

User Guide - FLDC4Y-DALI2

1-4 DALI addresses selectable/4 Channel/Constant voltage/PMW dimming/Numeric display

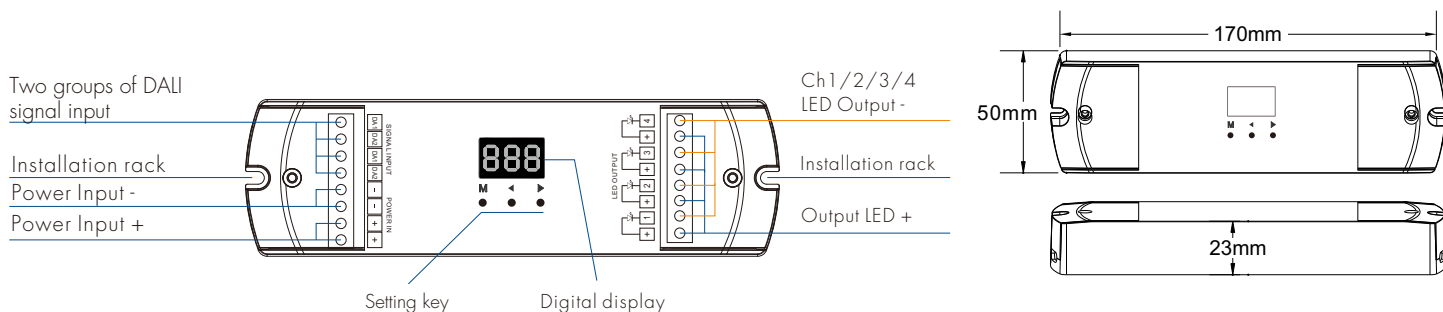
Features

- 4 channel constant voltage DALI2 LED Decoder with digital display.
- 1- 4 DALI selectable addresses that work independently.
- DALI standard protocol IEC 62386-102, IEC 62386-207
- DALI addresses can be manually assigned and shown on the digital display or automatically assigned by the DALI master controller.
- PWM digital dimming with standard DALI logarithmic dimming curve.
- PWM frequency 1000/2000/4000/8000Hz selectable.

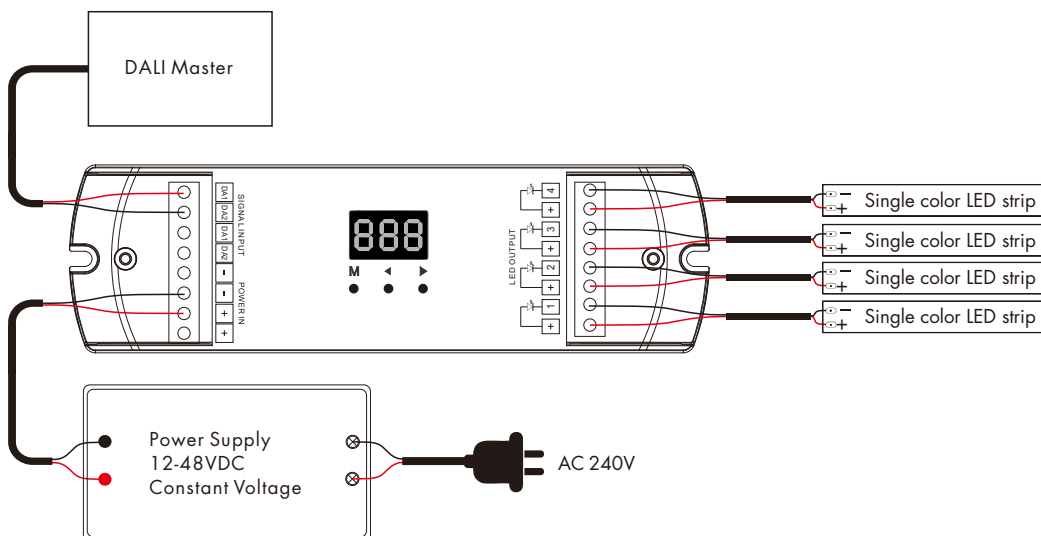
Technical Parameters

Input and Output		Dimming data		Environment	
Input voltage	12-48VDC	Input signal	DALI	Operation temperature	Ta: -30°C ~ +55°C
Input current	20.5A	Dimming range	0-100%	Case temperature (Max.)	Tc: +85°C
Output voltage	12-48VDC	Dimming curve	Logarithmic	IP rating	IP20
Output current	4 x 5A@12/24V 4 x 3A@36/48V	PWM Frequency	1000/2000/4000/8000Hz	Package	
Output power	4 x 60W@12V 4 x 120W@24V 4 x 108W@36V 4 x 144W@48V	Warranty		Size	L175x W54 x H27mm
Output type	Constant voltage	Warranty	5 years	Gross weight	0.136kg

Mechanical Structure and Installation



Wiring Diagram



Note: OLA = overload alarm. OHA = overheat alarm.

Operation

Setting a DALI Address Quantity

Prior to using the decoder, the number of DALI addresses need to be set.

- Long press the M key for 2s to set a DALI address quantity.
- Short press ◀ or ▶ key to switch between 1/2/3/4 DALI address quantity ("1CH", "2CH", "3CH" or "4CH").
- Short press the M key to quit DALI address quantity setting.

DALI address setup:

1 DALI address, Ch1,Ch2,Ch3,Ch4 will be the same DALI address.

2 DALI addresses, Ch1,Ch3 will be same DALI address A, Ch2,Ch4 will be same DALI address A+1.

3 DALI addresses, Ch1 will be DALI address A, Ch2 will be DALI address A+1, Ch3 will be DALI address A+2, Ch4 no DALI address and no output.

4 DALI addresses, Ch1 will be DALI address A, Ch2 will be DALI address A+1, Ch3 will be DALI address A+2, Ch4 will be DALI address A+3.

Example with the start DALI address set at 32:

When DALI address quantity is "1CH", the dimmer will occupy 1 DALI address: 32.

When DALI address quantity is "2CH", the dimmer will occupy 2 DALI addresses: 32,33.

When DALI address quantity is "3CH", the dimmer will occupy 3 DALI addresses: 32,33,34.

When DALI address quantity is "4CH", the dimmer will occupy 4 DALI addresses: 32,33,34,35.

Setting the DALI Address manually:

- Long press ◀ or ▶ key for 2s, then press ◀ or ▶ key to set the DALI address.
- Short press the M key to quit the DALI address setting.
- The start DALI address can be manually assigned from 00-63-FF.
- Factory defaults, no DALI address is assigned to the dimmer and the digital display shows "AFF".

DALI address assigned by DALI masters

The DALI address can also be assigned by the DALI Master controller automatically.

The digital display will show "AAU" when the DALI master is assigning the address.

After the address is assigned, the digital display will show the start DALI address "Axx", xx a number between 00 to 63.

Setting the PWM frequency

- Long press M & ◀ key for 2s to enter the PWM frequency setting.
- Short press ◀ or ▶ key to switch between 1000Hz("F10"), 2000Hz("F20"), 4000Hz("F40") or 8000Hz("F80").
A higher PWM frequency will lower the output current, increase the power noise, but will be more suitable for cameras (No flickers on video).
- Short press the M key to quit the PWM frequency setting.

Restore to default factory settings

- Long press ◀ and ▶ key for 2s, restore factory default parameter, display will show "RES".
- Factory default parameter: no DALI address is assigned, DALI address quantity is 4, PWM frequency is 2000Hz.

Safety & Warnings

- DO NOT install with power applied to device.
- DO NOT expose the device to moisture.