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.

Easy installation
The DimWheel fits into EU, UK and US industry-standard wall boxes and is compatible with most dimmer faceplates. 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
Datasheet DimWheel Colour

**Electrical data**
- Supply voltage: 12-32 VDC, SELV equivalent
- 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)

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

**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

**Environmental ratings**
- Ta: -20°C ... +60°C (-4°F... +140°F)
- Ta storage: -40°C ... +95°C (-40°F ... +203°F)
- Relative humidity: non-condensing

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

**Mounting data**
- Wall box compatibility: universal EU/UK and US single gang wall box
- Fixation DLC40201: fasten with two M3 screws. Choice of 8x M3 mounting hole positions.
- Fixation DLC40301: fasten with two #6 tapping screws. 2x 4.5mm/0.177” mounting holes provided.
- Faceplate compatibility: EU: universal faceplates (Gira, Busch Jaeger, Berker, Jung), UK: BS4662 compatible faceplates, US: standard single gang duplex receptacle wall plate or coax wall plate (e.g. Cooper, Leviton, Lutron, Pass & Seymour)
- Faceplate fixation DLC40201: M10 nut
- Faceplate fixation DLC40301: 2x holes for 6/32 UNC threaded screws
- Strain relief: provision for wire straps on both sides (wire straps not included)

**Dimension data**

<table>
<thead>
<tr>
<th>Description</th>
<th>Product</th>
<th>Order no.</th>
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<tbody>
<tr>
<td>DimWheel Colour, wall mount DMX controller, fits in standard EU wall box</td>
<td>DimWheel Colour</td>
<td>DLC40201</td>
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<tr>
<td>DimWheel Colour, US version, US wall mount DMX controller, fits in US single gang wall box</td>
<td>DimWheel Colour</td>
<td>DLC40301</td>
</tr>
<tr>
<td>DimWheel faceplate kit, colour: white, BS4662 standard wall box faceplate, for use with DLC4021</td>
<td>Faceplate</td>
<td>DLA101W1</td>
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For special form factors, connectors or other customized solutions, please contact us at OEMdesk@eldoled.com.
Please note that faceplate, wallbox and screws are not included with the DimWheel Colour.