4 Channels DALI Phase Dimmer

70040042

DALI 2 CE FC RoHS COMPLIANT

Important: Read All Instructions Prior to Installation

Function introduction

100-240VAC power input

2 groups DALI signal input & output or push switch input

4 channels load output

DALI Phase Cut Dimmer

100-240V ~   50/60Hz

1 x 800 W/VA
2 x 600 W/VA
3 x 500 W/VA
4 x 400 W/VA

L L4 L L3 L L2 L L1   L N NC NC DA DA DA DA

PUSH DIM
LO———ODA
NO———ODA

Digital display

0-6 0-9

Manual set buttons

DALI CE RoHS

Min. set

Min. set button, to set minimum dimming level
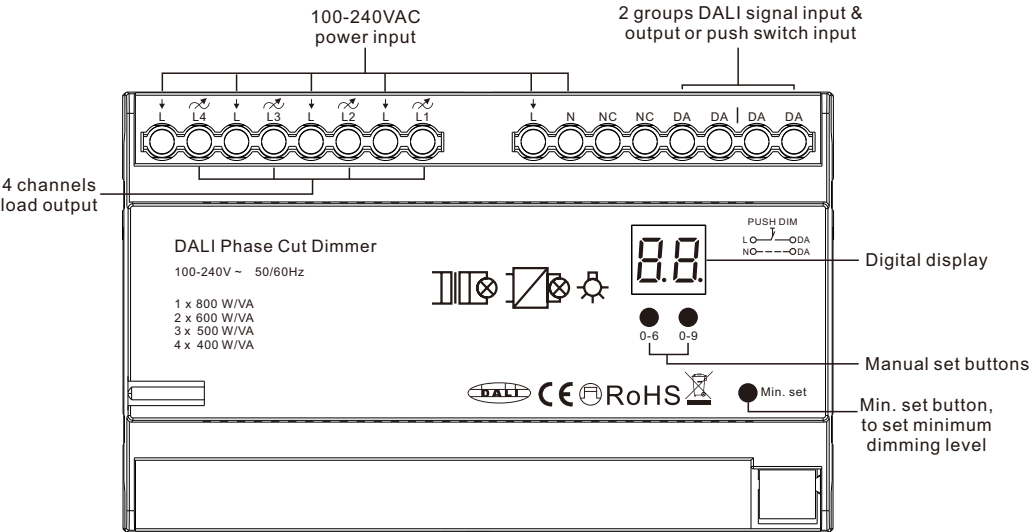
Product Data

Input Voltage	Output Voltage	Max. Load Current	Max. Load Power	DALI Consumption	Size(LxWxH)
100-240VAC	4x(100-240)VAC	4x1.8A	4x400W @ 230V 4x200W @ 110V	< 2mA	145.4x90x66.4mm

Compatible Load Types			
Load Symbol	Load Type	Maximum Load	Remarks
	Dimmable LED lamps	1*200W @ 110V, 1*400W @ 230V 2*150W @ 110V, 2*300W @ 230V 3*125W @ 110V, 3*250W @ 230V 4*100W @ 110V, 4*200W @ 230V	Due to variety of LED lamp designs, maximum number of LED lamps per channel is further dependent on power factor result when connected to dimmer.
	Dimmable LED drivers	1*200W @ 110V, 1*400W @ 230V 2*150W @ 110V, 2*300W @ 230V 3*125W @ 110V, 3*250W @ 230V 4*100W @ 110V, 4*200W @ 230V	Maximum permitted number of drivers per channel is 200W/400W divided by driver nameplate power rating.
	Incandescent lighting, Halogen 240V lamps	1*400W @ 110V, 1*800W @ 230V 2*300W @ 110V, 2*600W @ 230V 3*250W @ 110V, 3*500W @ 230V 4*200W @ 110V, 4*400W @ 230V	
	Low voltage halogen lighting with electronic transformers	1*200W @ 110V, 1*400W @ 230V 2*150W @ 110V, 2*300W @ 230V 3*125W @ 110V, 3*250W @ 230V 4*100W @ 110V, 4*200W @ 230V	

