



FEATURES

- BLUETOOTH+FADER+DIMMER+DRIVER
- DC Input: 12-24-48 Vdc or 12-24 Vdc
- Remote command options:
 - Bluetooth Low Energy (BLE Smart)
- Local command options:
 - Normally Open push-button
- Adjusting the brightness of while light
- Current outputs or Voltage outputs for R-L-C load
- Voltage outputs for R load
- Typical efficiency > 95%
- Adjusting the brightness up to completed off
- Memory function
- Soft start and soft stop
- Optimized output curve
- 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 CURRENT VARIANTS** (common anode)

Application: Dimmer

CODE	Input Voltage	Output	Channels	Commands	
DLB1248-1CC350-BLE	12-48V DC	1 x 350mA	1	BLE-1 N.O. push button	
DLB1248-1CC500-BLE	12-48V DC	1 x 500mA	1	BLE-1 N.O. push button	
DLB1248-1CC700-BLE	12-48V DC	1 x 700mA	1	BLE-1 N.O. push button	
DLB1248-1CC950-BLE	12-48V DC	1 x 950mA	1	BLE-1 N.O. push button	

Any current value in the range from 350mA to 950mA is available on demand.

➤ **CONSTANT VOLTAGE VARIANTS** (common anode)

Application: Dimmer

CODE	Input Voltage	Output	Channels	Commands	
DLB1248-1CV-BLE	12-48V DC	1 x 6,5 A	1	BLE – 1 N.O. push button	
DLB1224-1CV-BLE	12-24V DC	1 x 10 A	1	BLE – 1 N.O. push button	

➤ **PROTECTIONS**

		DLC1248-1CV	DLC 1224-1CV	DLC1248-1CC
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	✓	✓	✓
CLP	Current limit protection	✓	✓	

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

² Only control logic protection



➤ REFERENCE STANDARDS

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 purposes - EMC immunity requirements
EN 50581	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

