

LD-V4-IQ

4 channel 12/24V constant voltage PWM dimmer



| | |
|---------------|------------------------------------|
| Model number: | LD-V4-IQ |
| Mounting: | in-field, junction box or dry-wall |
| Dimensions: | 108×86×45.5mm |

Applications

- 4 individual single color LED stripes
- RGB+W LED stripe

Features

- button or potentiometer input
 - auto-detect input type
 - potentiometer auto-range
 - Brightness/saturation/hue control in RGB mode
- RGB mode

- exponential output control
- high frequency PWM operation
- channel phase spreading
- full output protection

General description

The LED dimmer LD-V4-HIQ is 4 channels PWM dimming controller for voltage controlled LED lights or ribbons. It can be used for 4 individual LED stripes or for RGB (+W) stripe. LD-V4-HIQ supports local control buttons or potentiometers connected directly to it, which can be mixed and are auto-detected. For more natural feel and smoother transitions outputs are exponentially controlled with resolution of 0,025 %. High PWM frequency (500 Hz) and channels spreading prevent flickering, reduces EMI noise and considerably increase power efficiency, while preventing eye-strain or headache.

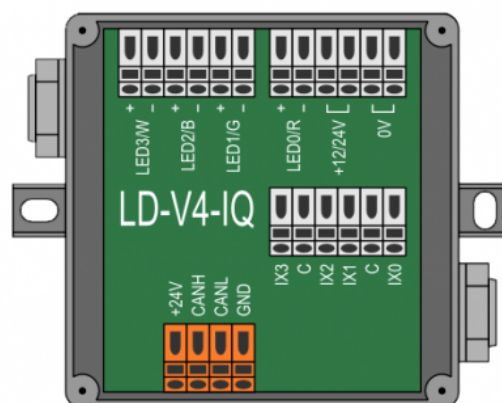
All outputs are fully protected against over-voltage, under-voltage and over-current. Many features are available in the stand alone mode, while advanced features like scenes, scheduling, smartphone operation, internet connection are only available when connected to the appropriate Home Controller.

