



Colour
is our nature

Highly Integrated 15/20/30/50 Watt Dimmable LED Drivers

The L Series products are constant current LED drivers with multiple LED outputs that are controlled over a one, two, three or four channels. They are targeted at larger networked and smaller standalone installations that require dimmable, high-power, general white or full-colour LED lighting. The L Series LED drivers are renowned for their high efficiency (95%) and are DMX and LedSync compatible. The drivers' small size makes them ideally suited for in-fixture installation, leading to less cabling, increased design freedom and improved system cost.

Applications

General white applications

- Office lighting
- Architectural lighting
- Hospitality lighting
- High and Low Bay lighting
- Signage / advertising lighting
- Retail lighting
- Public area / park / street lighting
- Display lighting

Static/dynamic full-colour applications

- Entertainment lighting
- Stage lighting
- Full-colour architectural lighting
- Signage / advertising lighting
- Façade lighting
- Retail display lighting
- Full-colour / tunable white applications
- Decorative lighting

Features & benefits

Input

- Voltage range: 12-28VDC, see page 2 for data per model

Output

- Current range: selectable current settings depending on model, see page 2
- Power: 15W, 20W, 30W or 50W max, depending on model

General

- Breakthrough form factors for in-fixture installation
- Drive, control and thermal protection per fixture
- DMX512A and LedSync compatible
- HydraDrive: 15-bit resolution
- Dimming control: smooth dimming from 100% to 0.1%
- High efficiency: 95% at full load due to single, high-precision current source
- Programmable parameters via TOOLbox and FluxTool software
- NTC thermistor interface



Datasheet L Series

	Operating supply voltage	Power output	LED output current settings	Weight
L-Dot Standard 	24V-28V DC	0-50W	Default: 350mA Onboard (over solder pads): 350mA, 460mA, 700mA, 900mA, 1,100mA, 1,200mA With external resistor: all in-between values up to 1,500mA	5.0 g 0.18 oz
L-Dot Nano 	24V-28V DC	0-30W	Default: 350mA Onboard: n.a. With external resistor: 700mA - 1,000mA	2.5 g 0.09 oz
L-Dot Pico 	12V-28V DC	0-15W	Default: 350mA Onboard: n.a. With external resistor: 700mA	2.5 g 0.09 oz
L-Strip Connector 	24V-28V DC	0-30W	Default: 350mA Onboard (over jumper block): 350mA, 460mA, 700mA, 900mA With external resistor: up to 1,000mA	17.5 g 0.62 oz
L-Strip Standard 	24V-28V DC	0-20W	Default: 350mA Onboard: n.a. With external resistor: 700mA	6 g 0.21 oz
L-Dot Connector 	24V-28V DC	0-50W	Default: 350mA Onboard (over jumper block): 350mA, 460mA, 700mA, 900mA, 1,100mA, 1,200mA With external resistor: all in-between values up to 1,500mA	26 g 0.92 oz

Connections	Description	Product	Order number
Power: solder pads (2)	L-Dot Standard, 50W, DMX, 1 control channel, constant current	L-Dot/S 1055	LDS10552
Data: solder pads (5)	L-Dot Standard, 50W, DMX, 2 control channels, constant current	L-Dot/S 2055	LDS20552
NTC: solder pads (2)	L-Dot Standard, 50W, DMX, 3 control channels, constant current	L-Dot/S 3055	LDS30552
Switch (in-fixture): solder pads (2)	L-Dot Standard, 50W, DMX, 4 control channels, constant current	L-Dot/S 4055	LDS40552
LED current setting: solder pads (2)			
LED groups: solder pads (5)			
Power: solder pads (2)	L-Dot Nano, 30W, DMX, 1 control channel, constant current	L-Dot/N 1025	LDN10252
Data: solder pads (3)	L-Dot Nano, 30W, DMX, 2 control channels, constant current	L-Dot/N 2025	LDN20252
NTC: solder pads (2)	L-Dot Nano, 30W, DMX, 3 control channels, constant current	L-Dot/N 3025	LDN30252
Switch: n.a.	L-Dot Nano, 30W, DMX, 4 control channels, constant current	L-Dot/N 4025	LDN40252
LED current setting: solder pads (2)			
LED groups: solder pads (5)			
Power: solder pads (2)	L-Dot Pico, 15W, DMX, 1 control channel, constant current	L-Dot/P 1015	LDP10151
Data: solder pads (3)	L-Dot Pico, 15W, DMX, 2 control channels, constant current	L-Dot/P 2015	LDP20151
NTC: solder pads (2)	L-Dot Pico, 15W, DMX, 3 control channels, constant current	L-Dot/P 3015	LDP30151
Switch: n.a.	L-Dot Pico, 15W, DMX, 4 control channels, constant current	L-Dot/P 4015	LDP40151
LED current setting: solder pads (2)			
LED groups: solder pads (5)			
Power: screw terminals (4)	L-Strip Connector, 30W, DMX, 1 control channel, constant current	L-Strip/C 1025	LSC10252
Data: screw terminals (6)	L-Strip Connector, 30W, DMX, 2 control channels, constant current	L-Strip/C 2025	LSC20252
NTC: pins (2)	L-Strip Connector, 30W, DMX, 3 control channels, constant current	L-Strip/C 3025	LSC30252
Switch (external): solder pad (1)	L-Strip Connector, 30W, DMX, 4 control channels, constant current	L-Strip/C 4025	LSC40252
LED current setting: pin (2)			
LED groups: pins (5)			
Power: pins (2)	L-Strip Standard, 20W, DMX, 1 control channel, constant current	L-Strip/S 1025	LSS10251
Data: pins (5)	L-Strip Standard, 20W, DMX, 2 control channels, constant current	L-Strip/S 2025	LSS20251
NTC: pins (2)	L-Strip Standard, 20W, DMX, 3 control channels, constant current	L-Strip/S 3025	LSS30251
Switch (external): pin (1)	L-Strip Standard, 20W, DMX, 4 control channels, constant current	L-Strip/S 4025	LSS40251
LED current setting: pin (2)			
LED groups: pins (5)			
Power: screw terminals (2)	L-Dot Connector, 50W, DMX, 1 control channel, constant current	L-Dot/C 1055	LDC10552
Data: screw terminals (5)	L-Dot Connector, 50W, DMX, 2 control channels, constant current	L-Dot/C 2055	LDC20552
NTC: screw terminals (2)	L-Dot Connector, 50W, DMX, 3 control channels, constant current	L-Dot/C 3055	LDC30552
Switch (in-fixture): screw terminals (2)	L-Dot Connector, 50W, DMX, 4 control channels, constant current	L-Dot/C 4055	LDC40552
LED current setting: jumper block (1)			
LED groups: screw terminals (5)			

Other information

Wiring L-Dot/C and L-Strip/C

- Cross section: 0.25 - 1 mm², AWG 24 - 18
- Strip length: 4.5 mm / 0.18 in.

Wiring L-Dot/S, L-Dot/N, L-Dot/P, L-Strip/S

- Cross section: 0.25 - 0.75 mm², AWG 24 - 20
- Strip length: 4.5 mm / 0.18 in.

Environmental ratings

- Ta range: 0°C...+50°C / 32°F...+122°F
- For use in dry locations
- Relative humidity: non-condensing

Control compatibility

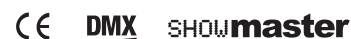
- DMX512A control gear

Mounting

- Ensure proper heat dissipation using e.g. a heat sink
- Mounting holes:
 - L-Dot Standard: for M3 screws (x2)
 - L-Dot Nano: for M3 screws (x1)
 - L-Dot Pico: for M2 screws (x1)
 - L-Strip Connectors: for M3 screws (x2)
 - L-Strip Standard: for M3 screws (x1)
 - L-Dot Connector: for M3 screws (x2) and M4 screws (x2)

Certifications

- IEC 61347-1, IEC 61347-2-13
- CE



Europe, Rest of World

eldoLED B.V.
Science Park Eindhoven 5125
NL-5296 ED Son
The Netherlands
T: +31 40 7820400
E: info@eldoled.com

North America

eldoLED America
One Lithonia Way
Conyers, GA 30012
USA
T: +1 877 353-6533
E: info@eldoled.com

Other documentation and support

Visit www.eldoled.com/support for further documentation such as quick start guide, wiring diagram, tech sheet and 3D IGES files.

Warranty

eldoLED represents and warrants that for a period of 3 (three) years, as of the date of invoice, Products materially meet the specifications and specifically agreed upon quality, both as stated in the applicable data-sheet and/or written design-in specifications, or as stated in writing otherwise by eldoLED, provided that these specifications are explicitly designated by eldoLED as "warranted specifications".

For the complete warranty text, visit www.eldoled.com/terms.