- In compliance with IEC 62386-101:2014, IEC 62386-102:2014, IEC 62386-207 Ed2.
- Built-in DALI-2 interface, DALI DT6 device
- Match all DALI systems in the market
- Safe and reliable full isolation design
- DALI phase dimmer, trailing edge dimming
- Supports resistive loads and capacitive loads
- DALI signal input, DALI address can be set with buttons and displayed on the digital display
- DALI address quantity can be set as 1/2/3/4 to control 4 channels load simultaneously or separately
- 4 channels AC100-240V output
- To dim and switch single color dimmable LED lamps, dimmable LED driver, traditional incandescent and halogen lights
- Din rail installation, easy and fast
- Waterproof grade: IP20

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

Operation

1. Set DALI Address Manually Via Buttons

1.1. Press and hold down any of the two buttons until numeric digital display flashes, then release the buttons.
1.2. Click any of the two buttons once to select a digit, click again to change the digit until the desired DALI address appears. Click first button to set "tens" position and second button to set "units" position. The address can be set from 00~63.
1.3. Then press and hold down any of the 2 buttons until the numeric digital display stops flashing to confirm the setting.

Note: DALI address can be manually assigned from 00-63-FF, by factory defaults, no DALI address is assigned for the driver, and the display shows FF . Setting DALI address as FF will reset the dimmer to factory defaults.

### 2. 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.
Note: The digital display will show AU when the DALI master is assigning addresses.

3. Set DALI Address Quantity.

4.A.

1   2

3.1. Press and hold down both of the two buttons until numeric digital display flashes, then release the button.
3.2. Click first button to select "1A", "2A", "3A" or "4A" which means 1/2/3/4 DALI addresses.
3.3. Then press and hold down any of the 2 buttons until the numeric digital display stops flashing to confirm the setting.
For example, when we set DALI address to 00:
When select 1A, all 4 channels load will be the same address 00, and controlled simultaneously.
When select 2A, channel L1&L3 will be same address 00, channel 2&4 will be same address 01.
When select 3A, channel L1 will be address 00, channel L2 will be address 01, channel L3&L4 will be address 02.
When select 4A, channel L1 will be address 00, channel L2 will be address 01, channel L3 will be address 02, channel L4 will be address 03.
Note: The channels with the same address will be controlled simultaneously, the channels with different addresses will be controlled separately.

4. Reverse-phase control (trailing edge)

+

Voltage

−
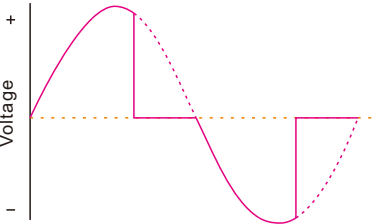
5. Set the minimum dimming brightness point.

The factory dimming range is 1%~100%, but the 1% can be re-set as below:

Operate the DALI master to dim the load of L1 to a brightness you want, then press and hold down the Min. set button until the light flashes, which means the minimum point is set at this brightness now. You can not dim lower than this brightness point. The minimum point will be covered by repeating doing that.

How to reset it to factory defaults: dim up the Load of L1 to 100% , then press and hold Min. set button until the the load of L1 flashes.

Note:

1) The dimming range of this dimmer is 1%-100%, but some load types may flicker when dimmed to 1%, thus a minimum brightness shall be set higher than 1% to avoid flickering during dimming process.

2) Whatever the DALI address quantity is set as: 1A, 2A, 3A, 4A, the minimum brightness shall be set or reset only by adjusting Load L1 output brightness and pressing Min. set button. Once the minimum brightness is set, all 4 channels load can not be dimmed below this value.

