

DALI Dimming LED Driver (Constant Current)

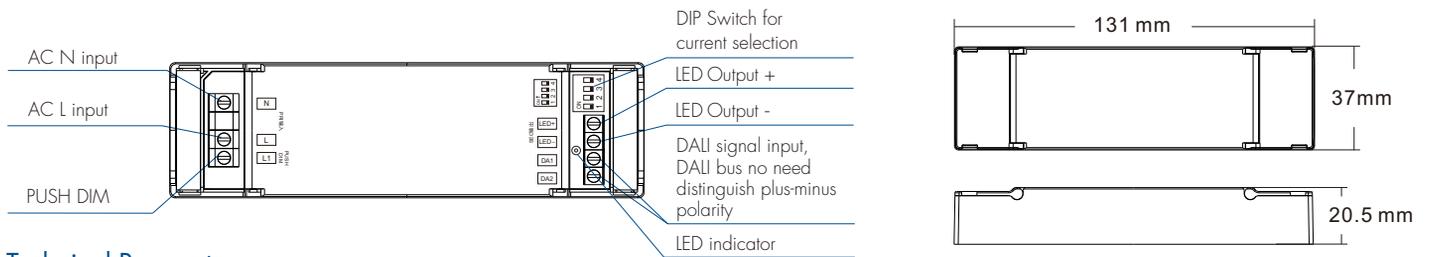
- Support DALI-2, Push DIM dimming mode.
- In accordance with DALI standard protocol IEC 62386-102, IEC 62386-207 and in compliance with DALI products from other international incorporation.
- PWM digital dimming, standard DALI logarithmic dimming curve.
- DALI address will be automatically assigned by DALI master, 1 DALI address.
- Universal AC input / Full range, High PF, High efficiency, Flicker Free.
- Standby power input<0.5W, meets the requirements of ERP certification.
- Multi-current & wide voltage, suitable for different power LEDs.
- Over-heat / Over-load / Short circuit protection, recover automatically.
- Class II design, SELV safety ultra-low voltage.
- Suitable for indoor LED lighting application.
- 5 Year, 50,000hr warranty.



Applications

- Suitable for downlight, spotlight and decorative applications.
- Office / Commercial / Domestic Lighting, Hotels, Classrooms, Warehouse, Health care, Retail and Display.
- Use for retrofit upgrades & new luminaire designs.

Mechanical Structures and Installations



Technical Parameters

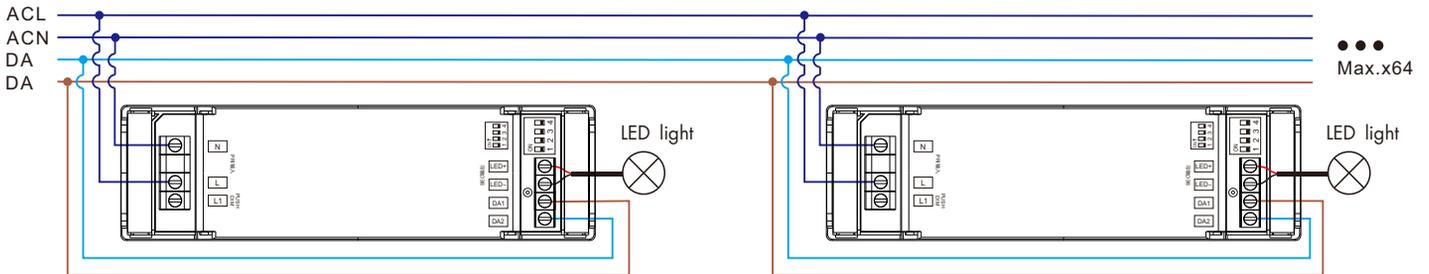
Output	Output Voltage	10~42VDC
	Max Output Voltage	48VDC
	Output Current	100-700mA
	Output Power	Max. 12W
	Dimming Range	0~100%, dimming depth:0.1%
	PWM Frequency	3600Hz
	Current Accuracy	100mA gear $\pm 10\%$, the rest of the gear $\pm 5\%$
	Ripple & Noise	<5%(Maximum current non dimming state)
Input	Input Voltage Range	100~240VAC
	Frequency Range	50/60Hz
	Efficiency(TYP)	>80% (350mA at full load)
	Input Current	$\leq 0.15A/115VAC, \leq 0.08A/230VAC$
	Power Factor	>0.95/115VAC, >0.9/230VAC
	THD	<12% / 230VAC(at full load)
	Anti Surge	L:N:1.5KV
	Inrush Current	Cold start8A, 135us duration(50% Ipeak) / 230VAC
	Leakage Current	< 0.6mA/230VAC
	Standby Power/No Load Power	<0.5W(DIMMING OFF)
Dimming Interface	DALI dimming	Voltage range: 9.5-22.5V, typical 16V, interface current consumption: 1.8mA
	Push DIM dimming	Voltage range: 100-240V 47/63Hz
Protection	Over Load Power	Current decrease or Hiccup, recovers automatically after fault condition is removed
	Short Circuit	Output shortcircuit, intermittently shut down output; Long time shortcircuit, the system will completely shut down the LED output, you need to manually power on restart activation
	Over Temperature	Current decrease when PCB temp>100°C, recovers automatically after fault condition is removed
Environment	Working Temperature	-20°C~50°C
	Tcase Max	80°C
	Working Humidity	20%~90%RH, non-condensing
	Storage Temp/Humidity	-40°C~80°C, 10%~95%RH
	Temperature Coefficient	$\pm 0.03\%/^{\circ}C$ (0-50%)
	Vibration Resistance	10-500Hz, 2G, 6min/cycle, X,Y,Zaxes/2min
Safety&EMC	Security Specifications	CE-LVD: EN 61347-2:13:2014/A1:2017, EN 61347-1:2015, EN 62493:2015
	Withstand Voltage	I/P/O/P: 3750VAC
	Insulation Resistance	I/P/O/P: 100M/500VDC/25°C/70%RH Ω
	EMC Emission	CE-EMC:EN55015,EN61000-3-2,EN61000-3-3
	EMC Immunity	CE-EMC: EN61000-4-2,3,4,5thunderbolt1KV,6,11
	Certications	CE, DALI 2.0