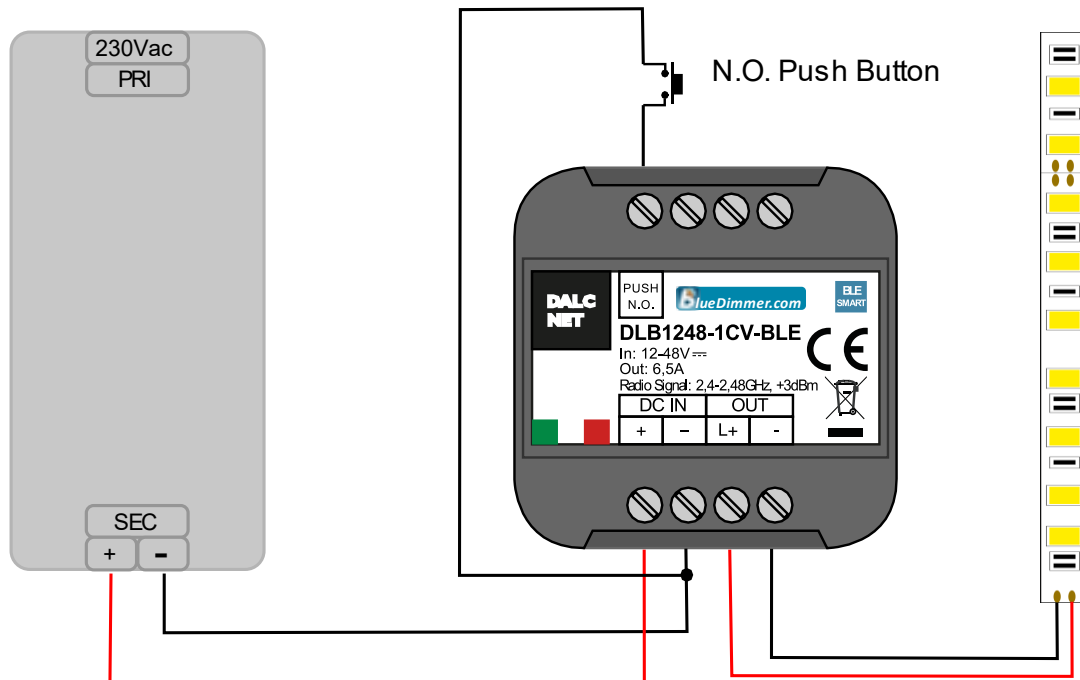
➤ TECHNICAL SPECIFICATIONS

		Variants					
		Constant current				Constant voltage	
		350mA	500mA	700mA	950mA	12/24/48 Vdc	12/24 Vdc
Supply voltage		min: 10,8 Vdc .. max: 52,8 Vdc				min: 10,8 Vdc max: 52,8 Vdc	min: 10,8 Vdc max: 26,4 Vdc
Output voltage		min: $V_{in}/4$ - max: $V_{in}-0,9V$				= V_{in}	= V_{in}
Input current		max 0,35A	max 0,5A	max 0,7A	max 0,95A	max 6,5A	max 10A
Output current		350 mA	500 mA	700 mA	950 mA	max 8 A peak	max 10 A
Absorbed nominal power	@12V	4.2 W	6 W	8.4 W	11.4 W		
	@24V	8.4 W	12 W	16.8 W	22.8 W		
	@48V	16.8 W	24 W	33.6 W	45.6 W		
Power loss in standby mode		<500mW				<500mW	
Type of Load		R-L-C				R-L-C	R
Thermal shutdown		150°C				150°C	-
D-PWM dimming frequency		300 Hz					
D-PWM resolution		16 bit					
D-PWM range		0,1 – 100 %					
Storage Temperature		min: -40 max: +60 °C					
Ambient Temperature		min: -10 max: +40 °C					
Wiring		2.5mm ² solid - 2.5mm ² stranded - 30/12 AWG					
Wire preparation length		5,5 – 6,5 mm					
Protection grade		IP20					
Casing material		Plastic					
Packaging unit (pieces/unit)		Carton Box 21pz					
Mechanical dimensions		44 x 57 x 25 mm					
Package dimensions		263 x 178 x 82 mm					
Weight		1000g					

➤ INSTALLATION

To set the product, follow the instruction on the picture below:

- 1) connect the LED in the output terminal blocks "OUT" of the device.
- 2) connect the N.O. push button in the correct terminals of the device
- 3) connect the power supply (12-24 Vdc or 12-48 Vdc depending on the dimmer model) to terminal blocks "DC IN" of the device.





➤ 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 down).
- 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.
- For the constant current output, the voltage of LED module (Vf) must be less of 5V at the voltage of power supply.

Command:

- The length of the connection cables between the local commands (N.O. Push button 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 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.



➤ LOCAL COMMAND

PUSH DIMMER FEATURE

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

Button	Intensity
Click	On/Off
Double click	Maximum intensity
Long pressure (>1s) from OFF	Turn ON at 1% (Nightly Time), then dimmer up/down
Long pressure (>1s) from ON	Dimmer up/down
Long pressure (>5s) case BLE from ON	To recognition of BlueDimmer App (pairing APP)

➤ **BLUETOOTH SMART SETUP****FEATURES**

- Bluetooth LOW ENERGY 4.1

RELATION WITH LOCAL COMMANDS

Both local and remote commands can act simultaneously.
The remote control can monitor the output status in real time.

ADDRESSING

Unique ID ✓

CHANNEL MAPS

The intensity and the status (ON/OFF) is controlled by a Bluetooth device

Channel	Function	Value
1	Dimmer	Intensity [0.255]

COMPATIBLE APPS

- **Bluedimmer**

The BlueDimmer Low Energy applications is used to control through smartphone and tablet modules and strip LED connected to the dimmer DLB1248-BLE-1CH.

The APP implements the following functions:

