

**FEATURES**

- Dimmer + Fader + Driver
- DC Input 12/24/48 VDC
- Local Command: N.O. push button / 0-10V / 1-10V / Potentiometer
- Adjustable brightness output
- Current voltage outputs for R-L-C loads
- Typical efficiency > 95%
- Adjustable brightness up to completely off (Dim to Dark)
- Minimum brightness level: 0.1% (1% with push button control)
- D-PWM Modulation
- Adjustable D-PWM frequency: 300/600/1200
- Adjustable output curve: Linear / Quadratic / Exponential
- Soft start and soft stop
- Extended temperature range
- 100% Functional test – 5 Years warranty

→ For the whole and updated *Device Manual* refer to producer's website: <http://www.dalcnet.com>

CONSTANT VOLTAGE VARIANTS (common anode)

Application: Dimmer

CODE	Supply voltage	Output	Channel	Command	
DLD1248-1CV	12-48V DC	1 x 8A max	1	N.O. push button / Analog signal 0-10 / 1-10 / Potentiometer	PROFESSIONAL

PROTECTION

OTP	Over temperature protection ¹		✓
OVP	Over voltage protection ²		✓
UVP	Under voltage protection ²		✓
RVP	Reverse polarity protection ²		✓
IFP	Input fuse protection ²		✓
SCP	Short circuit protection		✓
OCP	Open circuit protection		X
CLP	Current limit protection		✓

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¹ Thermal Protection on the output channel in case of high temperature. The thermal intervention is detected by transistor (>150°C) or current regulation (depending of the booster variant).

² Only control logic protection



REFERENCE STANDARD

EN 61347-1	Lamp controlgear - Part 1: General and safety requirements
EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
EN 61547	Equipment for general lighting purpose – EMC immunity requirements
EN 50581	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances
ANSI E 1.3	Entertainment Technology - Lighting Control Systems - 0 to 10V Analog Control Specification
IEC 60929-E.2.1	Control interface for controllable ballasts - control by d.c. voltage - functional specification

