

**Colour
is our nature**



Constant Voltage LED Driver/Controller

LINEARdrive DC Series

LINEARdrive DC is a highly integrated, enclosed and easy-to-configure constant voltage driver/controller for low-power, indoor LED lighting applications requiring up to 24A.

LINEARdrive DC can be integrated in a network or used as a standalone device. ShowMaster, supported on all eldoLED driver/controllers, allows you to upload show sequences for use in standalone mode. You can create and manage your own show sequences with the TOOLbox and freely available PC software.

LINEARdrive DC is DMX, DALI and LedSync compatible, and allows 15-bit dimming and colour control and bidirectional communication for driver configuration and temperature read-out.

LINEARdrive 100/180/720

LINEARdrive 100/180 can supply up to 6A and LINEARdrive 720 up to 24A.

LINEARdrive DC is broadly applicable as it supports low-power LED applications in several environments, be it DMX, DALI or 0-10V. LINEARdrive 100 and 180 support DMX and 0-10V, LINEARdrive 720 supports DALI as well.

Setup is a breeze!

Configure LINEARdrive DC over its intuitive, 3-button user interface with display. The easy-to-navigate menu allows you to set parameters such as the number of channels, DMX or DALI settings for networked mode and show/colour/dim values for standalone operation. You can also lock the driver's configuration and perform a visual test run of the connected LED groups.



Robust thermal management

Built-in over temperature protection protects the LINEARdrive DC against overheating.

Low EMI

LINEARdrive DC's EMI is very low due to the implementation of slew-rate controlled dimming and shielded conductors.

Easy to connect

Take off LINEARdrive DC's top cover to discover that connecting is self-explanatory: the spring-cage connectors for LEDs, power and network leads are all clearly marked. Strain reliefs prevent leads from being pulled out by accident.

Advantages

- LINEARdrive 100 and 180 support up to 1.5A per channel (RGBW, 4 channels) or 2A per channel (RGB, 3 channels); LINEARdrive 720 supports up to 6A per channel.
- DALI, DMX and 0-10V compatible
- Unprecedented ease-of-configuration
- Extremely smooth dimming and fine colour mixing: 15-bit control resolution for each LED group
- ShowMaster: user-definable show sequences
- Very low EMI
- Compact form factor: 153x50x23mm / 6.02"x1.97"x0.91"

Electrical data

- Maximum load:
LINEARdrive 100:
6A at 12V or 4A at 24V
LINEARdrive 180:
6A, irrespective of PSU voltage
LINEARdrive 720:
24A, irrespective of PSU voltage
- Maximum load per output channel:
LINEARdrive 100:
at 12V: 4x1.5A or 3x2A
at 24V: 4x1A or 3x1.3A
LINEARdrive 180: 4x1.5A or 3x2A
LINEARdrive 720: 4x6A
- Operating supply voltage range:
12V-28V DC
- Processor: eldoLED FluxLogic 850 Series
- Independent LED groups: up to 4

Dynamic effects

- HydraDrive Algorithm Based Modulation
- Control of channel 1 (R), 2 (G), 3 (B) and 4 (W/A): 0 - 100% in 15-bit set point resolution
- Contrast ratio: up to 2,000:1

Thermal data

- Cooling LINEARdrive 100/180: passive (integrated heat spreader).
- Cooling LINEARdrive 720: second heat spreader on LINEARdrive 720 ensures ease of mounting onto required heat sink
- Built-in protection against overheating of driver/controller

Network control

- Network input: USITT DMX512A, LedSync or DALI (DALI only on LINEARdrive 720)
- Network output: LedSync, DALI (DALI only on LINEARdrive 720)
- DMX/LedSync: 8ms update rate, compatible with 8 and 16 bit network resolution
- LedSync: bidirectional communication for temperature read-out and driver configuration. For driver configuration, use the TOOLbox and freely available PC software

ShowMaster

- Nine standard shows or up to 20 customer-defined shows set at factory
- User-defined shows (ShowMaster): up to 20 shows, via TOOLbox and PC software
- Show selection: via menu buttons

Environmental ratings

- T_a range: -20°C...50°C (-4°F...122°F)
- T_c max: 65°C (149°F)
- T_{heat sink} max: 60°C (140°F)
- Relative humidity: non-condensing

Mounting data

- Mounting orientation: any
- Mounting holes: for M4 screws (4)

Certifications

- CE: IEC 61347, EN 55015, IEC 61003, EN 61547
- UL

User interface

- Menu buttons: M, - and + (3)
- Display: segmented (4 x 16)
- Modes: colour/show/DMX/DALI (DALI on LINEARdrive 720)
- Features: setup, lock, reset

Connectors

LINEARdrive 100/180

- VDC: + and - (2)
- DMX in: +, - and shield (3)
- LedSync thru: +, - and shield (3)
- EXT in: + and - (2) for 10kΩ potentiometer, 0-10V or show switch
- LED groups: - for group 1 through 4 (4)
- LED supply: +

Connectors LINEARdrive 720

- VDC: + and - (2)
- DMX in: +, - and shield (3)
- LedSync out: +, - and shield (3)
- DALI: DA+ (2) and DA- (2)
- EXT in: + and - (2) for 10kΩ potentiometer, 0-10V or show switch
- LED groups: GND and - for group 1 through 4 (8)

Dimensions

- LxWxH: 153 mm x 50 mm x 23 mm
6.02" x 1.97" x 0.91"

Ordering information

Description	Product	Order nr
LINEARdrive 100W Display	Linear 100/D	LIN100D1
LINEARdrive 180W Display	Linear 180/D	LIN180D1
LINEARdrive 720W Display	Linear 720/D	LIN720D1



V3.0

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