LED stripe dimmer

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.
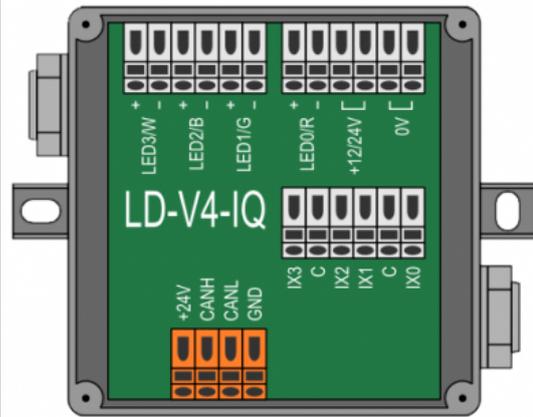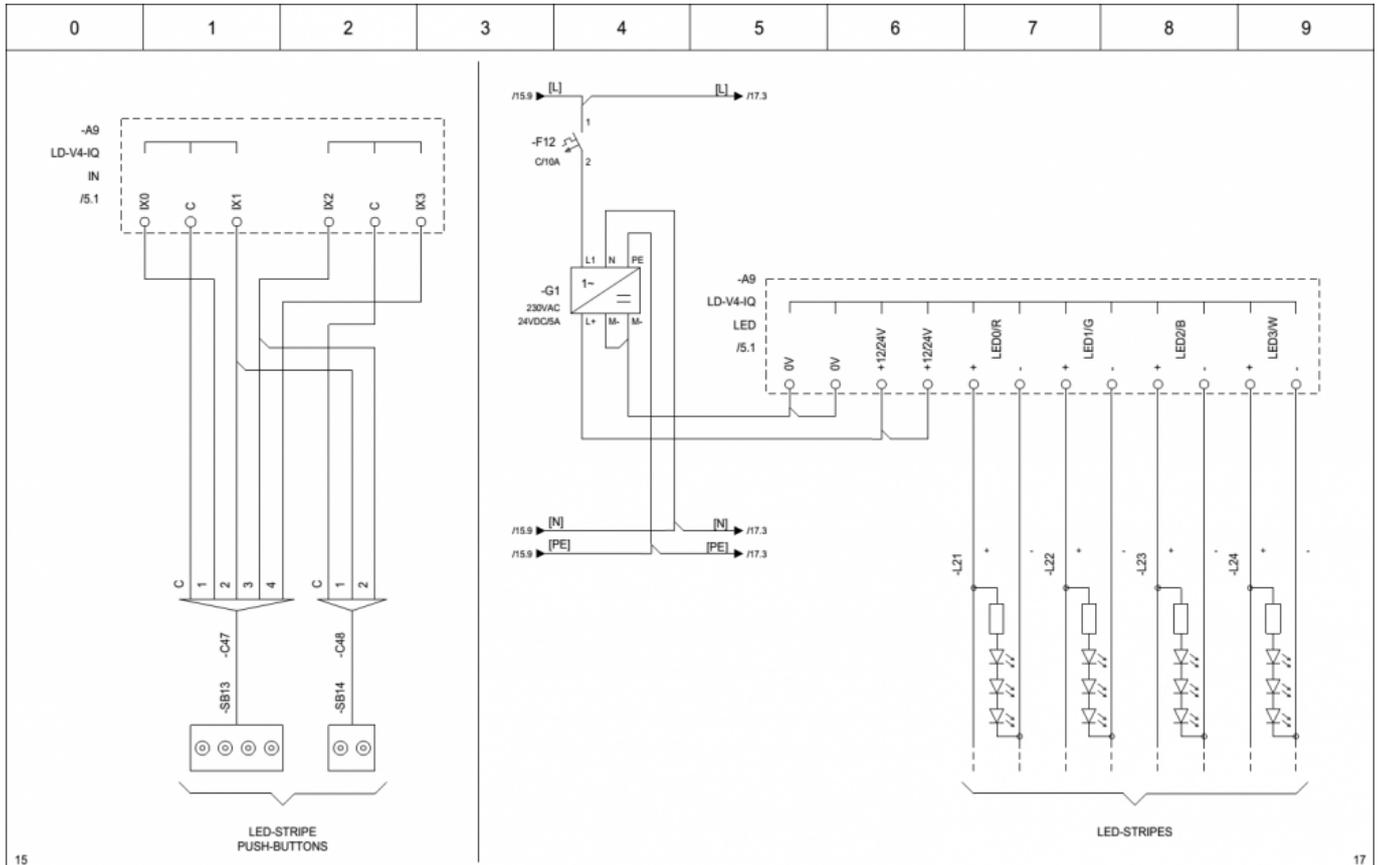
Technical specification

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 / RGB saturation button	**IX3**	+	Digital/analog input 3
Push-buttons common	**C**	-	Digital/analog inputs common
LED 2 / RGB mode jumper	**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	.	

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