



YC-DALI.16C.485
DALI Dimming Module

Product Manual

Release : May 13, 2024

Version : V1.0



Figure1. DALI Dimming Module

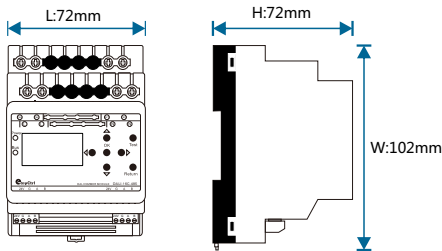


Figure 2. Dimensional Drawing - Front View Figure 3. Dimensional Drawing -Sideview

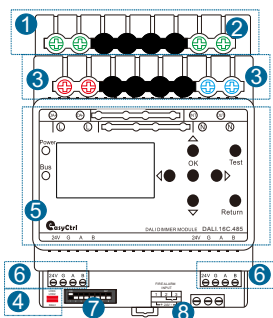


Figure 4. Product Information

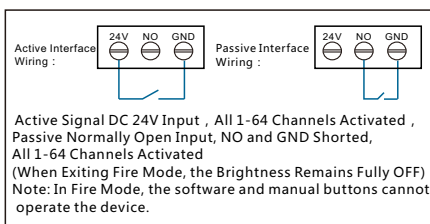


Figure 5. Fire Interface Description

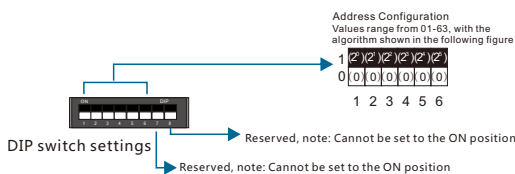


Figure 6. Address DIP Switch Table 1

Product Overview

DALI Dimming Module (see Figure 1), serve as a system dimmer execution unit, typically installed in a distribution box. It supports the conversion between RS485 protocol and DALI protocol, and is compatible with both DT6 and DT8 driver protocols. The module supports single-color and dual-color DALI drivers. It comes with a built-in DALI power supply and features a single DALI bus, which can extend up to 300 meters. The module supports up to 64 DALI driver devices, divided into 64 groups, 16 scenes, and 16 zones. It is equipped with an OLED display for convenient engineering configuration.

Function Description

- Standard 35mm DIN rail installation: Occupies 4P module units.
- Converts RS485 bus signals to DALI bus signals.
- Capable of controlling up to 64 DALI devices.
- Built-in 1 auxiliary relay for special driver processing.
- DALI bus supports a maximum distance of 300 meters, with the ability to manage 64 DALI driver devices divided into 64 groups, 16 scenes, and 16 zones.
- Groups 1-16 are DALI protocol groups (supporting up to 64 devices per group), and groups 17-64 are auxiliary groups (supporting up to 2 devices per group)
- Equipped with built-in fire emergency functionality.
- Features a 30mm x 18mm LCD display.
- Supports RS485 communication.

Precautions

- Use CAT5E or RVV4*0.75 four-core wire for bus wiring.
- After installation, check all connections to ensure they are correctly connected.
- DALI output wiring is non-linear, but if multiple drivers are connected hand in hand, it needs to be connected in the same direction, and no crossover cables are allowed.

Product Information

Product Dimensions: See Figures 2 and 3

Product Wiring: See Figure 8

Product Information: See Figure 4

1. DALI signal output terminal: left is DA+, right is DA-.
2. Relay output: It control DALI drive 220V on/off (only for special DALI drive).
3. DALI power input: AC 220V input, left is live line interface, right is neutral line interface.
4. LED1: DALI power indicator LED2: DALI signal communication lamp (when DALI signal is sent, the LED light will flash slightly)
5. Control Panel Information:
 - Power : Power indicator light
 - Bus : Default off in RS485 mode.
 - Δ :move up
 - ∇ :move down
 - \triangleleft :move left
 - \triangleright :move right
 - OK:confirm
 - Test:test
 - Return : return/exit
 - LED display: Displays DALI status information.
 - For details, see the DALI debugging manual.
6. Bus Interface : 24V、G、A、B;
7. Setting Address:
 - Step 1: (See Figure 8) Remove the latch cover; it requires some force to pull it out.
 - Step 2: (See Figures 6-7) Refer to the address setting dip switch table to set the dip switch to the corresponding address.
 - Step 3: After setting the address, remember to replace the latch cover.
8. Fire Interface:
 - Fire Center: Provides a normally closed signal to engage all 64 circuits; provides a normally open signal to disconnect all 64 circuits, with priority over software and manual control (see Figure 5).

Product Installation

See Figures 9-12

- Step 1. Secure the 35mm rail with screws.
- Step 2. Remove the snap-on cover from the DALI Dimming Module.
- Step 3. Press the entire module onto the rail and slide it until it is in the correct position, then snap the cover into place.

Safety Warning

- Tightening torque should not exceed 0.4 Nm.
- Input power wire: Max 4mm²; Load wire: Max 1mm².
- Installation location: Distribution box.
- Do not connect the RS485 BUS interface incorrectly, as it may damage the equipment.
- The RS485 BUS interface must not be connected to AC power; otherwise, it will damage all devices on the bus.
- Ensure a good ventilation environment.
- Do not expose to rain, contact with other liquids, or corrosive gases.

