

**Colour  
is our nature**



### 45/90/180 Watt Full-Colour Dimmable LED Driver

POWERdrive DC is a constant current LED driver with multiple LED outputs that are controlled over four channels. It is targeted at larger networked and smaller standalone installations that require dimmable, high-power full-colour static or dynamic LED lighting. POWERdrive DC is DALI, DMX/ RDM and LedSync compatible.

#### 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: 12 - 32 VDC
- Current, max:
  - POWERdrive 45D: 2.2A
  - POWERdrive 90D: 4.62A
  - POWERdrive 180D: 6.16A



POWERdrive 180D

##### Output

- Voltage: 11 - 31 VDC ( $V_{sup} - 1V$ )
- Current range:
  - POWERdrive 45D configurable from 200 - 500mA
  - POWERdrive 90D configurable from 200 - 1,050mA
  - POWERdrive 180D configurable from 200 - 1,400mA
- Power: 45W, 90W, 180W max

##### General

- DALI, USITT DMX512A / RDM (explore & address, ANSI E1.20) and LedSync compatible
- HydraDrive: 15-bit resolution
- Dimming control: smooth dimming from 100% to 0.1%, gamma-corrected curve
- High efficiency
- LED current configurable for each output separately
- Intuitive 3-button user interface for on-the-fly configuration
- Interface for external control device: 10kΩ potentiometer, 0-10V source or momentary switch
- ShowMaster: 9 default shows, up to 20 user-defined shows, uploadable via TOOLbox and PC software
- NTC interface for robust thermal management

#### Product offering

##### Description

POWERdrive DC, 45W, DMX/DALI/0-10V, 4 control channels, constant current, 4x LED outputs  
 POWERdrive DC, 90W, DMX/DALI/0-10V, 4 control channels, constant current, 4x LED outputs  
 POWERdrive DC, 180W, DMX/DALI/0-10V, 4 control channels, constant current, 4x LED outputs

##### Product

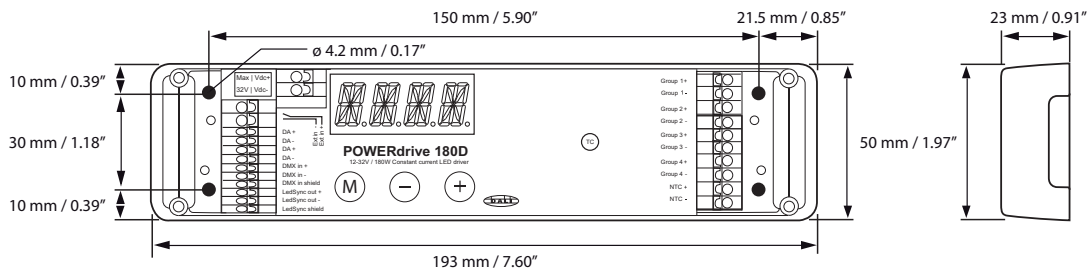
POWER 45D  
 POWER 90D  
 POWER 180D

##### Order no.

PWR045D2  
 PWR090D2  
 PWR180D2

**Dimensions, weight, packaging**

- Weight: 191 g, 6.7 oz
- Packaging: 12 pcs/carton



**Connections**

**Connectors**

- VDC: + and -
- DALI: + and - (x2)
- DMX in: +, - and shield
- LedSync out: +, - and shield
- Ext in: + and -

**Connectors (cont'd)**

- LED outputs: + and - (x4)
- NTC: + and -

**Wiring**

- Cross section: 0.5 - 1.5 mm<sup>2</sup>, AWG 20 - 16
- Strip length: 9 mm / 0.35 in.

**Other information**

**Certifications**

- CE
- IEC 61347, EN 55015, IEC 61003, EN 61547
- UL: UL Recognized Component (file no. E333135). POWERdrive 40D and 90D are Class 2 output.

**Environmental ratings**

- Ta range: -20°C...50°C / -4°F...122°F
- Tc max: 65°C / 149°F
- For use in dry locations

**Accessories**

- LEC4 LED engine with CREE® MC-E Color
- LEW4 LED engine with CREE® MC-E White

**Control compatibility**

- DALI control gear
- DMX512A and RDM explore & address (ANSI E1.20) control gear
- Standard 0-10V switch controls



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**Other documentation and support**

Visit [www.eldoled.com/support](http://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 datasheet 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](http://www.eldoled.com/terms).