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Colour is our nature

DMX Compatible Integrated Network Dimmer

DimWheel Series

The DimWheel is a powerful one-button DMX controller that lets you set dim level, colour and show for LED drivers and DMX compatible luminaires. It is easy-to-install and meets EU, UK and US wall box size requirements. Also, it is compatible with most dimmer face plates available on the market.

DimWheel Colour

The DimWheel Colour features the following operation modes:

- for general white LED lighting applications, the 1-channel mode lets you dim the light and turn it on or off.
- for applications requiring colour temperature control, e.g. mixing warm and cool white light, the DimWheel features a 2-channel mode. In this mode, you can set the colour temperature, dim the light and turn it on or off.
- for static and dynamic full colour applications (RGB and RGBW/A), the 3- and 4-channel modes offer complete colour or show control plus dimming and on/off control. Colour control allows you to create any hue and pick a saturation level for this hue. Show control lets you run a show in DMX broadcast or chase mode and set the show speed.

Dimming and colour: high control resolution

The DimWheel offers a large dynamic range from 100% down to 0.5%. For most applications, it suffices to have an 8-bit control resolution. In 8-bit DMX mode, DimWheel offers a gamma-corrected dimming curve. The 16-bit resolution guarantees extremely smooth brightness control and fine colour mixing, making the DimWheel the perfect one-button digital LED dimmer.

Shows: broadcast and chase

DimWheel Colour offers two types of show modes: broadcast and chase. You can use broadcast mode for mood lighting where all connected luminaires receive the same set point (=colour) and use chase mode for linear dynamic applications. You can define and upload show sequences to the DimWheel Colour yourself by connecting the eldoLED TOOLbox to the DimWheel's LedSync-in interface and using the freely available TOOLbox PC software.

DimWheel Colour (EU/UK)

Easy installation

The DimWheel fits into EU, UK and US industry-standard wall boxes. The DimWheel's mounting plate ensures easy installation into the wall box, and its push-in connectors and strain reliefs guarantee easy and tidy connection of wires.

Setup is a breeze!

The DIP switches, which are accessible after mounting, allow you to set the operation mode, select the show mode (broadcast or chase) and set the network resolution to 8- or 16-bit.

Features

- USITT DMX512A compatible
- One-button on-off/dimming/colour/show control
- Operating supply voltage range: 12V-32V DC
- DIP switches for configuration, accessible after mounting
- External switch interface allows remote show selection
- All settings saved to memory when light is switched off or when a power glitch occurs
- Front indicator LED for local show (speed), colour and dim level feedback

Advantages

- Complete functionality solution offering LED show sequences, colour, dimming and on/off control
- Can be mounted/used like standard household dimmer
- Integrated back box and mounting plate simplify total system setup and installation

Electrical data
- Supply voltage: 12V-32V DC
- Maximum power: 2W
- Reverse polarity protected
- Processor: eldoLED DimLogic 4400 Series

DIP switches
- 1 and 2: set the controller for 1, 2, 3 or 4 channel operation mode
- 3: toggles between show and color mode (3 and 4 channel mode only)
- 4: sets show mode to broadcast or chase
- 5: sets DMX network resolution to 8 or 16 bit

Connectors
- V sup: + and - (2)
- External switch input: + and - (2)
- DMX in: +, - and shield (3)
- LedSync out: +, - and shield (3)

Network control
- Network input/output: USITT DMX512A, based on RS485 specification
- Output signal update rate: 8ms
- Number of network channels: 128
- Network resolution: 8- or 16-bit
- Communication: bi-directional for configuration and uploading of shows

Operating modes
- On/off
- Dimming: with gamma corrected dimming curve (8-bit resolution)
- Colour selection
- Show: broadcast and chase
- Show speed selection

User interface
- Encoder type: endless
- Ballistic effect: yes

Dynamic effects
- Control channel 1 - 64: 0 - 100%
- Control channel 65 -128: 0 or 100%

Thermal data
- Cooling: passive. No active cooling required.
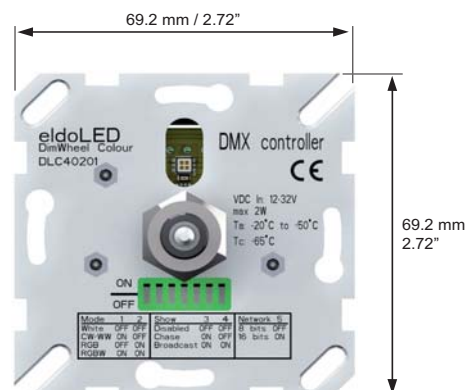
Environmental ratings
- Ambient temperature range:
  -20°C ... +60°C (-4°F... +140°F)
- Storage ambient temperature:
  -40°C ... +95°C (-40°F ... +203°F)
- Relative humidity: non-condensing

Mounting data
- Wall box compatibility:
  all common EU,UK and US standards
- Strain reliefs: on both sides, one for each connector
- Nut: for fastening an aesthetic face plate (M10)
- Mounting holes: 8x M3

Dimensions
- LxW of aluminum mounting plate:
  69.2 mm x 69.2 mm / 2.72 in. x 2.72 in.
- Depth back box - mounting plate:
  22.91 mm / 0.90 in.
- Depth back box - encoder:
  39.26 mm / 1.55 in.

Ordering information

Description	Product	Order nr
Dimmer 1-4 channel white/colour LedSync	DimWheel Colour	DLC40201

For special form factors, connectors or other customized solutions, please contact us at OEMsales@eldoled.com.