

**FEATURES**

- BLUETOOTH+SEQUENCER+FADER+DIMMER+DRIVER
- DC Input: 12-24 Vdc
- Local Command: n°2 N.O. Push Buttons
- Control: ON-OFF, Dimmer, Tunable White, RGB or RGBW Colour
- Current outputs or voltage outputs for LED strip
- 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

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

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

Application (4 channels output): Dimmer, Tunable White, RGB, RGBW

CODE	Supply Voltage	Output	Channels	Commands	
DLX1224-4CC350	12-24V DC	4x350mA	4	2 N.O. push button	EASY
DLX1224-4CC500	12-24V DC	4x500mA	4	2 N.O. push button	EASY

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

Application (4 channels output): Dimmer, Tunable White, RGB, RGBW

CODE	Supply Voltage	Output	Channels	Command	
DLX1224-4CV	12-24V DC	4x5A (max 10A tot.)	4	2 N.O. push button	EASY

➤ **PROTECTIONS**

		CC	CV
OVP	Over voltage protection ¹	✓	✓
UVP	Under voltage protection ¹	✓	✓
RVP	Reverse polarity protection ¹	✓	✓
IFP	Input fuse protection ¹	✓	✓

¹ 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 purpose – EMC immunity requirements
EN 50581	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

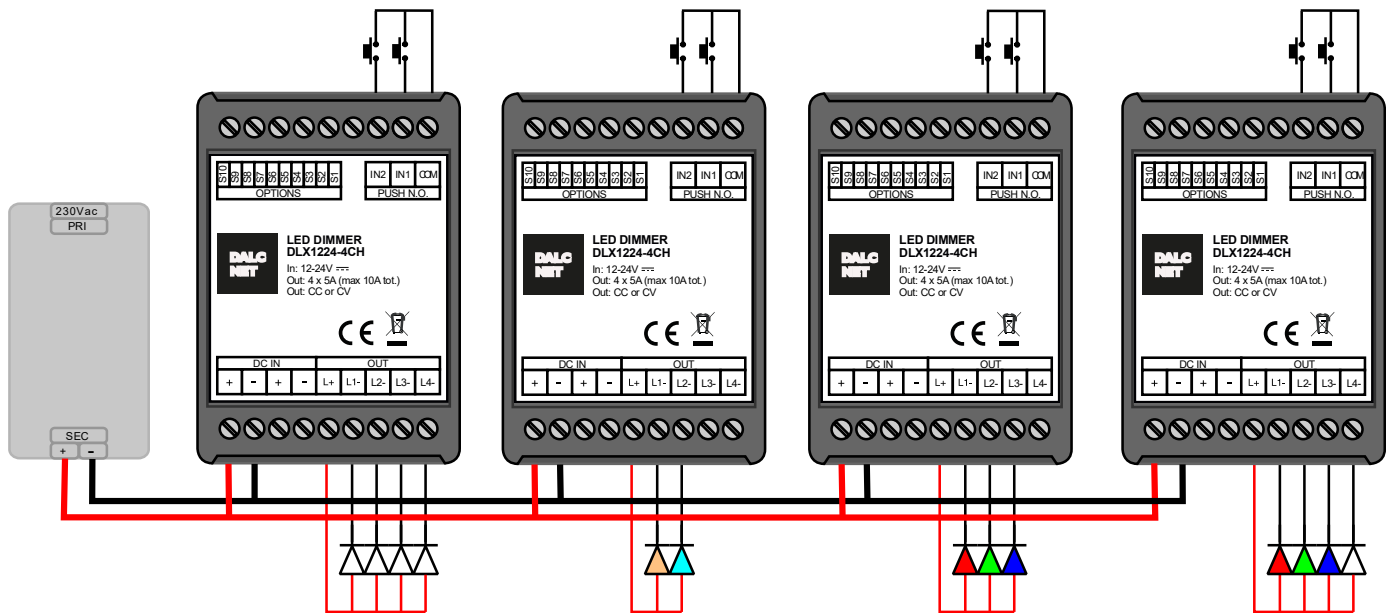
➤ TECHNICAL SPECIFICATIONS

		Variant					
		Constant current				Constant voltage	
		4 channels				4 channels	
Supply voltage		DC min: 10,8 Vdc .. max: 26,4 Vdc					
Output voltage		min: $V_{in}/4$ - max: $V_{in}-0,9V$				=Vin	
Input current		max 2A				max 10A	
Output current		Variante 350 mA		Variante 500 mA		max 5 A/ch	max 10 A total ²
		350mA/ch	max 1,4 A total	500mA/ch	max 2 A total		
		1 ch	max 4ch	1 ch	max 4ch		
Nominal power ³	@12V	4,2 W	16,8 W	6 W/ch	24 W	60W/ch	120 Wmax
	@24V	8,4 W	33,6 W	12 W/ch	48 W	120W/ch	240 Wmax
Power loss in standby mode		<500mW				<500mW	
Type of Load		R-L-C				R	
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 - 1.5mm ² stranded - 30/12 AWG					
Wire preparation length		5,5 – 6,5 mm					
Protection grade		IP20					
Casing material		Plastic					
Packaging unit (pieces/unit)		Single Carton Box 1pz				Carton Box 12pz	
Mechanical dimensions		88 x 54 x 26 mm					
Packaging dimensions		106 x 59 x 36 mm				263 x 178 x 82	
Weight		74g				900g	

² For the voltage version the device provides max 10A ($I_{tot} = I_{L1} + I_{L2} + I_{L3} + I_{L4}$). Each channel provides max 5A.

³ Maximum value, dependent on the ventilation conditions

➤ INSTALLATION



➤ 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.



➤ **SETUP**

Function	<p>Note: Factory positions = all OFF</p>	-Switches from 1 to 2: -Switches from 3 to 10:	Load Type Don't use – keep at off position
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• DIP from 1 to 2: **Load Type**

White Dimmer		Tunable White		RGB		RGBW	
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➤ **LOCAL COMMAND FUNCTION**

WHITE DIMMER FEATURE: *The intensity of all outputs is controlled by one N.O. button only.*

Button	Function		
1	Dimmer	Click Doble Click Long pressure (>1s) from OFF Long pressure (>1s) from ON	On/Off Turn on at 100% Turn on at 10% (Nighttime) Dimmer UP/DOWN

TUNABLE WHITE FEATURE: *Intensity and Color Temperature Connection can be controlled by two N.O. push buttons.*

Button	Function		
1	Dimmer	Click Doble Click Long pressure (>1s) from OFF Long pressure (>1s) from ON	On/Off Turn on at 100% Turn on at 10% (Nighttime) Dimmer UP/DOWN
2	Temperature Color	Double Click Long pressure (>1s)	Neutral White Color Temperature UP/DOWN

RGB/RGBW FEATURE: *It is possible to control intensity, colour and white*

Button	Function		
1	Dimmer	Click Doble Click Long pressure (>1s) from OFF Long pressure (>1s) from ON	On/Off Turn on at 100% Turn on at 10% (Nighttime) Dimmer UP/DOWN
2	White / Color	Click Double Click Long pressure (>1s)	Start/stop color rotation Change from White to color and vice-versa Change rotation speed ⁴

⁴ Color rotation speed is selectable from 4 predefined levels.

The selected speed (set by button pressure) is visualized as a white strobe light:

- 10 flash lights/s for a 6 seconds rotation
- 5 flash lights/s for a 30 seconds rotation
- 2 flash lights/s for a 6 minutes rotation
- 1 flash light/s for a 30 minutes rotation