Packing List

- YC-DALI.16C.485*1/User Manual*1/Certificate of Conformity*1

1 2 3 4 5 6 7 8								ON OFF
ID01	ID02	ID03	ID04	ID05	ID06	ID07	ID08	
ID09	ID10	ID11	ID12	ID13	ID14	ID15	ID16	
ID17	ID18	ID19	ID20	ID21	ID22	ID23	ID24	
ID25	ID26	ID27	ID28	ID29	ID30	ID31	ID32	
ID33	ID34	ID35	ID36	ID37	ID38	ID39	ID40	
ID41	ID42	ID43	ID44	ID45	ID46	ID47	ID48	
ID49	ID50	ID51	ID52	ID53	ID54	ID55	ID56	
ID57	ID58	ID59	ID60	ID61	ID62	ID63	ID64	

Figure 7. Address Dip Switch Table 2

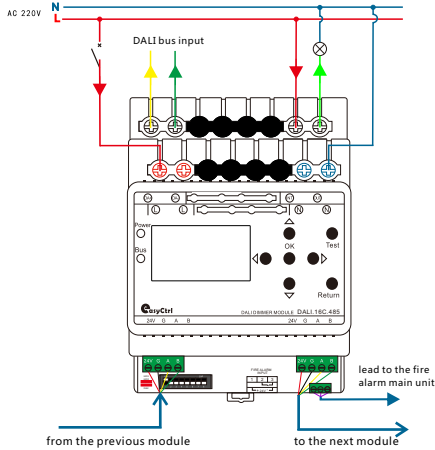


Figure 8. Product Wiring Diagram



Figure 9

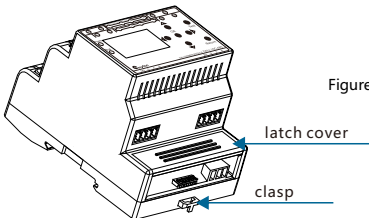


Figure 10

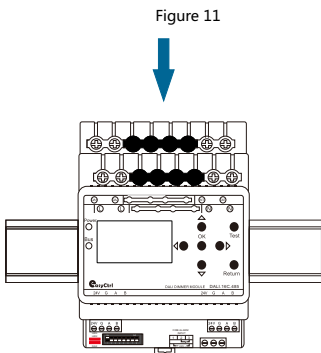


Figure 11

Figure 12. installation drawing

Technical Parameters

Basic Parameters

Operating Voltage	24VDC ±10%
Maximum Power Consumption	≤0.6W
Communication Interface	2XRS485
Output Interface	1-channel DALI bus output
Secondary Interface	1 CH 16A relay output (for special drive processing)
Display Mode	OLED display screen
Switching Cycles	no-load : 5,000,000 cycles , load : 3,000,000 cycles
Protection	circuit breaker for each circuit

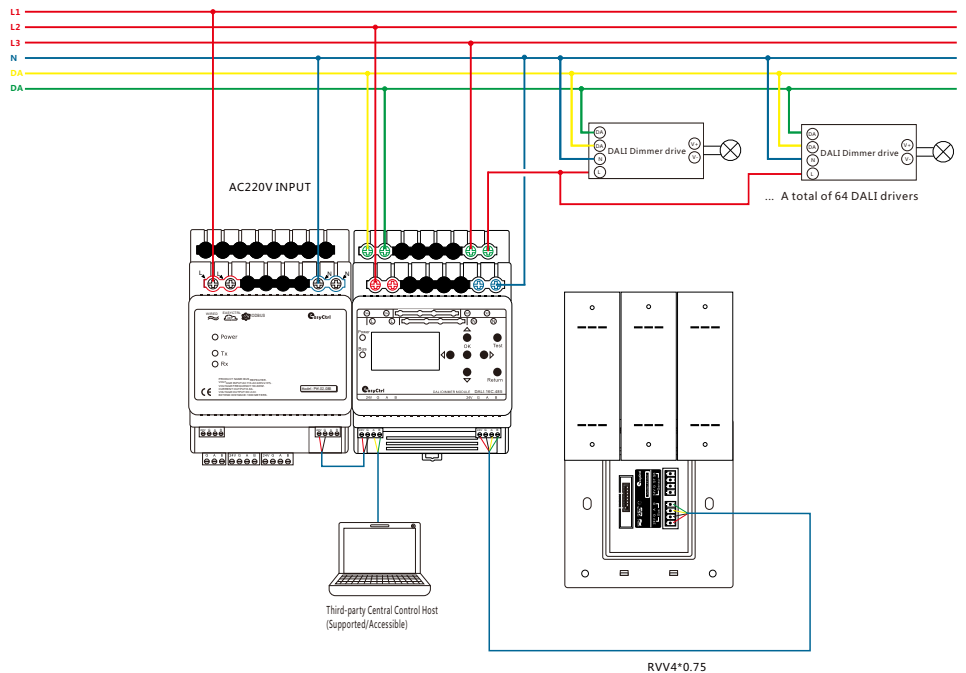
External Environment

Operating Temperature	0°C~45°C
Operating Relative Humidity	20%~93% RH
Storage Temperature	-40°C~50°C
Storage Relative Humidity	10%~93% RH

Product Specifications

Dimensions (L*W*H)	72 mm*102 mm*72 mm
Net Weight	≤261 g/pcs
Enclosure Material	flame retardant PP
Installation Method	standard 35mm DIN rail mounting (see Figure 9-12)
Protection Level	IP20

System Diagram



Bus Specification

Bus interface	4-core wire : RVV4*0.75	UTP : CAT5/CAT5E
24V	RED	BROWN WHITE/BROWN
GND	BLACK	BLUE WHITE/BLUE
A	YELLOW	ORANGE WHITE/GREEN WHITE
B	GREEN	ORANGE/GREEN

Technical support

Service Hotline: 86-18029750069

working hours: 9:00-12:00,13:00-18:00,From Monday to Friday)

Email: ceshi@easyctrlg.com

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