ARTECTA
THE ART OF LIGHTING

eldoLED · LED technology

50W Full-Colour Dimmable LED Driver

POWERdrive 562 and 561 are constant current, DMX/RDM compatible LED drivers with three and four LED outputs respectively. Targeted at a wide range of full-colour, dynamic LED lighting applications, POWERdrive's dynamic response can be tuned to fit any content - from exceptionally smooth fades in architecture to fast-paced video in entertainment. POWERdrive - Beyond Colour.

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

Output
- Voltage: 55V typ
- Current range: settable from 200mA to 1,050mA
  for each LED output separately
- Power: 50W max

General
- Power factor: > 0.9
- DMX / RDM and LedSync compatible
- Hybrid HydraDrive: efficient, smooth and flicker-free dimming
- Full dimming control: 100% to 0%, choice of linear or logarithmic dimming curve
- High efficiency 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)
- LEDcode/NTC interface for robust thermal management
- Programmable with TOOLbox pro and FluxTool software via DMX/LedSync

LEDcode configuration

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

www.eldoled.com/fluxtool

CE · ⚡10 · D̲E̲ · DMX RDM

Connectors
- LED outputs: + and - (562: x3 and 561: x4)
- LEDcode/NTC: + and -
- DMX in: +, - and shield
- Power: Line, Neutral and Ground

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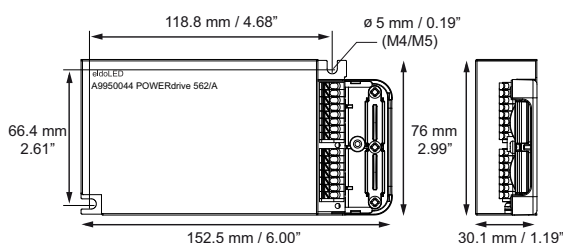
- Weight: 372 g, 13.12 oz

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

Control compatibility
- DMX512A and RDM explore & address
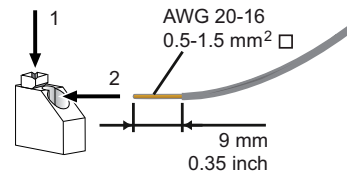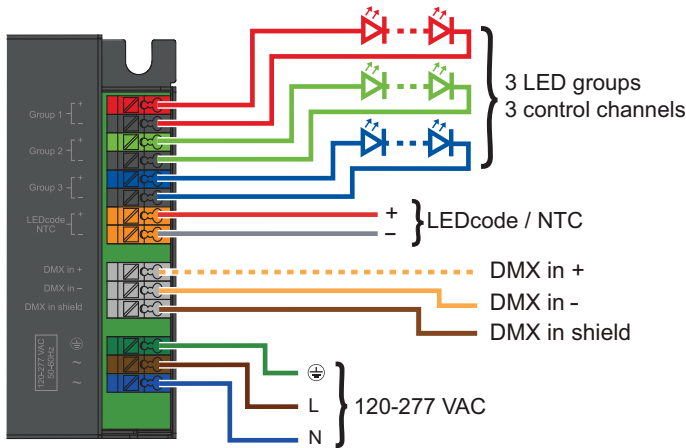 (ANSI E1.20) control gear

Certifications
- CE
- IEC 61347, IEC 62384, EN 55015,
  EN 55022, IEC 61000-3-2, IEC 61547
- UL: pending
- ENEC by VDE (pending for 561/M)

eldoLED
A9950044 POWERdrive 562/A

118.8 mm / 4.68"   ø 5 mm / 0.19" (M4/M5)

66.4 mm 2.61"

76 mm 2.99"
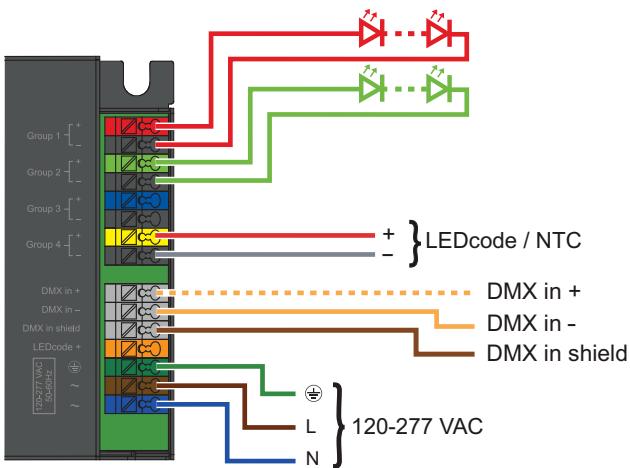
152.5 mm / 6.00"   30.1 mm / 1.19"

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

Connecting 3 LED groups
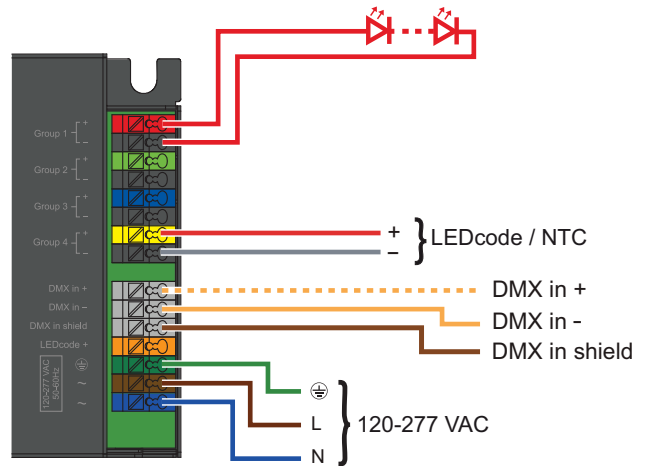
Group 1 + −
Group 2 + −
Group 3 + −
LEDcode / NTC + −
DMX in +
DMX in −
DMX in shield
120-277 VAC ~ ~

} 3 LED groups
3 control channels

+ − } LEDcode / NTC

DMX in +
DMX in −
DMX in shield

⊕
L
N
} 120-277 VAC

1
2
AWG 20-16
0.5-1.5 mm² □
9 mm
0.35 inch

Connecting 2 LED groups

Group 1 + −
Group 2 + −
Group 3 + −
Group 4 + −
DMX in +
DMX in −
DMX in shield
LEDcode +
~ ~

+ − } LEDcode / NTC

DMX in +
DMX in −
DMX in shield

⊕
L
N
} 120-277 VAC

Connecting 1 LED group

Group 1 + −
Group 2 + −
Group 3 + −
Group 4 + −
DMX in +
DMX in −
DMX in shield
LEDcode +
~ ~

+ − } LEDcode / NTC

DMX in +
DMX in −
DMX in shield

⊕
L
N
} 120-277 VAC

⚡ 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 groups

Indicates the location of the connectors for your LED groups. R(ed) represents channel 1, G(reen) represents channel 2 and B(lue) represents channel 3. The default group color allocation can be changed using the TOOLbox pro and freely available FluxTool application.

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

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. Connect the TOOLbox pro to the LEDcode connectors.

DMX in

Use these connectors when the driver is used in a DMX network. Connect the network cable's DMX+, DMX- and DMX shielding wire (the orange/white, orange and brown wire in a CAT5 cable) to the DMX in+, DMX in- and DMX in shield connector respectively.

120-277 VAC

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