Technical specification

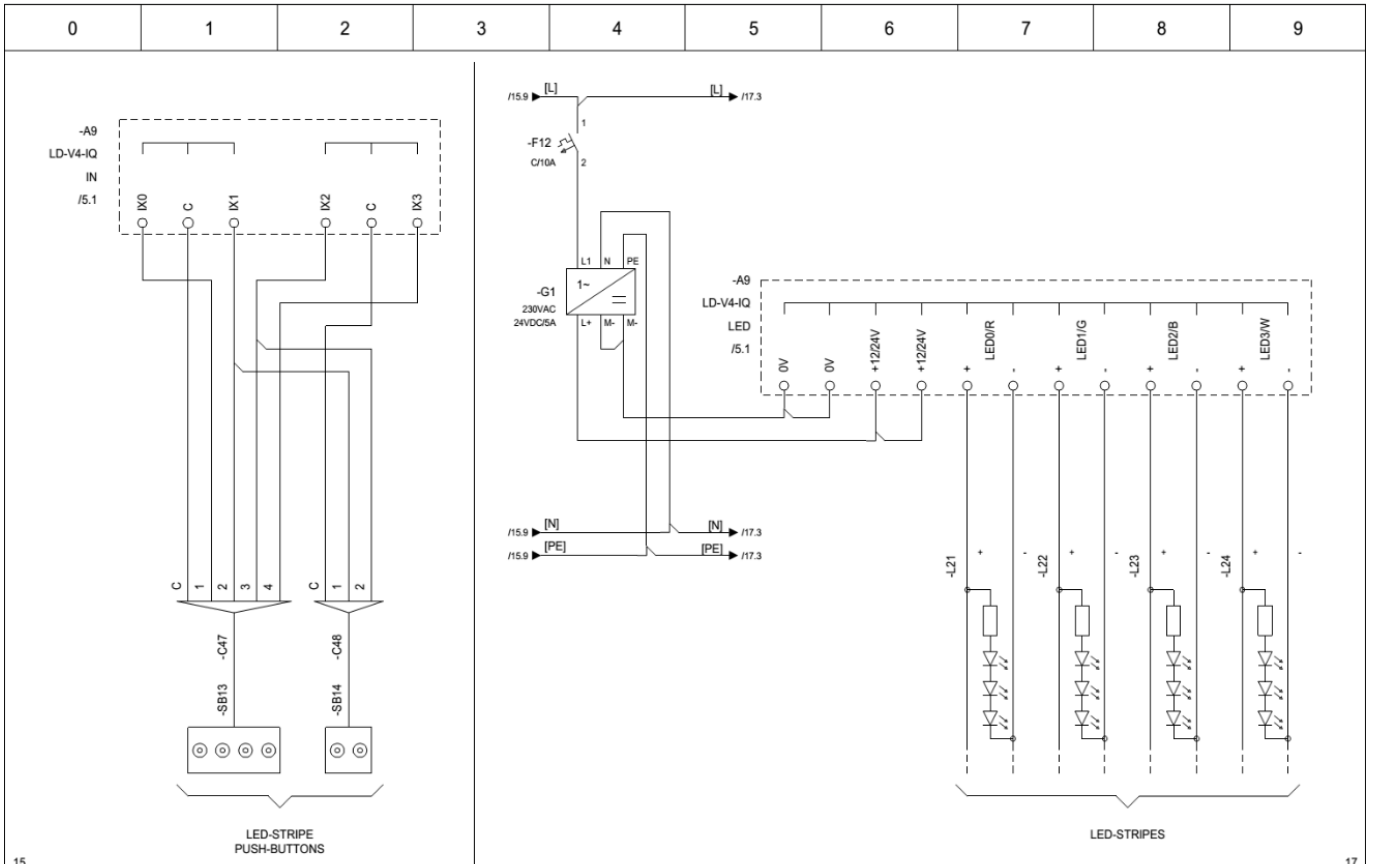
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|---------------------------|-----------------------------|
| Total output power | 240 W @ 12 V |
| | 480 W @ 24 V |
| Total power loss: | 2 W @ 3×6,7 A |
| Max current per terminal: | 10 A |
| PWM frequency: | 500 Hz |
| Output resolution: | 12-bit |
| Digital inputs: | internal pull-up 12 V, 2 mA |
| Analog inputs: | 10k / 1-10 V; auto-range |
| Potentiometer inputs: | 10 k |
| LED power supply: | 12 / 24 V (10..28 V) |
| Power supply: | 24 V / 25 mA |
| Operating temperature: | 0..45 °C |
| Storage temperature: | -20..75 °C |
| Relative humidity: | 0..95 % n/c |
| Galvanic separation: | supply/outputs |
| Maximum current | |
| Output | Supply |
| 1x10A | 1x10A |
| 2x10A | 2x10A |
| 3×6.7A | 2x10A |
| 4x5A | 2x10A |

Terminals

| | | | |
|---------------------------------------|----------------|---|------------------------------------|
| LED stripe 3 / White RGB stripe | LED3/W | + | LED 3 / W |
| | | - | PWM output |
| LED stripe 2 / Blue RGB stripe | LED2/B | + | LED 2 / B |
| | | - | PWM output |
| LED stripe 1 / Green RGB stripe | LED1/G | + | LED 1 / G |
| | | - | PWM output |
| LED stripe 0 / Red RGB stripe | LED0/R | + | LED 0 / R |
| | | - | PWM output |
| LED power supply | +12/24V | . | LED PWM outputs power supply |
| | | . | |
| | 0V | . | |
| | | . | |
| LED 3 | IX3 | + | Digital/analog input 3 |
| Push-buttons common | C | - | Digital/analog inputs common |
| LED 2 / RGB saturation button | IX2 | + | Digital/analog input 2 |
| LED 1 / RGB color button | IX1 | + | Digital/analog input 1 |
| Push-buttons common | C | - | Digital/analog inputs common |
| LED 0 / RGB brightness button | IX0 | + | Digital/analog input 0 |
| IEX2 BUS | +24V | . | IEX2 bus |
| | CANH | . | |
| | CANL | . | |
| | GND | . | |




Wiring diagram



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| | | | | | | | | | | | | | |
|-----|---------------|-----------|------|---|--|---|--|---|--|---|--|---|--|
| | | | | Last changed by GK Last changed 14/9/2015 Prev date 14/9/2015 | |  Robotina d.o.o. OIC Kozina 38 SI-6240 Kozina | | HC-IQ Automation LD-V4-IQ Inputs / Outputs HIQ wiring | | Drawing number 001 Pages 17 | | Installation = Location + Page number 16 | |
| Rev | Revision text | Signature | Date | | | | | | | | | | |