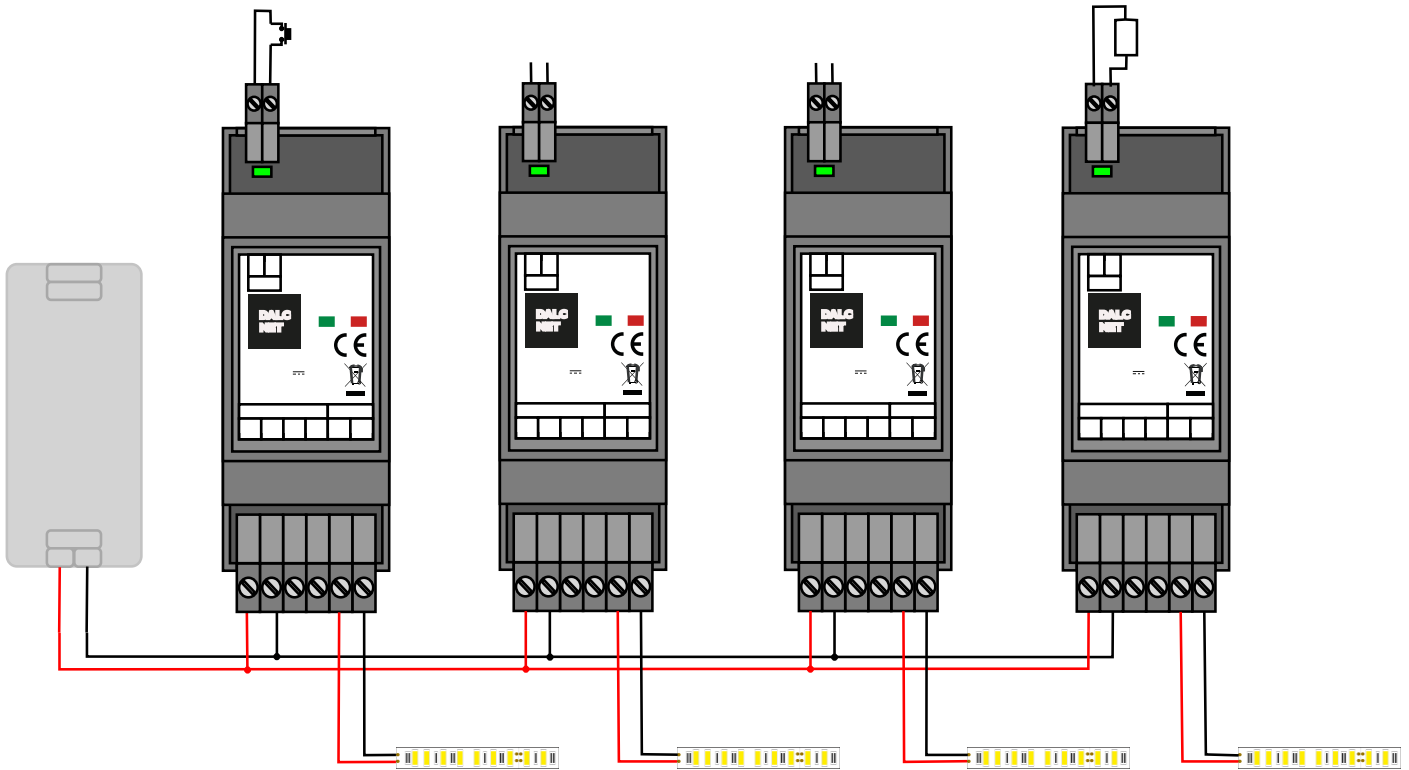
TECHNICAL SPECIFICATIONS

		Variants
		Constant Voltage
Supply voltage		min: 10.8 VDC – max: 52.8 VDC
Output voltage		= V_{in}
Input current		max 8A peak
Output current		max 8A peak max 7.5A @55°C max 6.5A @60°C
Nominal power ³	@12V	78 W (@6.5A) – 90 W (@7.5A)
	@24V	156 W (@6.5A) – 180 W (@7.5A)
	@48V	312 W (@6.5A) – 360 W (@7.5A)
Power loss in standby mode		<500mW
Type of Load		R-L-C
Thermal shutdown		150 °C
Command supply current		0.5 mA (per 1-10V)
Command required current (max)		0.1 mA (per 0-10V)
D-PWM frequency adjustable		300 -- 600 -- 1200 Hz
D-PWM resolution		16 bit
D-PWM range		0.1 – 100 %
Storage temperature		min: -40 max: +60 °C
Ambient temperature ¹		min: -10 max: +60 °C
Wiring		Buttons: 1.5 mm ² solid – 1 mm ² stranded – 30/14 AWG Power & Leds: 2.5 mm ² solid – 1.5 mm ² stranded – 30/12 AWG
Wire preparation length		Buttons: 6 mm Power & Leds: 7.5 mm
Protection grade		IP10
Casing material		Plastic
Packaging unit (pieces/unit)	Single Carton Box 1 pc	Carton Box 7 pc
Mechanical dimensions	92 x 36 x 62 mm – DIN-rail 2mod	
Packaging dimensions	124 x 71 x 48 mm	263 x 178 x 82 mm
Weight	88 g	800 g

³ Maximum value, dependent on ventilation conditions

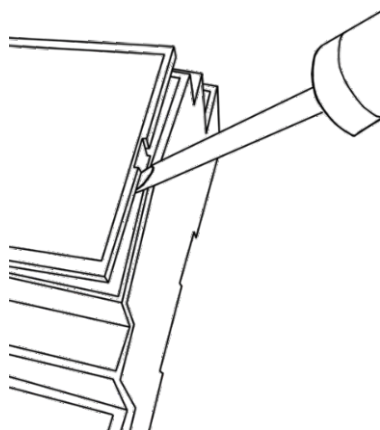
INSTALLATION

Connect the switching supply (12-48V). Connect the N.O. push button at 0V/IN or a command 0..10V or 1..10V or a potentiometer (22K Ω). Connect LEDs.



