



FEATURES

- DIMMER+FADER+DRIVER
- DC Input: 12/24/48 Vdc
- Local Command: N.O. push button / 0÷10V / 1÷10V / Potentiometer
- Adjusting the brightness
- Current voltage outputs for R-L-C loads
- Typical efficiency > 95%
- Adjusting the brightness up to completed off (Dim to Dark)
- Level minimum of brightness: 0.1% (1% in push)
- D-PWM Modulation
- **Adjusting D-PWM frequency: 300 / 600 / 1200**
- **Adjusting 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)

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

Application: Dimmer

Protection

OTP	Over temperature protection
OVP	Over voltage protection
UVP	Under voltage protection
RVP	Reverse polarity protection
IFP	Input fuse protection
SCP	Short circuit protection
OCF	Open circuit protection
CLP	Current limit protection

**Reference Standard**

EN 61347-1:2008 +A1:2011+A2:2013	Lamp controlgear - Part 1: General and safety requirements
EN 61000-3-2:2014	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
EN 61000-3-3:2013	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection
EN 62384:2006+A1:2009	DC or AC supplied electronic control gear for LED modules - Performance requirements
EN 55015:2013+A1:2015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
EN 61547:2009	Equipment for general lighting purposes - EMC immunity requirements
EN 50581:2012	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

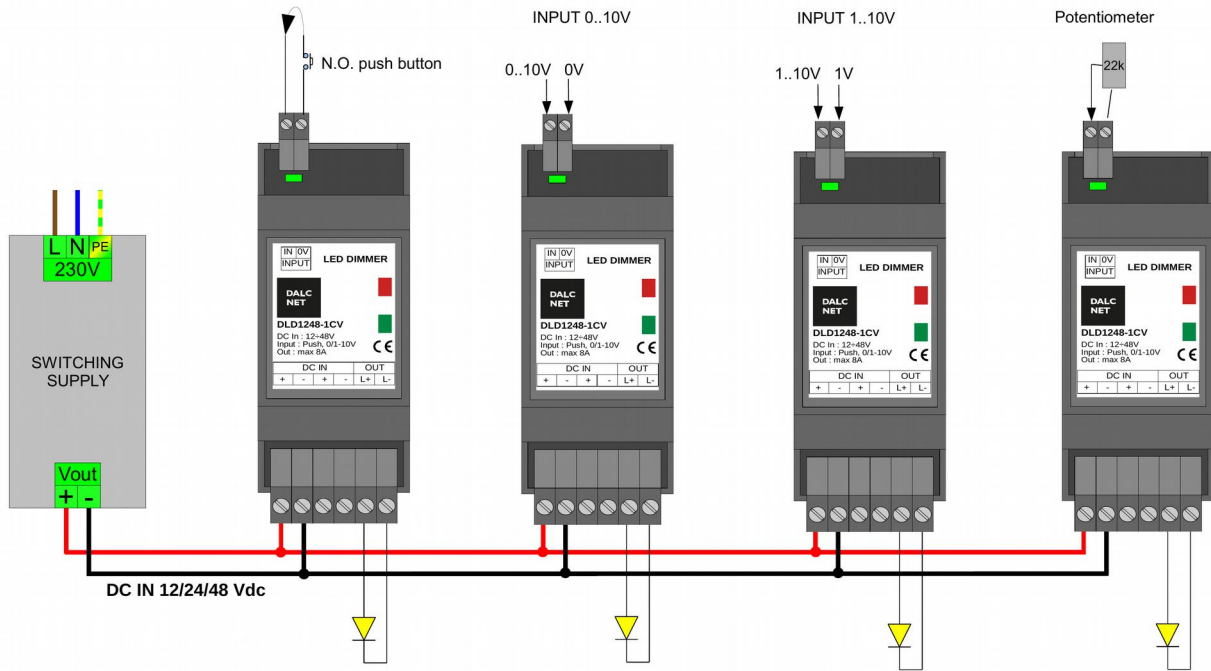
Technical Specifications

		Variant
		Constant Voltage
Supply voltage		min: 10,8 Vdc .. max: 52,8 Vdc
Input current		max 8 A peak ¹⁾
Output voltage		= Vin
Output current		max 8 A peak ¹⁾ max 7,5A @55°C ¹⁾ max 6,5A @60°C ¹⁾
Nominal power ¹⁾	@12V	78 W (@ 6,5A) – 90 W (@ 7,5A)
	@24V	156W (@ 6,5A) – 180 W (@ 7,5A)
	@48V	312W (@ 6,5A) – 360 W (@ 7,5A)
Thermal shutdown		150 °C
Command supply current		0,5mA (only for 1-10V)
Command required current (max)		0,1mA (only for 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: -40 max: +60 °C
Protection grade		IP10
Wiring		2.5mm ² solid - 1.5mm ² stranded - 30/12 AWG
Mechanical dimensions		92 x 36 x 62 mm - DIN RAIL 2mod.
Packaging dimensions		124 x 71 x 48
Weight		88g

¹⁾ maximum value, dependent on ventilation conditions

Installation

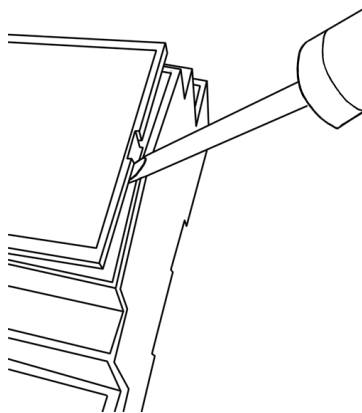
Connect the switching supply (12-48V), connect the N.O. push button at 0V/IN or a command 0..10V or 1..10V or potentiometer (22K Ω), connect leds.



DLD1248-1CV

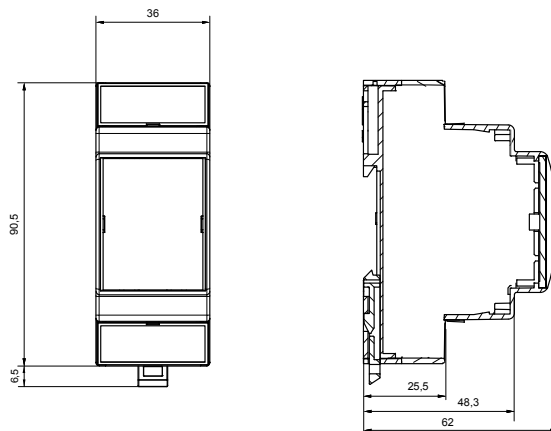
Opening the cover

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



Mechanical dimension:

(without connectors)





Configuration Dip-switch

Function		<ul style="list-style-type: none"> Switches from 1 to 2: Curve Switches from 3 to 4: Input Type Switches from 5 to 6: Output Frame Rate (Adjusting Frequency)
Note: Factory positions = all OFF		

● Switches from 1 to 2: **Curve**

Default		Exponential		Quadratic		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 pressure (>1s) from OFF Long pressure (>1s) from ON	On/Off Maximum Intensity Turn on at 10% (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 bottom-up position (with the cover / label updown).
- Keep separated the circuits at 230V (LV) and the circuits not SELV from circuits to 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, 0-10 V, 1-10 V, 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.
- All the product and the control signal connect 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. Is preferable to use shielded and twisted cables.