

# 4 Channel Constant Current LED DALI Dimmer

Model No.: DA4-C(150-500mA) / DA4-C(350-1200mA)

1-4 DALI address selectable/4 Channel/Constant current/PMW dimming/Numeric display



DA4-C(150-500mA)



DA4-C(350-1200mA)

## Features

- 4 channel constant current DALI LED Dimmer with digital display, 150-500mA or 350-1200mA per channel.
- 1-4 DALI address quantity is selectable, 4 channel work separately.
- In accordance with DALI standard protocol IEC 62386-102, IEC 62386-207 and in compliance with DALI products from other international incorporation.
- DALI address can be manually assigned and shown in digital display or automatically assigned by DALI master.
- PWM digital dimming, standard DALI logarithmic dimming curve.
- PWM frequency 1000/2000/4000/8000Hz selectable.
- Over-heat / Short circuit protection, recover automatically.
- With fast self-testing function.

CE RoHS

## Technical Parameters

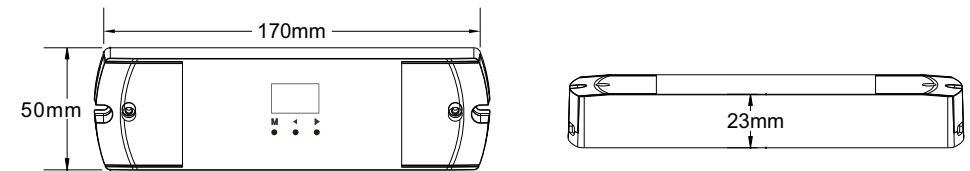
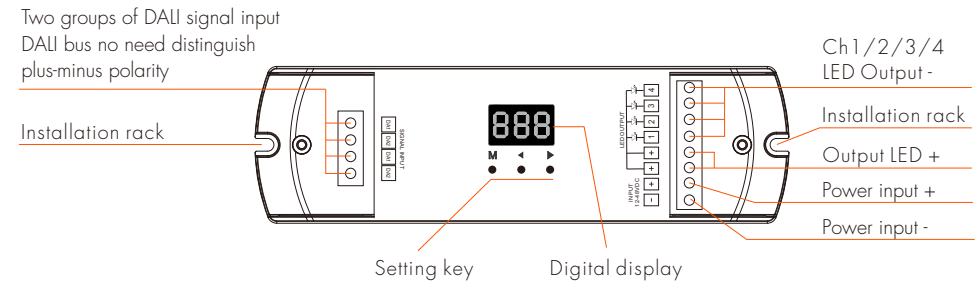
| Input and Output        |   |
|-------------------------|---|
| Input voltage           | 12-48VDC  |
| Output voltage          | 4 x (3-45)VDC   |
| Output current          | 4CH, 150-500mA or 350-1200mA/CH                             |
| Output power            | 4 x (0.45-22.5)W (150-500mA)<br>4 x (1.05-54)W (350-1200mA) |
| Output type             | Constant current  |
| Environment             |   |
| Operation temperature   | Ta: -30°C ~ +55°C   |
| Case temperature (Max.) | Tc: +80°C   |
| IP rating               | IP20  |

| Dimming data            |  |
|-------------------------|--|
| Input signal            | DALI   |
| Dimming range           | 0-100%   |
| Dimming curve           | Logarithmic                                    |
| PWM Frequency           | 4000Hz (default)                               |
| Warranty and Protection |  |
| Warranty                | 5 years  |
| Protection              | Reverse Polarity<br>Over-heat<br>Short circuit |

