Input Surge: 65 VDC for 500 ms

Output

Output Voltage: 2-56 V ($V_{in} + 2V > V_{out}$)
Output Current Trim: 25-100%
Ripple & Noise: 450mV 20 MHz bandwidth
Short Circuit Protection: Current is limited to rated output
Capacitive Load: 2.2 μ F max
Temperature Coefficient: +/- 0.03%/oC max

Remote On/Off: On = 0.3-1.25 V or open circuit
Off = 0.15 V (applied to control pin)

Quiescent Input Current: 25 μ A max
Remote On/Off Signal: 1 mA max
Current

Protocol

Power Interface: 4-Point PD detection
Control: IEC 62386-207: LED modules (device type 6)

Connection

Termination: FCC68 8x8 ports
LED connection:

- 1 = LED 1+
- 2 = LED 1-
- 3 = 48VDC
- 4 = 0V
- 5 = DALI
- 6 = DALI

Fixings: M4 slot and hole on base at 185mm hole centres

General

Efficiency: 97%
Switching Frequency: 40-1000 kHz variable
MTBF: 3.3 Mhrs to MIL-HDBK-217F at 25 °C,GB

Environmental

Operating Temperature: -10 °C to +70 °C
Storage Temperature: -40 °C to +125 °C
Humidity: Up to 95%, non-condensing
Thermal Impedance: 35 °C/W

EMC

Emissions: EN55022 class B conducted & radiated
ESD Immunity: EN61000-4-2, level 2 Perf Criteria A
Radiated Immunity: EN61000-4-3, level 2 Perf Criteria A
EFT/Burst: EN61000-4-4, level 2 Perf Criteria A
Surge: EN61000-4-5, level 2 Perf Criteria A
Conducted Immunity: EN61000-4-6, level 2 Perf Criteria A

Important

All wiring must be carried out by a qualified electrician in accordance with the current edition of the wiring regulations and any applicable regional standards

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