LED Current Selection: 

Output Voltage	9-42V	9-42V	9-42V	9-42V	9-40V	9-34V	9-30V	9-26V	9-24V	9-22V	9-20V	9-18V	9-17V
Output Current	100mA	150mA	200mA	250mA	300mA	350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA
Output Power	0.9-4.2W	1.35-6.3W	1.8-8.4W	2.25-10.5W	2.7-12W	3.15-11.9W	2.4-12W	3.6-11.7W	4.05-12W	3.3-12W	4.5-12W	4.95-11.7W	5.4.9W

Wiring Diagram

1. DALI dimming connection



DALI dimming mode

After installation according to the wiring diagram of DALI dimming application, the dimming power supply receives any DALI command to enter the DALI dimming operating mode.

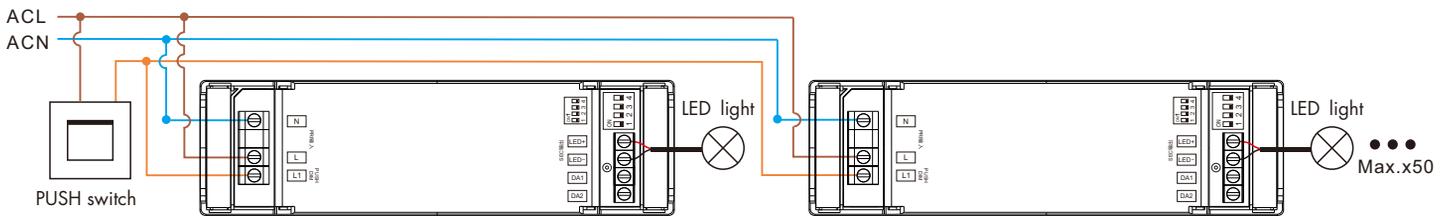
Power-on level

When the driver is in DALI-dimming mode, the factory default level after each power-on is the brightest. (The recommended setting for the default factory power-on level of the DALI-2 driver is the brightest in the DALI-2 standard.)

The power-on level can be set through the DALI configuration tool or DALI application controller during installation, and can be set to memory or fixed any brightness (such as off, darkest, 30%, 50% etc.).

The dimming curve can be selected by DALI configuration. The default is logarithmic dimming curve.

2. Push DIM dimming application



Switch to the push DIM dimming mode

After installation according to the wiring diagram of pushDIM dimming application, short press the push button 1 times, the driver will automatically switch to the push DIM dimming mode.

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 step-less 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.
- **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%.

Installation note

1. This product must be installed and adjusted by a qualified professional.
2. This product is non-waterproof. When installed outdoors, please ensure it is mounted in a water proof enclosure.
3. LED driver should keep a certain distance from the heating stuff(such as the luminaries radiator).
The installation interval between the product and the product is recommended to be 1.5cm, so as not to affect the service life due to poor heat dissipation.
4. Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger a accident.
5. If a fault occurs, please do not attempt to fix the product by yourself. If you have any questions, please contact us in time.