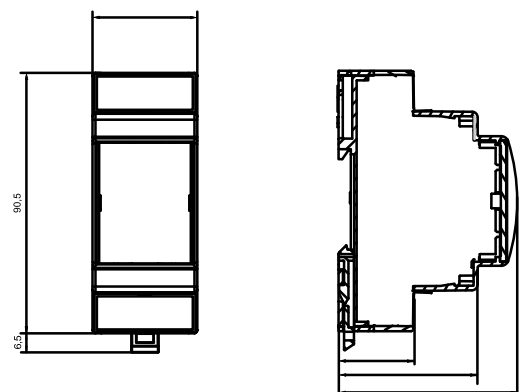
OPENING THE COVER

For the Dip-switch and selectors configuration it is necessary to pull up the cover of the device. See the picture.



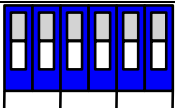
MECHANICAL DIMENSIONS

(without connectors)





CONFIGURATION DIP-SWITCH

Function		-Switches from 1 to 2: -Switches from 3 to 4: -Switches from 5 to 6:	Curve Input Type Output Frame Rate (Adjustable Frequency)
Note: Factory position = all OFF			

Switches from 1 to 2: **Curve**

Default		Quadratic		Exponential		Linear	
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Switches from 3 to 4: **Input Type**

Push button NO MEMORY		Push button MEMORY		Analog 0-10V		Analog 1-10V	
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Switches from 5 to 6: **Out frequency**

300Hz		600Hz		1200Hz		Reserved	
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FUNCTION

N.O. PUSH BUTTON

The intensity and the status (ON/OFF) is controlled by the N.O. push button

Button	Function	Intensity
1	Click Double Click Long press (>1s) from OFF Long press (>1s) from ON	On/Off Maximum Intensity Turn on at 1% (Nighttime) Dimmer UP/DOWN

0-10V & 1-10V & Potentiometer 22kΩ

The intensity is controlled by input voltage variation

Input	Function	Intensity
0-10V 1-10V Potentiometer	Dimmer	0-1V=0% 10V=100%

TECHNICAL NOTES

Installation:

- Installation and maintenance must be performed only by qualified personnel in compliance with current regulations.
- The product must be installed inside an electrical panel protected against overvoltages.
- The product must be installed in a vertical or horizontal position with the cover / label upwards or vertically; Other positions are not permitted. It is not permitted to installed in a bottom-up position (with the cover / label down).
- Keep separated the circuits at 230V (LV) and the circuits not SELV from circuits at low voltage (SELV) and from any connection with this product. It is absolutely forbidden to connect, for any reason whatsoever, directly or indirectly, the 230V mains voltage to the bus or to other parts of the circuit.

Power supply:

- For the power supply use only a SELV power supplies with limited current, short circuit protection and the power must be dimensioned correctly. In case of using power supply with ground terminals, all points of the protective earth (PE = Protection Earth) must be connected to a valid and certified protection earth.
- The connection cables between the power source "low voltage" and the product must be dimensioned correctly and they should be isolated from every wiring or parts at voltage not SELV. Use double insulated cables.
- Dimension the power supply for the load connected to the device. If the power supply is oversized compared with the maximum absorbed current, insert a protection against over-current between the power supply and the device.

Command:

- The length of the connection cables between the local commands (N.O. Push button, 0-10V, 1-10V, Potentiometer or other) and the product must be less than 10m; the cables must be dimensioned correctly and they should be isolated from every wiring or parts at voltage not SELV. Use double insulated shielded and twisted cables.
- Any product or control signal connected at the local command (N.O. Push button, 0-10V, 1-10V, Potentiometer, or other) must be SELV (the devices connected must be SELV or supply a SELV signal)

Outputs:

- The length of the connection cables between the product and the LED module must be less than 10m; the cables must be dimensioned correctly and they should be isolated from every wiring or parts at voltage not SELV. It is preferable to use shielded and twisted cables.