Wiring Diagram

1.With DALI bus
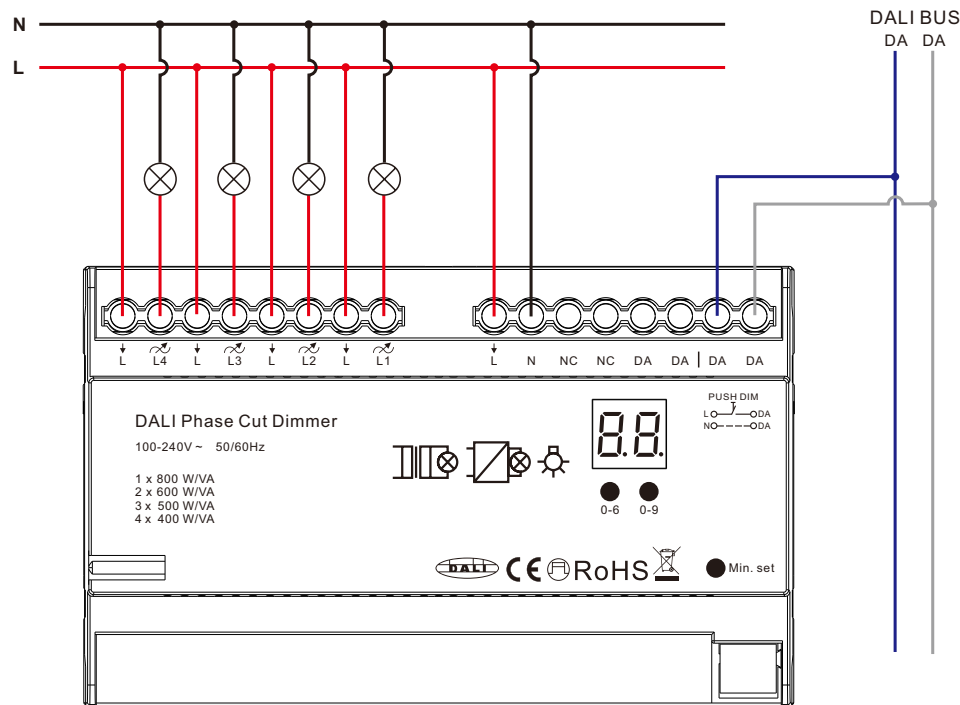
Note:

1) The maximum allowed number of parallel connected drivers or luminaries per channel shall be less than 10, otherwise the dimmer may be damaged due to the high inrush current at the moment of starting.

2) The maximum allowed cable length from the dimmer to connected drivers or luminaries shall not be longer than 80 meters.

3) The maximum allowed cable length from the push switches to the dimmer shall not be longer than 80 meters.

2.With AC Push
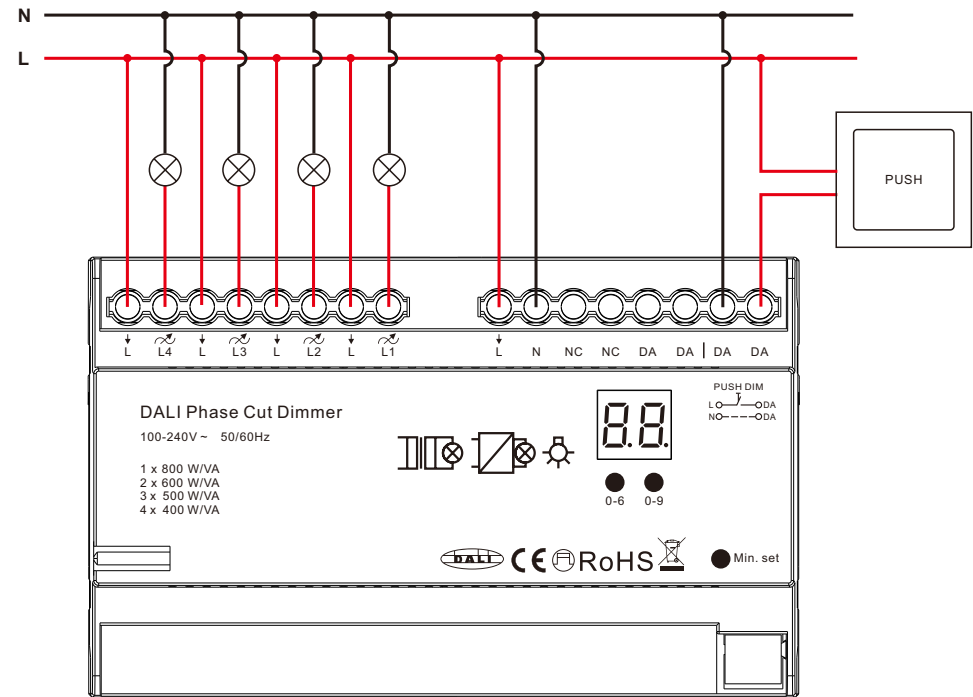
This phase dimmer adopts trailing edge dimming (reverse phase control), the dimming range is 1%~100%, please make sure the connected loads support reverse phase control. Please refer to the user manual of the load or consult the supplier of the load.

Product Dimension