

A9950560 SOLOdrive 50W Constant Current 0-10V-Version

50W 0-10V Dimmable LED Driver

SOLOdrive 561 is a 0-10V dimmable, constant current LED driver. Dimming is beautiful - smooth all the way down to 0. 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. SOLOdrive is programmable to suit a wide application area and 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: 120-277VAC
- Current, max: 0.7A
- Frequency: 50/60Hz
- 0-10V dimmer input

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
- 0-10V compatible (IEC 60929 Annex E). SOLOdrive 561 is a current source driver, compatible with both current sink and current source controllers. For a list of compatible 0-10V dimmers, please visit www.eldoled.com/compatibility

Note that the driver's 0-10V interface is not insulated from the LED outputs, meaning the insulation class (basic or double) of the dimmer will determine the final insulation class of the LED outputs. If the 0-10V dimming signal is only basic insulated, LED outputs are considered ELV (not SELV).

- 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



CE cULus **LEDcode 0-10V**

Connectors

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

Wiring

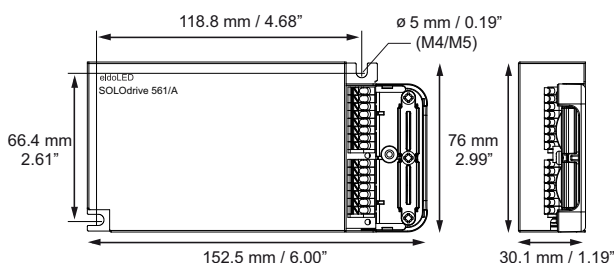
- Cross section: 0.5 - 1.5 mm², AWG 20 - 16
- Strip length: 9 mm / 0.35 in.
- Weight: 372 g, 13.12 oz


Environmental ratings

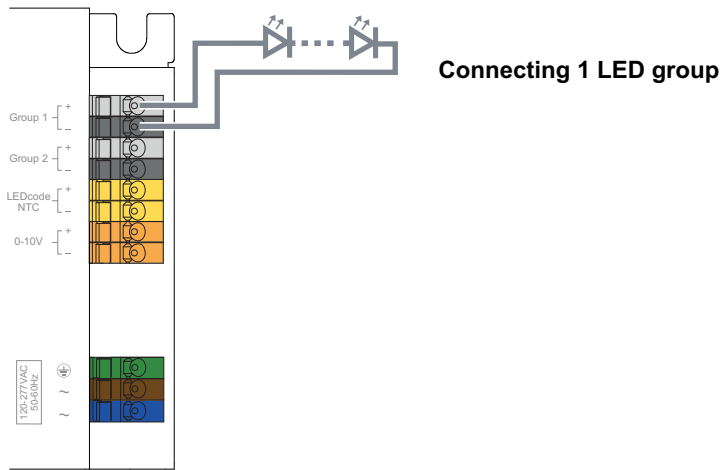
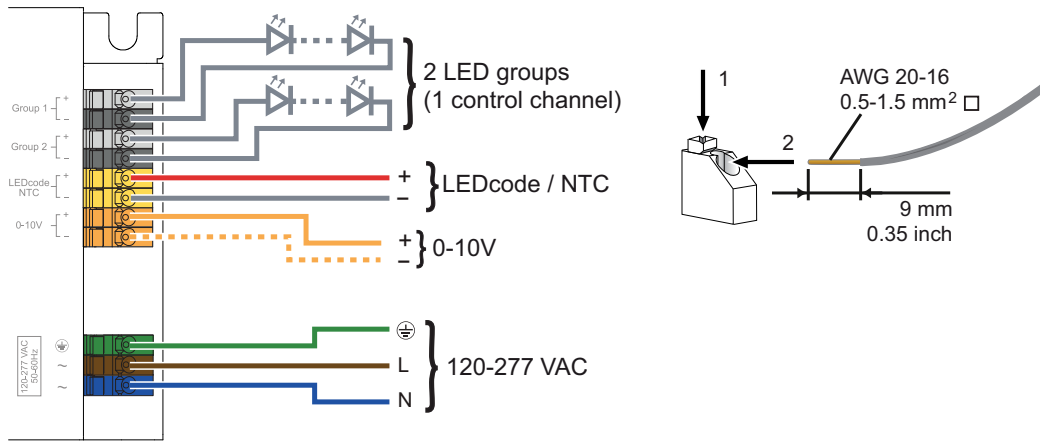
- Ta range: -20°C...+50°C / -4°F...+122°F
- Tc max: 85°C / 185°F
- For use in damp and dry locations


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.



 **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 are controlled over one channel.

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.

0-10V

Connect your 0-10V control device to the driver's 0-10V + and 0-10V- connectors.

120-277 VAC

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