

A9950561 SOLOdrive 50W Constant Current 1xDali-Version

50W Dimmable DALI LED Driver

SOLOdrive 560/S is a DALI compatible, constant current LED driver with two LED outputs that are controlled as a single ballast. Dimming is beautiful - smooth all the way down to 0. SOLOdrive is programmable to suit a wide application area. Its two LED outputs offer the possibility of driving a very high power 50W LED array connected to a single output, or driving two strings of 15 LEDs at 350mA. LEDcode allows easy extension of the SOLOdrive's feature set with time, motion and brightness based intelligence.

Applications

- Office lighting
- Next-generation 'T5' luminaires
- Architectural lighting
- Hospitality lighting
- Low Bay lighting
- Signage / advertising lighting
- Retail lighting
- Public area / park / street lighting
- Display lighting

Features & benefits

Input

- Voltage: 120 - 277 VAC
- Current, max: 0.7A
- Frequency: 50/60Hz

Output

- Class 2 LED outputs (x2)
- Voltage: 55V typ
- Current range: settable from 200mA to 1,050mA for each LED output separately
- Power: 50W max

General

- Power factor: > 0.9
- DALI compatible (IEC 62386-101/102/207)
- Hybrid HydraDrive: efficient, smooth and flicker-free dimming
- Full dimming control: 100% to 0%, choice of linear or logarithmic dimming curve
- Highly efficient over a wide power and voltage range: 89% at full load, ≥ 85% above 67% load
- Maximum (rated) power available over wide LED voltage (30-55V) and LED current range (200-1,050mA)
- NTC interface for robust thermal management
- LEDcode: programming interface (LED output current, NTC temperature, dimming curve, minimum dimming level) and sensor/extended feature set interface

LEDcode configuration

- USB-LEDcode interface: TOOLbox pro (part number: A9915056)
- FluxTool software: for Mac and PC freely downloadable from

www.eldoled.com/fluxtool



Connectors

- LED outputs: + and - (x2)
- LEDcode / NTC: + and -
- 0-10V: + and -
- Power: Line, Neutral and Ground

Wiring

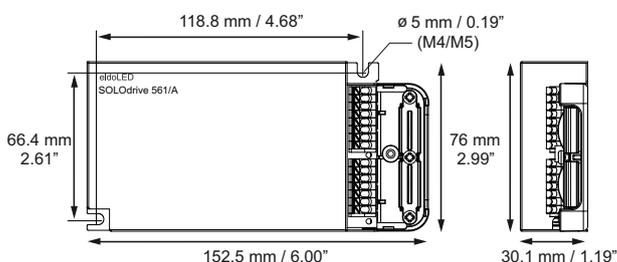
- Cross section: 0.5 - 1.5 mm², AWG 20 - 16
- Strip length: 9 mm / 0.35 in.
- Weight: 372 g, 13.12 oz

Environmental ratings

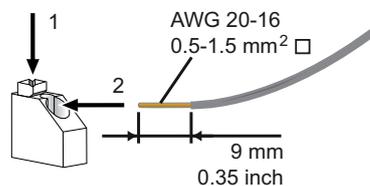
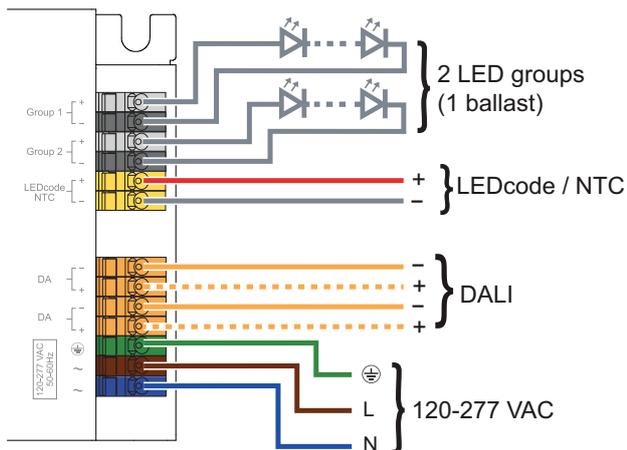
- Ta range: -20°C...+50°C / -4°F...+122°F
- Tc max: 85°C / 185°F
- For use in damp and dry locations

Certifications

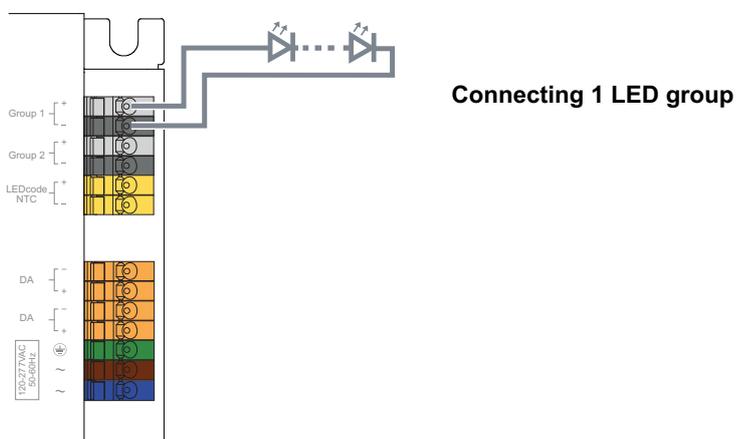
- CE
- IEC 61347, IEC 62384, EN 55015, EN 55022, IEC 61000-3-2, IEC 61547, IEC 60929 Annex E
- UL: Recognized Component for US and Canada (file no. E333135), according to UL1310 and UL8750. US: Class 2 output. Canada: Non-Class 2 output. (SOLOdrive 561/M pending)



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



Solid or stranded copper wires only.



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

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

LED group

Indicates the location of the connectors for your LED groups. These LED groups represent one DALI ballast.

LED wiring distance

Maximum wiring distance at full load:

AWG value	20	19	18	17	16
Distance (m)	14	18	22	28	36
Distance (ft)	45.9	59	72.2	91.9	118.1

 Please observe voltage drop over long cable lengths.

 Longer cable lengths increase EMI susceptibility.

LEDcode/NTC

LEDcode allows configuration of

- Dimming curve: lin / log
- Minimum dimming level
- NTC throttle temperature
- LED drive current per output: from 200mA-1,050mA in 1mA steps

Programming the driver via LEDcode requires a TOOLbox pro and FluxTool software.

Connecting a 47kΩ NTC thermistor enables closed loop thermal control. The NTC throttle temperature is programmable through LEDcode.

DALI

You can use these connectors to connect the driver to a DALI network. Always combine a DA+ and DA- connector for either data input or data output.

120-277 VAC

The driver has been designed for use with universal mains voltage input of 120-277 VAC, 50/60Hz.