

Colour  
is our nature

## Integrated Network Dimmer

### DimWheel Series

The DimWheel Series products are powerful one-button DMX controllers for LED drivers and luminaires.

### Intuitive operation: one-button on/off and dimming control

Operating the DimWheel is as intuitive as operating a standard household dimmer. Pressing the rotary encoder switches the light on or off, turning the encoder while the light is on adjusts the brightness. Turn the encoder fast to make big steps in increasing or decreasing the light output, turn it slow for bit-by-bit brightness control.

### High control resolution

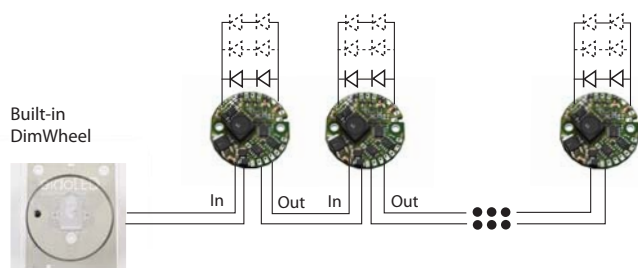
15-bit resolution guarantees smooth brightness control, making the DimWheel the perfect digital LED dimmer. The DimWheel also offers total dimming control from 100% down to 0.5%.

### Onboard LED

An LED on the DimWheel's PCB gives you local visual feedback on the actual dimming level.

### Network control

The DimWheel uses a DMX/LedSync-compatible output interface to control eldoLED and other standard DMX devices with either an 8-bit or 16-bit network resolution. The network resolution is configurable by way of a DIP switch. The 16-bit network resolution, which is supported by the LedSync protocol, allows extremely fine dimming.



Example of a DimWheel wiring schematic

### Easy installation

The DimWheel's small footprint of 40mm by 48mm or 1.57" by 1.89" allows integration in any industry-standard mounting space used for traditional lighting dimmers. The screw terminals and threaded encoder guarantee easy connection and easy mounting, making the installation process of the DimWheel a breeze.

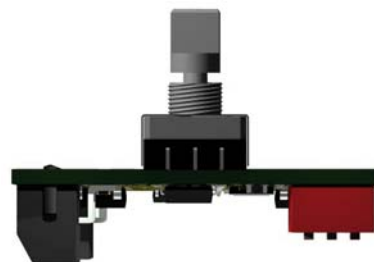


### Features

- On/off switch integrated in encoder
- Operating supply voltage range: 12V-32V DC
- USITT DMX512A- and LedSync-compatible
- 8- or 16-bit network resolution
- Onboard LED for local visual feedback
- On/off state and dimming level are saved to memory when light is switched off or a power glitch occurs

### Advantages

- Accurate/complete solution for LED lighting dimming and on/off control
- Can be mounted and used like standard household dimmers
- Low EMI
- Simplifies total system solution
- Easy network setup



Screw terminals and threaded encoder ensure easy mounting

**Electrical data**

- Operating supply voltage range: 12V-32V DC
- Processor: eldoLED DimLogic 1200 Series
- Reverse polarity protection

**Dynamic effects**

- Control channel 1-128: 0 - 100%
- Control channel 129-256: 0 or 100%

**Thermal data**

- Cooling: passive. No active cooling required.

**Connections**

- Power: screw terminals (2)
- Data: screw terminals (3)

**Network control**

- Network output: USITT DMX512A or LedSync, based on RS485 specification
- Output signal update rate: 13ms
- Number of network channels: 256
- Network resolution: 8- or 16-bit, configurable by way of DIP switch
- Communication: bi-directional for configuration or sensor value read-out

**Operating modes**

- On/off mode
- Dimming mode

**User interface**

- Encoder type: detentless
- Encoder resolution: 20 steps in 360°
- Ballistic effect: yes

**Environmental ratings**

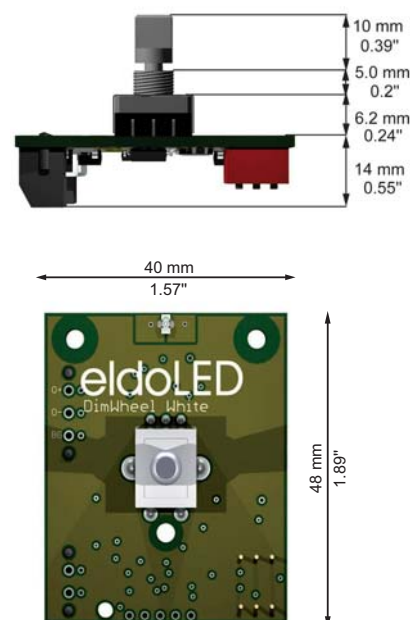
- Maximum ambient temperature: 60°C (140°F)
- Minimum ambient temperature: -20°C (-4°F)
- Storage ambient temperature: -40°C to 95°C (-40°F to 203°F)
- Relative humidity: non-condensing

**Mounting data**

- Mounting orientation: any
- Mounting holes: for M3 screws (3)
- Threaded encoder for easy mounting

**Dimensions**

- LxWxH: 48 mm x 40 mm x 21.2 mm  
1.89" x 1.57" x 0.84"

**Ordering information**

Description	Product	Order nr
Dimmer 1 channel LedSync	DimWheel - W	DLW10101

For special form factors, connectors or other customized solutions, please contact us at [OEMsales@eldoled.com](mailto:OEMsales@eldoled.com).