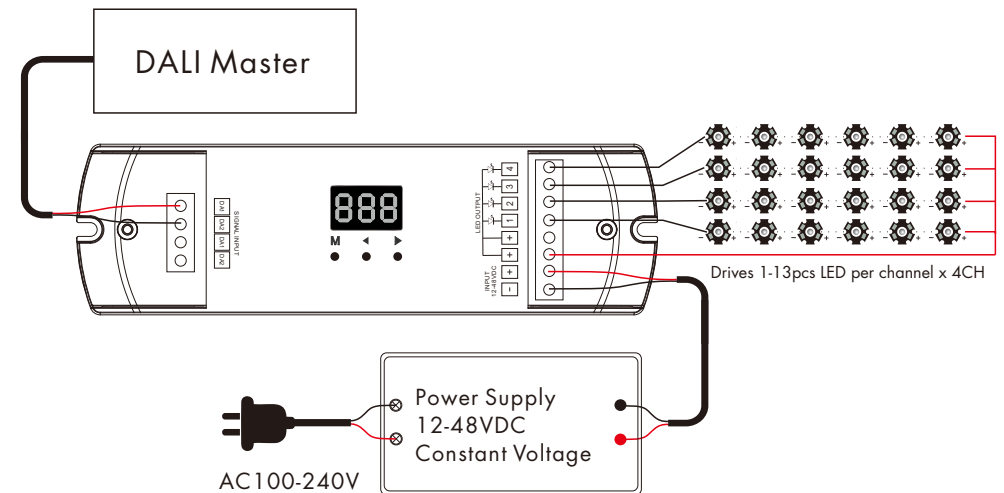
## LED Current Selection

|                       |                 |             |           |             |           |             |           |             |           |
|-----------------------|-----------------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
| DA4-C<br>(150-500mA)  | Output Current  | 150mA       | 200mA     | 250mA       | 300mA     | 350mA       | 400mA     | 450mA       | 500mA     |
|                       | Output Voltage  | 3-45V       | 3-45V     | 3-45V       | 3-45V     | 3-45V       | 3-45V     | 3-45V       | 3-45V     |
|                       | Output Power/CH | 0.45-6.75W  | 0.6-9W    | 0.75-11.25W | 0.9-13.5W | 1.05-15.75W | 1.2-18W   | 1.35-20.25W | 1.5-22.5W |
| DA4-C<br>(350-1200mA) | Output Current  | 350mA       | 500mA     | 600mA       | 700mA     | 800mA       | 900mA     | 1050mA      | 1200mA    |
|                       | Output Voltage  | 3-45V       | 3-45V     | 3-45V       | 3-45V     | 3-45V       | 3-45V     | 3-45V       | 3-45V     |
|                       | Output Power/CH | 1.05-15.75W | 1.5-22.5W | 1.8-27W     | 2.1-31.5W | 2.4-36W     | 2.7-40.5W | 3.15-47.25W | 3.6-54W   |

## Mechanical Structures and Installations



## Wiring Diagram



## Operation

### Output current setting

- Please select the correct current firstly when the LED load is disconnected.
- Long press M and ◀ or ▶ key in the same time for 2s, prepare for setup output current.
- For DA4-C(150-500mA): short press ◀ or ▶ key to switch 150mA("C15"), 200mA("C20"), 250mA("C25"), 300mA("C30"), 350mA("C35"), 400mA("C40"), 450mA("C45") or 500mA("C50").
- For DA4-C(350-1200mA): short press ◀ or ▶ key to switch 350mA("C35"), 500mA("C50"), 600mA("C60"), 700mA("C70"), 800mA("C80"), 900mA("C90"), 1050mA("CA5") or 1200mA("CC0").
- Press M key or timeout 10s, quit output current setting.

### Set DALI Address Quantity

You need set DALI address quantity according to applications requirement for the first time.

- Long press M for 2s, prepare for set DALI address quantity.
- Short press ◀ or ▶ key to switch between 1/2/3/4 DALI address quantity ("1CH", "2CH", "3CH" or "4CH").
- Short press M key or timeout 10s, quit DALI address quantity setting.

DALI address quantity setup explain:

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

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

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

When set 4 DALI address, Ch1 will DALI address A, Ch2 will DALI address A+1,  
Ch3 will DALI address A+2, Ch4 will DALI address A+3.

For example, the start DALI address is 32:

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

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

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

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

### Set DALI Address via buttons

- Long press ◀ or ▶ key for 2s, prepare for set the start DALI address, then press ◀ or ▶ key to set the start DALI address.
- Short press M key or timeout 10s, quit start DALI address setting.
- The start DALI address can be manually assigned from 00-63-FF.
- by factory defaults, no DALI address is assigned for the dimmer, and digital display shows "AFF".

### DALI address assigned by DALI masters

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

Please refer to user manuals of compatible DALI Masters for specific operations.

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

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

Using DALI master assign address may result in discontinuous address, the digital display will show the start DALI address "Uxx".

### Set PWM frequency

- Long press M & ◀ key for 2s, prepare for set PWM frequency.
- Short press ◀ or ▶ key to switch between 1000Hz("F10"), 2000Hz("F20"), 4000Hz("F40") or 8000Hz("F80").  
Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera (No flickers for video).
- Short press M key or timeout 10s, quit PWM frequency setting.

### Restore factory default parameter

- Long press ◀ and ▶ key for 2s, restore factory default parameter, display "RES".
- Factory default parameter: no DALI address is assigned, DALI address quantity is 4, PWM frequency is 2000Hz.
- Long press M & ▶ key for 2s, enter fast self-testing, the output channel will be on orderly then all on.

## Safety & Warnings

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