DALCNET S.r.I.

DALC

NET

Registered office: via Meucci, 35 - 36040 Brendola (VI) - Italy Headquarters: via Meucci, 35 - 36040 Brendola (VI) - Italy Tel. + 39 0444 1836680/1867452 Fax. + 39 0444 1867453 VAT: IT-04023100235 info@dalcnet.com www.dalcnet.com



DLC1248-110 single channel

Device Manual

Made in Italy Rev. 2016-04-26 pag. 1/4

CE

FEATURES

- FADER+DIMMER+DRIVER
- DC Input: 12/24/48 Vdc
- Command: 0-10V / 1-10V
- Adjusting the brightness of withe light
- Current outputs or voltage outputs for R-L-C loads
- Typical efficiency > 95%
- · Adjusting the brightness up to completed off
- · Soft start and soft stop
- Optimized output curve
- Extended temperature range
- 100% Functional test 5 years warranty

Constant currents variants (common anode)

CODE	Voltage supply	Output	Channels	Command		
DLC1248-1CC350-110	12-48V DC	1 x 350mA	1	Analog signal 0-10V / 1-10V		
DLC1248-1CC500-110	12-48V DC	1 x 500mA	1	Analog signal 0-10V / 1-10V		
DLC1248-1CC700-110	C1248-1CC700-110 12-48V DC 1 x 700mA 1		Analog signal 0-10V / 1-10V			
DLC1248-1CC950-110	12-48V DC	1 x 950mA	1	Analog signal 0-10V / 1-10V		
Any current value in range from 350 mA to 950 mA is available on demand						

Application: Dimmer

Constant voltage variants (common anode)

CODE	Voltage supply	Output	Channels	Command	
DLC1248-1CV-110	12-48V DC	1 x 8A max	1	analog signal 0-10V / 1-10V	

Application: Dimmer

Protections

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



DALCNET S.r.I.

Registered office: via Meucci, 35 - 36040 Brendola (VI) - Italy Headquarters: via Meucci, 35 - 36040 Brendola (VI) - Italy Tel. + 39 0444 1836680/1867452 Fax. + 39 0444 1867453 VAT: IT-04023100235 info@dalcnet.com www.dalcnet.com

DLC1248-110 single channel EASY DIMMER

EASY DIMMER Device Manual Made in Italy Rev. 2016-04-26 pag. 2/4

Reference Standards

IEC/EN 61347-1	Lamp controlgear - Part 1: General and safety requirements
IEC/EN 61347-2-13	Lamp controlgear - Part 2-13: Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules
IEC/EN 62384	DC or AC supplied electronic control gear for LED modules - Performance requirements
IEC 61547	Equipment for general lighting purposes - EMC immunity requirements
IEC 61000-3-2	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current \leq 16 A per phase)
EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
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 current			Constant voltage		
		350mA	500mA	700mA	950mA		
Supply voltage			min: 10,8 Vdc max: 52,8 Vdc				
Input current		max 0,4A	max 0,5A	max 0,7A	Max 0.95A	max 8 A peak ¹⁾	
Absorbed power at 0% output	@12V	max 90 mW max 75 m					
	@24V		max 180 mW				
	@48V		max 455 mW				
Output voltage	·		min: Vin/4	max: Vin-0,9V		= Vin	
Output current		350 mA	500 mA	700 mA	950mA	max 8 A peak ¹⁾ max 7,5A @20°C ¹⁾ max 6,5A @40°C ¹⁾	
Nominal Power ¹⁾	@12V	4.2 W	6 W	8.4 W	11.4 W	78 W	
	@24V	8.4 W	12 W	16.8 W	22.8 W	156 W	
	@48V	16.8 W	24 W	33.6 W	45.6 W	312 W	
Thermal shutdown		150 °C				150 °C	
Command Supply Current		0,5mA (only for 1-10V)					
Command Required Current (max)		0,1mA (not for 1-10V)					
D-PWM dimming frequency		250Hz					
D-PWM resolution		16 bit					
D-PWM range		0,1 – 100 %					
Storage temperature		min: -40 max: +60 °C					
Ambient temperature 1)		min: -10 max: +40 °C					
Protection Grade		IP20					
Wiring		2.5mm ² solid - 1.5mm ² stranded - 30/12 AWG					
Mechanical dimensions		44 x 44 x 25 mm					
Packaging dimensions		68 x 56 x 35 mm					
Weight	40g						
¹⁾ maximim value, dependent on ven	tilation conditions						



LED DRIVERS



DALCNET S.r.I. Registered office: via Meucci, 35 - 36040 Brendola (VI) - Italy Headquarters: via Meucci, 35 - 36040 Brendola (VI) - Italy Tel. + 39 0444 1836680/1867452 Fax. + 39 0444 1867453 VAT: IT-04023100235 info@dalcnet.com www.dalcnet.com

DLC1248-110single channel

Made in Italy Rev. 2016-04-26 pag. 3/4

Installation

Connect the switching supply (12-48 V) to the device, connect the potentiometer or 0..10V control or 1..10V control, connect the leds.

Device Manual



DALC NET

DALCNET S.r.I.

Registered office: via Meucci, 35 - 36040 Brendola (VI) - Italy Headquarters: via Meucci, 35 - 36040 Brendola (VI) - Italy Tel. + 39 0444 1836680/1867452 Fax. + 39 0444 1867453 VAT: IT-04023100235 info@dalcnet.com www.dalcnet.com

DLC1248-110single channel EASY DIMMER

Device Manual

Made in Italv Rev. 2016-04-26 pag. 4/4

LED DRIVERS

Operation

0-10V & 1-10V

The intensity is controlled by input voltage variation.

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

Technical Notes

• The 0+10V control input is compatible with sinking/sorcing 1+10V controls (where available). In 1+10V control mode without external current source, the current source of the product must be activated, as shown on connection scheme.

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.

• For the power supply is preferable to use a SELV power supply. In the case of using class I power supply, ALL points of the protective earth (PE = Protection Earth) must be connected to a valid protection earth .

Keep 230V cables separate from circuits to low voltage (SELV).

• 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. Is preferable to use shielded and twisted cables. (Only for multi-channel) In case of output currents higher at 10A, connect at the power supply both pairs of power supply input "V +" and "V-".

• 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.

• The length of the connection cables between the local commands (push-button, potentiometer, 0-10 V, 1-10 V, 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. Is preferable to use shielded and twisted cables.

• The length and type of the connection cables of the BUS (DALI, DMX, Modbus, Ethernet, or other) use cables as per specification of the respective protocols and regulations and they should be isolated from every wiring or parts at voltage not SELV. Is preferable to use shielded and twisted cables

To connect the DMX512+RDM, Modbus and DALI bus use cables as per specification of the respective protocols and regulations.

It '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.