DALC NET D80x18-1224-2CV-CBU Dimmer Casambi Instruction Manual

DIMMER CASAMBI
D80x18-1224-2CV-CBU
Device Manual

Made in Italy

Contents

FEATURES

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- Command: APP Casambi
- N°2 Output channels
- Control: Dimmer White and Tunable White
- Constant Voltage output for Common Anode applications
- Voltage Output for R loads
- Memory Function
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- Adjusting the brightness up to complete off
- Soft Start and Soft Stop
- Typical efficiency > 95% – 100% Functional Test

➢ CONSTANT VOLTAGE VARIANTS

CODE	SUPPLY VOLTAGE	CHANNEL	OUTPUT	COMMAND	
D80x18-1224-2CV-CBU	12-24 Vdc	2	2 x 4A (max 4A Tot)	APP CASAMBI	

D80x18-1224-2CV-CBU is delivered ex-factory with TW Fixture as the default setting.

➢ PROTECTIONS

OVP	Over Voltage Protection [1]	✔
RVP	Reverse Polarity Protection [1]	✔
IFP	Input Fuse Protection [1]	✔

➢ TYPE OF CASAMBI FIXTURE

FIXTURE	SUPPLY VOLTAGE	OUTPUT	CHANNEL	COMMAND	
CBU-D80X18 WW	12-24 Vdc	2 x CV	2	APP CASAMBI	DIMMER
CBU-D80X18 TW	12-24 Vdc	2 x CV	2	APP CASAMBI	TUNABLE WHITE

[1]Only for control logic protection

➢ REFERENCE STANDARD

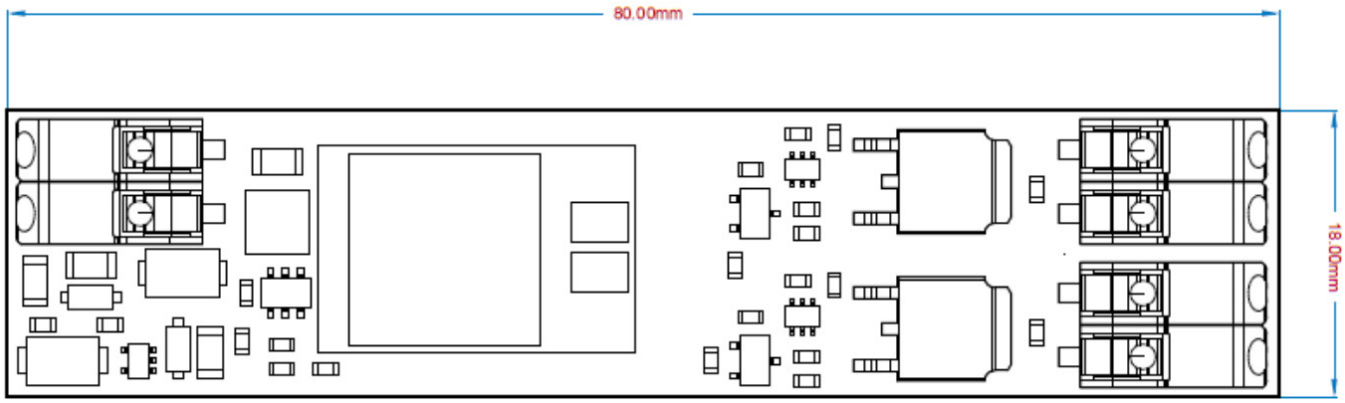
EN 61347-1	Lamp control gear – Part1: General and safety requirements
EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
EN 61547	Equipment for general lighting purposes – EMC immunity requirements

➢ TECHNICAL SPECIFICATIONS

		Constant Voltage	
Supply voltage		Min: 10.8Vdc … max: 26.4Vdc	
Input current		Max 4A	
Channel		4	
Output voltage		= Vin	
Output current		A/ch	A tot.
		4 A [2]	4 A [2]
Nominal power [2]	@12V	48 W	48 W
	@24V	96 W	96 W
Power loss in standby mode		<500mW	
Type of load		R	

D-PWM dimming frequency		600 Hz
D-PWM resolution		833 step
Operating frequencies		2,400 … 2,483 GHz
Maximum output power		4 dBm
D-PWM range		0 – 100%
Storage temperature		min: -25°C … max: +60°C
Ambient temperature		min: -10°C … max: +40°C
Maximum Temperature at Tc		45°C[3]
Wiring	Solid sizes	0,2 … 0,75 mm^2 – 24 … 18 AWG
	Stranded sizes	0,2 … 0,75 mm^2 – 24 … 18 AWG
Wire preparation length		7 ÷ 10 mm
Mechanical dimensions		80 × 18 × 10,5 mm
Fixing		Bi-adhesive
Weight		9 g

➢ MECHANICAL DIMENSION



[2] The maximum value is dependent on the dissipation conditions. This value is measured at 40°C, it is the maximum Ambient Temperature.
[3] Tc = 45 ° C with Ta = 40 ° C. At an ambient temperature of Ta = 20 ° C → Tc = 25 ° C

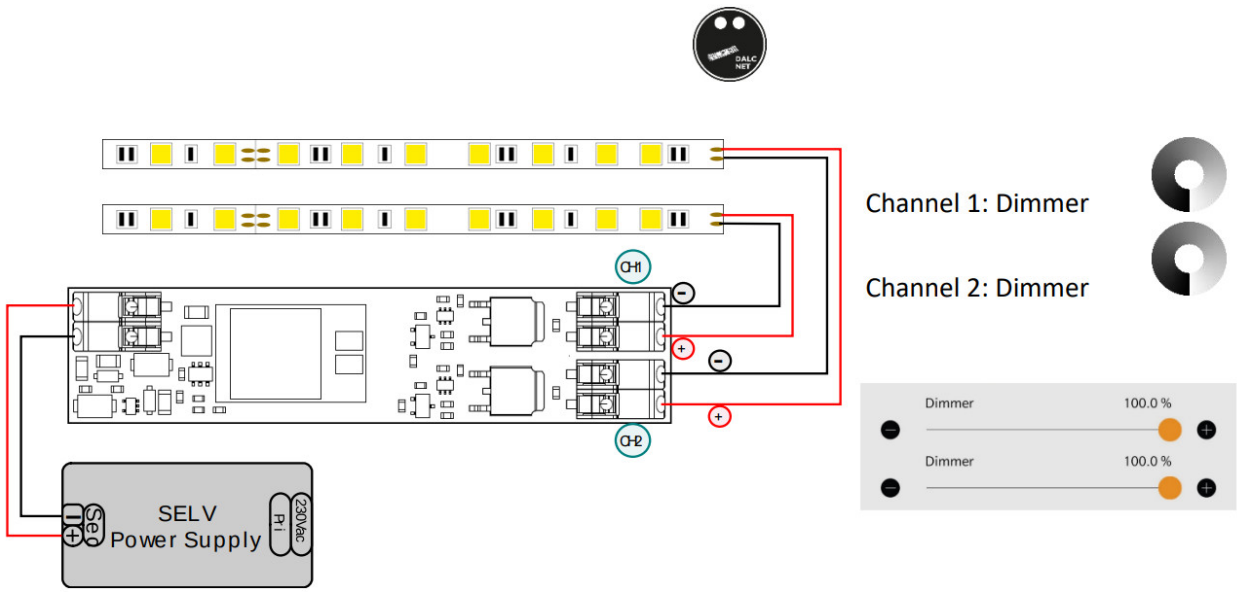
➢ INSTALLATION

To set the product, follow the instructions below:

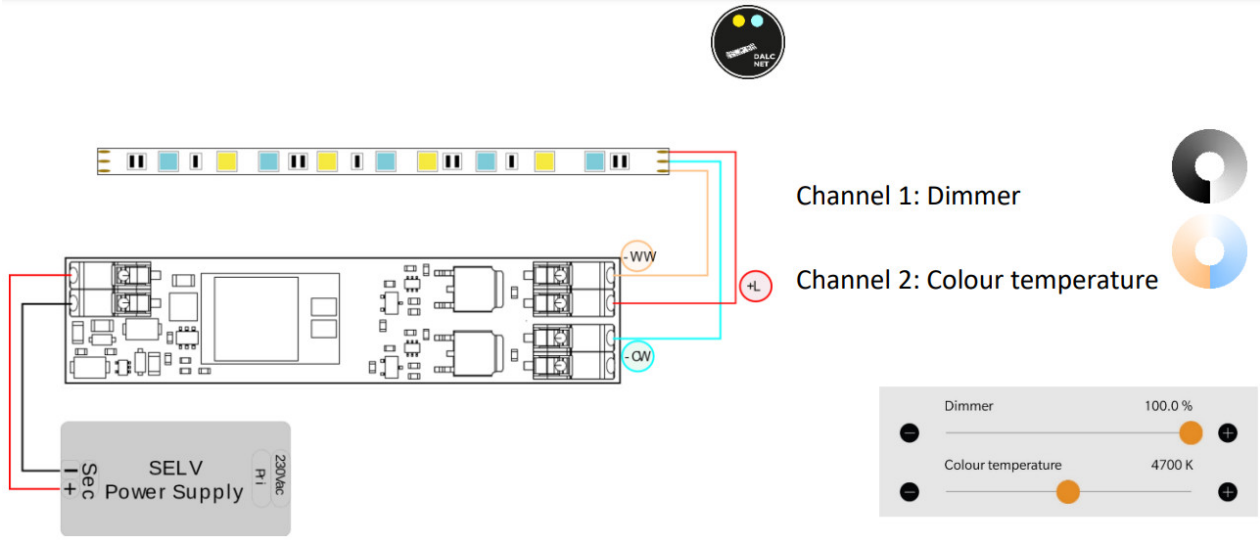
- Fix the Casambi Driver inside the aluminum profile with the provided thermal Bi-adhesive;
- Connect the LED in the output channel;
- Connect the power supply to the input of the dimmer.

This Product like any other Casambi product, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signals which are crucial to the operation of the product.

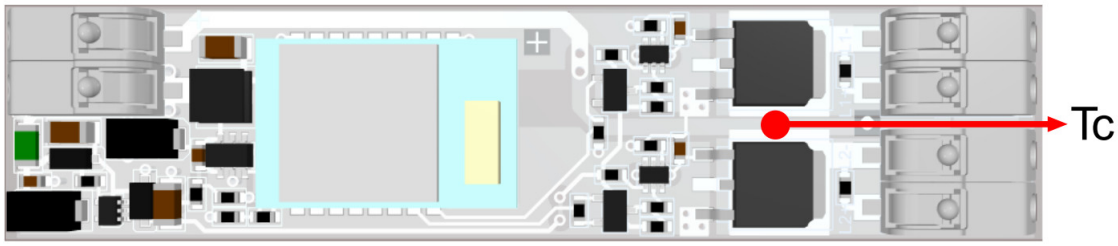
➢ WIRING DIAGRAM: WHITE FIXTURE



➢ WIRING DIAGRAM: TUNABLE WHITE FIXTURE



➢ **Tc POINT**



➢ **TECHNICAL NOTE**

Installation:

- Installation and maintenance must be performed only by qualified personnel in compliance with current regulations.
- The product must be dissipated correctly.
- 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 forbitten to connect, for any reason whatsoever, directly or indirectly, the 230V, the 230V mains voltage to the bus or to other parts of the circuits.

Power Supply:

- For the power supply using only a SELV power supply with limited current, short circuit protection and the power must be dimensioned correctly. In case of using a power supply with ground terminals, all points of the earth (PE = Protection Earth) must be connected to valid and certified protection earth.
- The connection cable between the power source “low voltage” and the product must be dimensioned correctly and they should be isolated from every wiring or parts at no SELV voltage. It is suggested to use the double insulated shield.
- Dimension the power supply for the load connected to the device. If the power supply is oversized compared with the maximum absorbed current, insert protection against over-current between the power supplies and the device.

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 part at no SELV voltage. It is suggested to use double insulated shielded cables.

WARNING: For optional functionality of the Bluetooth signal, do not put the device into metal or aluminum boxes and do not shield the device.
As with any other Bluetooth product, should not be placed in a metal enclosure or next to large metal structures. Metal will effectively block all radio signal which are crucial to the operation of the product.

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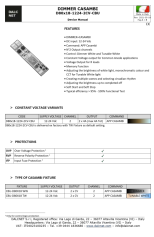
Documents / Resources

	DALC NET D80x18-1224-2CV-CBU Dimmer Casambi [pdf] Instruction Manual D80x18-1224-2CV-CBU, Dimmer Casambi

References

- Led dimmer and RGB controller for professional lighting systems
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