

DA1

1 Channel Constant Voltage DALI LED Dimmer

DA1

Features

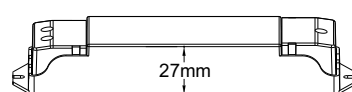
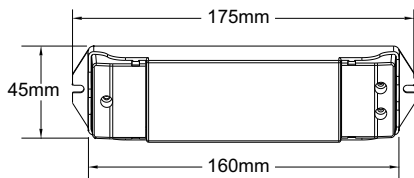
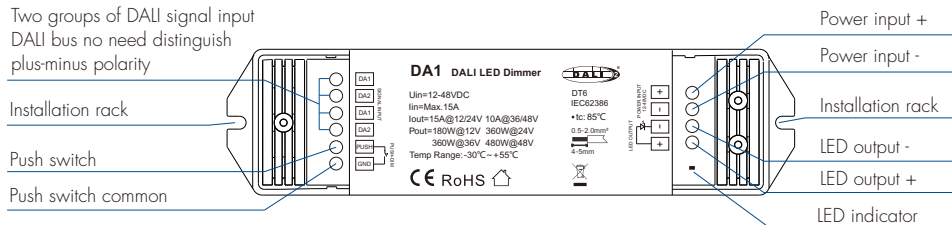
- 1 channel constant voltage DALI LED Dimmer, output Max. 15A.
- DALI-2 certified, in accordance with DALI standard protocol IEC 62386-101, 102, 207 and in compliance with DALI products from other international incorporation.
- DALI address will be automatically assigned by DALI master, 1 DALI address.
- PWM frequency 500Hz, 2KHz, 8KHz or 16KHz selectable.
- Standard DALI logarithmic dimming curve.
- Connect with external push switch to achieve on/off and dimming function.
- Over-heat / Overload / Short circuit protection, recover automatically.



Technical Parameters

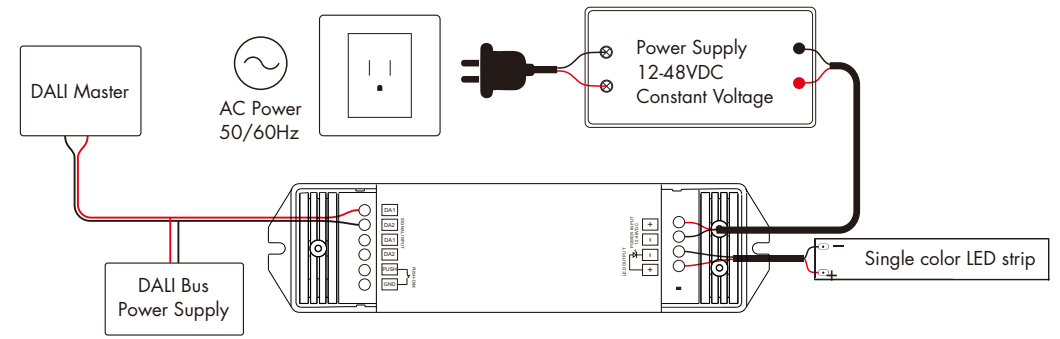
Input and Output		Dimming data		Safety and EMC	
Input voltage	12-48VDC	Input signal	DALI + Push Dim	EMC standard	EN IEC 55015 EN IEC 61547
Input current	Max 15A	Dimming range	0-100%	Safety standard	EN 61347-1/-2 EN 62493
Output voltage	12-48VDC	Dimming curve	Logarithmic	Certification	CE RoHS DALI-2
Output current	15A@12/24V 10A@36/48V	PWM frequency	500Hz, 2KHz(default), 8KHz, 16KHz	Package	
Output power	180W@12V 360W@24V 360W@36V 480W@48V	Environment		Size	L178 x W50 x H38mm
Output type	Constant voltage	Operation temperature	Ta: -30°C ~ +55°C	Gross weight	0.132kg
		Case temperature (Max.)	Tc: +85°C	Warranty	5 years

Mechanical Structures and Installations

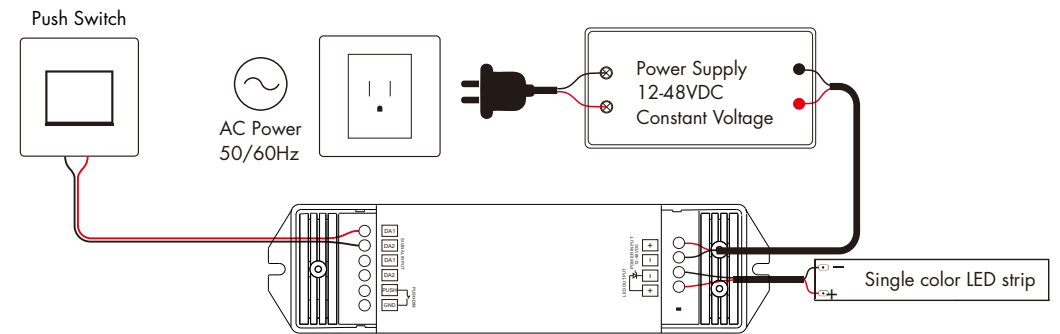


Wiring Diagram

- DA1 connect with DALI master



- DA1 connect with push switch



DALI Control

- DALI Address Assigned by DALI Master

This product is designed with 1 DALI address input and 1 channel output, DALI address is assigned by DALI Master controller automatically, please refer to user manuals of compatible DALI Masters for specific operations.

- DALI priority

The DALI master or Push switch can be connected at the same time, which makes the product more user-friendly and more options to fit for some extra-ordinary demands.

If the controller be used with the Push-Dim interface prior to using the DALI interface, the DALI command will make it return DALI control automatically.

Push Dim Function

The provided Push-Dim interface allows for a simple dimming method using commercially available non-latching (momentary) wall switches.

- **Short press:**
Turn on or off light.
- **Long press (1-6s):**
Press and hold to stepless dimming, With every other long press, the light level goes to the opposite direction.
- **Dimming memory:**
Light returns to the previous dimming level when switched off and on again, even at power failure(The power failure memory need to be set on the host computer).
- **Synchronization:**
If more than one controller are connected to the same push switch, do a long press for more than 10s, then the system is synchronized and all lights in the group dim up to 100%.
This means there is no need for any additional synchrony wire in larger installations.
We recommend the number of controllers connected to a push switch does not exceed 25 pieces,
The maximum length of the wires from push to controller should be no more than 20 meters.

PWM Frequency Setting

Press and hold the push switch and power on, and keep pressing for 5s, the LED indicator fast flashes 3 times, enter the PWM frequency setting state.

Release the push switch and operate the following steps within 5s to switch the PWM frequency:

Press and hold the push switch for 2s, set the PWM frequency to 500Hz, the LED indicator flash 1 time.

Press and hold the push switch for 5s, set the PWM frequency to 2KHz, the LED indicator flash 2 times.

Press and hold the push switch for 10s, set the PWM frequency to 8KHz, the LED indicator flash 3 times.

Press and hold the push switch for 15s, set the PWM frequency to 16KHz, the LED indicator flash 4 times.

The factory default PWM frequency is 2KHz.

Higher PWM frequency, will cause lower output current, higher power noise, but more suitable for camera(No flickers for video).

PWM frequency and output current mapping:

U_{in} \ I_{out} / PWM	500Hz	2KHz	8KHz	16KHz
12/24V	15A	12A	10A	10A
36/48V	10A	8A	6A	6A

Safety & Warnings

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