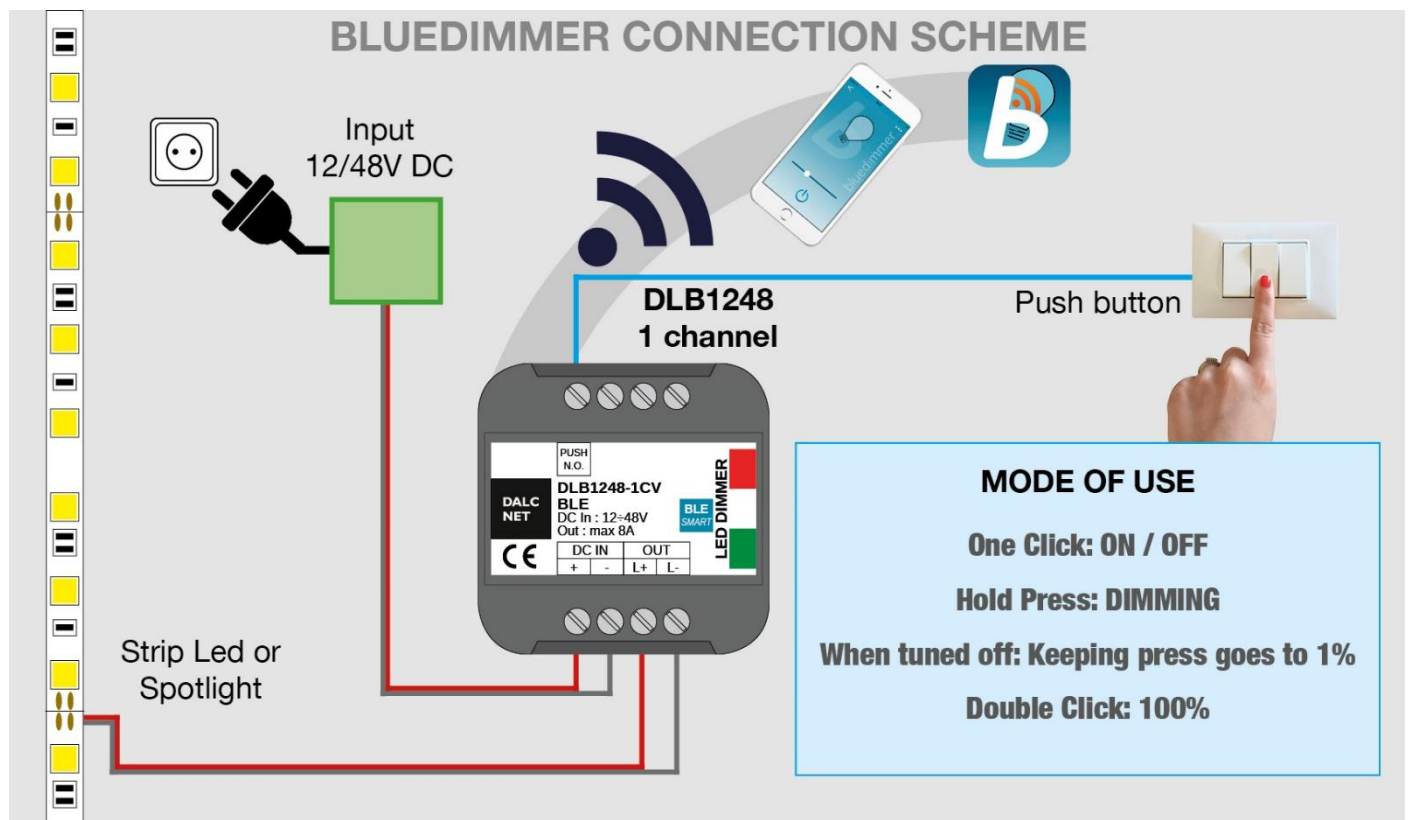
- Turning on
- Turning off
- Dimmer up and down
- master dimmer multi source



➤ **BLUEDIMMER SOFTWARE INSTRUCTIONS**

Necessary conditions for the correct use of the device:

- APPLE device with ON Bluetooth Low Energy 4.1 version
- ANDROID device with ON Bluetooth Low Energy 4.1 version
- Dalcnet Product DLB1248 with BLE smart function
- Strip Led or spotlight
- N.O. Push-Button
- Bluedimmer App, available on the App Store and Play Store, download for free.

**SCHEME**

➤ APP INSTALLATION ON THE DEVICE

Download for free and install the application on your smartphone and tablet.

OSSERVATION:

On the version of Android 6.0 is necessary allow at BlueDimmer application to access Your location.



START UP SEQUENCE IMAGES



Automatic research and identification of DALCNET DLB1248 with BLE function products.

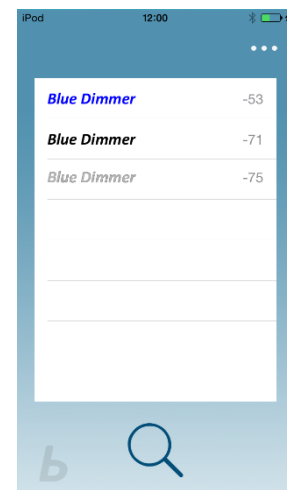
N.B.:

Manual research is possible by clicking on the lens symbol at the bottom of your device's screen.



Example of results of the research:

- Device in **blue** = device associated and ready for use
- Device in **black** = new device to pair
- Device in **grey** = device already associated but not available



HOW TO ASSOCIATE THE DEVICE TO THE BLUEDIMMER APPLICATION

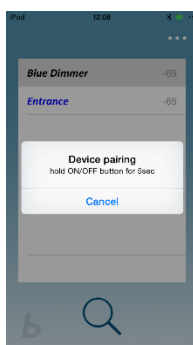
1- Set selectors S1 and S2 according to the load you want to drive.

2- Select on the smartphone/tablet the connected device.

The strip led or spotlight connected to the selected device will automatically light on

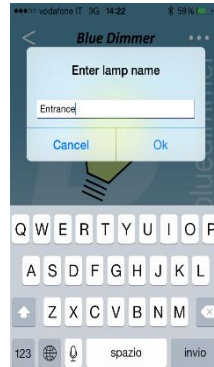


3- Keep press for 5 sec the push button connected to the light-on-led for pairing. From firmware version 1.2 the pairing is automatic.



4- On the screen will appear a box to name the strip led or spotlight controlled by DALCNET BLE device.

For ex.: you can name 'kitchen' the light in the kitchen, and 'living' the one in the living room. This is a simple way to control the lights in your house.



5- DALCNET device has now been correctly paired and ready for use.

You will see the lamp name on the display. Here you can start controlling your led light.



LEGEND:

