



**Colour
is our nature**

4x2A DMX/DALI Full-Colour Dimmable LED Driver

LINEARdrive

LINEARdrive gives you infinite colour control for low-voltage LED applications ranging from single colour for accent and cove lighting all the way up to RGBW for full colour entertainment product solutions. This constant voltage LED driver is DMX/DALI compatible and allows you to create your colour or dynamic show without an external controller. Symbiosis ensures the LED driver works seamlessly together with LED modules, controls and intelligent luminaire elements.

Product offering



LINEARdrive 100/M

Part number (P/N)	LIN100M1
Product description	LINEARdrive AC, 100W, DMX/DALI, UI, 4 control channels, constant voltage, 4x 12/24V outputs, long metal

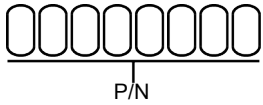
Programming tools

Programming interface	TOOLbox pro (TLU20504)
Programming cable set	TOOLbox pro to LED driver, programming cable, 5pcs (TLC03051)
Programming software	FluxTool

Warranty

Warranty period	General Terms and Conditions
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Order number configurator



P/N	LED driver part number.
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Input characteristics

Nominal input voltage range AC	120 - 250V (ENEC), 120 - 277V (UL)
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Nominal input voltage DC	120 - 275V
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Maximum input current	1.05A @ 120V / 60Hz
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Input frequency range	50 - 60Hz
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Power factor at full load	> 0.94
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THD at full load	< 10%
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Maximum inrush current	35A 240µs @ 120V / 60Hz
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Surge protection	3kV (L to N) 4kV (L/N to GND)
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Maximum standby power	< 0.5W
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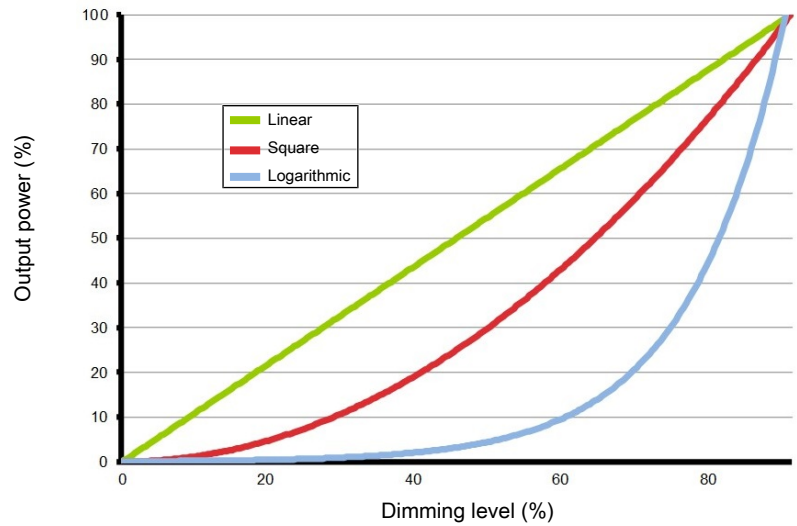
Output characteristics

LED output load	RGBW @ 12V: 2.08A RGB @ 12V: 2.76A RGBW @ 24V: 1A RGB @ 24V: 1.33A 5A maximum common anode For UL Class 2: RGBW @ 12V: 1.25A per output RGB @ 12V: 1.66A per output RGBW @ 24V: 1A per output RGB @ 24V: 1.33A per output
Maximum LED output power	100W
Number of LED outputs	4 (UL Class 2)
LED output current	2.8A absolute maximum rating per output
LED output voltage	12 - 24V DC
Circuit protection	To prevent excessive output current from damaging the LED driver, it is highly recommended to use circuit protection appropriate for your application's nominal and inrush current requirements.

Control characteristics

Control channels	4
Control protocol	DMX/DALI
Dimming range	100% - 0.1%
Dimming curve options	Logarithmic (default) Linear Square
Dimming method	HydraDrive
Driver configuration	via 3-button user interface on driver
Remark: ignore dimming curve setting in DALI mode	

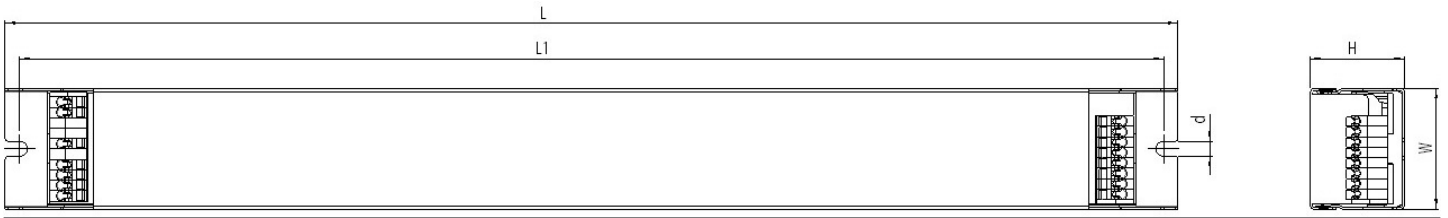
Dimming curves



Environmental conditions

Operating ambient temperature (Ta) range	-40 °C to +50 °C
Maximum operating case temperature (Tc max)	85 °C

LED driver mechanical details



Length (L) typical: 370 mm / 14.57 in

Width (W) typical: 41 mm / 1.61 in

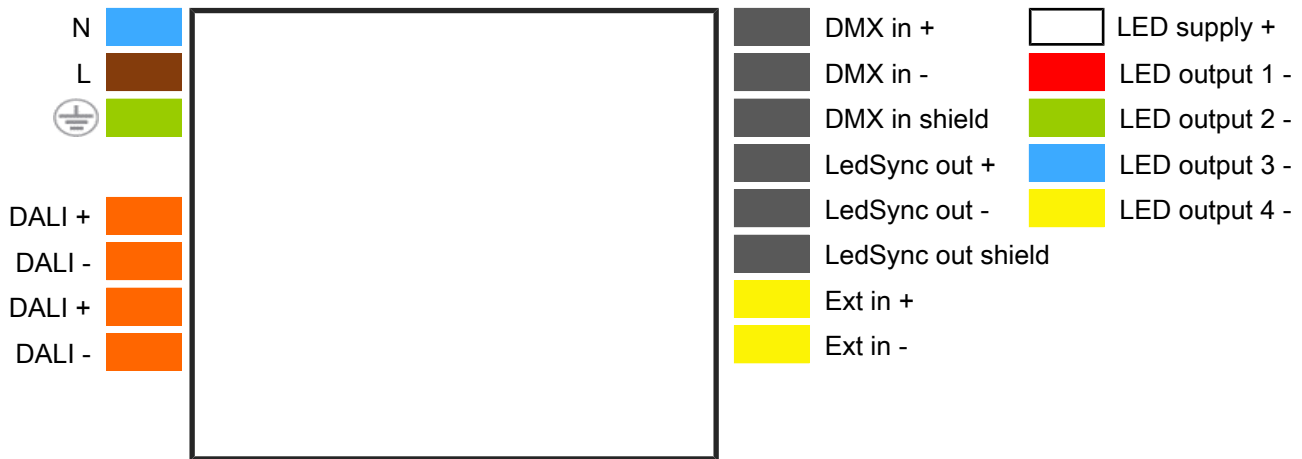
Height (H) typical: 30 mm / 1.18 in

Weight 880 g

Packaging

Products per box 20 pcs

Connector layout



Wiring specifications

Wire core cross section 0.5 - 1.5 mm²
AWG 20 – 16

Wire strip length 9.0 mm / 0.35 inch

Automatic circuit breakers (MCB)

Maximum loading	MCB type	B10	B13	B16	C10	C13	C16
		Number of LED drivers	5	6	8	8	10

Standards and compliance

UL, recognized component	UL 1310 UL 8750 (Class 2 output)
ENEC safety	EN 61347-1 EN 61347-2-13 (Emergency lighting)
ENEC performance	EN 62384
Conducted emissions	EN 55015
Radiated emissions	EN 55015
Radio disturbance characteristics	EN 55022
Harmonic current emissions	EN 61000-3-2
Electromagnetic immunity	EN 61547
DALI	EN 62386-101/102/207
DMX	E1.11 – 2008, USITT DMX512-A ANSI E1.20
FCC	47 CFR Part 15 class B
RCM	AS/NZS 61347.1, AS/NZS 61347.2.13
Restriction of hazardous substances	RoHS3 (Directives 2011/65/EU-2015/863/EU)

Certifications



Safety



FELV control terminals marked “Risk of electric shock” are not safe to touch. Dimming connected to FELV control terminal shall be insulated for Low Voltage supply of the control gear.



Risk of electrical shock. May result in serious injury or death. Disconnect power before servicing or installing.



The LED driver may only be connected and installed by a qualified electrician. All applicable regulations, legislation, and building codes must be observed. Incorrect installation of the LED driver can cause irreparable damage to the LED driver and the connected LEDs.

Pay attention when connecting the LEDs: polarity reversal results in no light output and often damages the LEDs.



LED drivers are designed and intended to operate LED loads only. Powering non-LED loads may push the LED driver outside its specified design limits and is, therefore, not covered by any warranty.



eldoLED products are designed to meet the performance specifications as outlined at certain operating conditions in the data sheet. It is the responsibility of the fixture manufacturer to test and validate the design and operation of the system under expected and potential use cases, including faults.



Please observe voltage drop over long cable lengths. Longer cable lengths increase EMI susceptibility.



Product renderings and dimensional drawings are generic for the housing type. Product label, connector type and quantity may vary.

Europe, Rest of World

eldoLED B.V.
Science Park Eindhoven 5125
5692 ED Son
The Netherlands

E: info@eldoled.com
W: www.eldoled.com

North America

eldoLED America
One Lithonia Way
Conyers, GA 30012
USA

E: info@eldoled.com
W: www.eldoled.com
