

# DALI to PWM Converter



SC-DALI-1



## Product Description

SC-DALI-1 is a non-isolated signal converter, transforming the DALI signal to PWM output. It conforms to the DALI protocol IEC 62386-101, 102, 103, 207. Input voltage ranges from 10VDC to 22.5VDC. One converter can control one LED driver. It flexibly fits in many different DALI lighting system designs.

## Feature

- Output PWM dimming signal; compatible with PWM dimmable driver; high performance, high reliability
- Dimming range 10%-100% (dim to off)
- DALI dimming function; The logarithmic dimming mode and linear dimming mode can be selected via DALI interface.
- IP67 rating; waterproof casing
- Warranty: 5 yrs (Please refer to the warranty description.)

## Application

- Plant lighting
- Indoor office lighting
- Decorative lighting
- Commercial lighting
- Residential lighting

## Electrical Characteristic

Full Model Number		SC-DALI-1
Output	PWM Range	10%-100% (dim to off)
	PWM Voltage	10VDC
	PWM Source Current	5mA (Max.)
	PWM Tolerance	±5%
	Frequency	1KHz
	Temperature Drift	±5%
	Start-up Time	<1S@16VDC, DALI typical voltage
Input	Input Voltage	10-22.5VDC
	Input Current	≤5mA
Environment Description	Working Temperature	-30°C~+60°C
	Working Humidity	20-90%RH (no condensation)
	Storage Temperature & Humidity	-30°C~+ 60°C (six months under class I environment); 10-90%RH (no condensation)
	Atmospheric Pressure	86KPa~106KPa
Safety and Electromagnetic Compatibility	Certification	Conform to CE
	Electromagnetic Emission	Conform to EN55015
Others	IP Rating	IP67
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty	5 years
	Implementation Standards of DALI	IEC 62386-101, 102, 103, 207
	Lamps that can use this accessory	SKYLUX

Remarks	<ol style="list-style-type: none"> <li>1. It is recommended that customer should install protection devices for surge, for over voltage and for undervoltage to ensure safety before connecting to electricity.</li> <li>2. Disconnect the DALI input before connecting to the PWM dimmable drivers. Wire them only when they are not powered on.</li> <li>3. The PC cover, housing, end caps and other parts of the LED driver inside the LED light fixture must conform to UL94-V0 flammability standard or above.</li> <li>4. As accessories, the converter and LED driver are not the only factors determining the EMC performance of the LED light fixture. The structure and the wiring of the light fixture are also relevant. Thus it's strongly recommended the LED light fixture manufacturer re-confirms the EMC of the whole LED light fixture.</li> <li>5. Unless otherwise stated, the parameters mentioned above were test results under the ambient temperature of 25°C, humidity of 50%, DALI signal input and 100% load.</li> </ol>
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## Dimming Instruction

### Description of Terminals

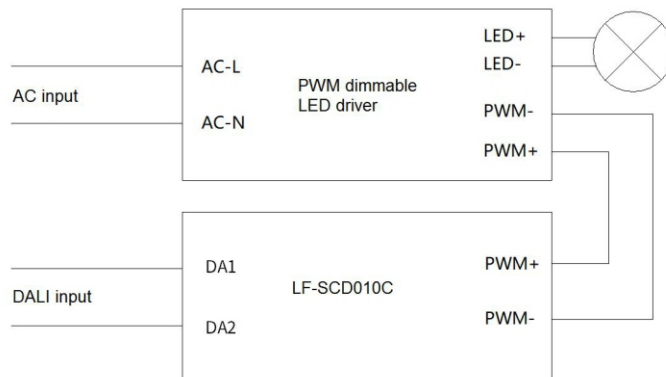
#### INPUT

DA1	DA1 dimming input terminal
DA2	DA2 dimming input terminal

#### OUTPUT

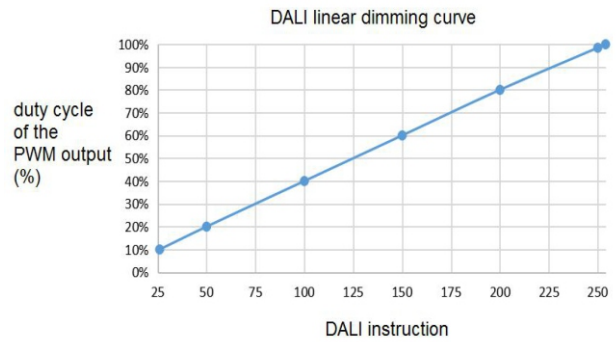
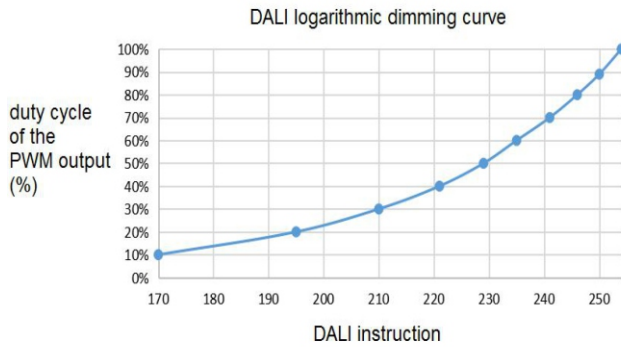
PWM+	PWM signal output terminal
NC	Vacant
PWM-	PWM signal output terminal

### Wiring Diagram of DALI Dimming

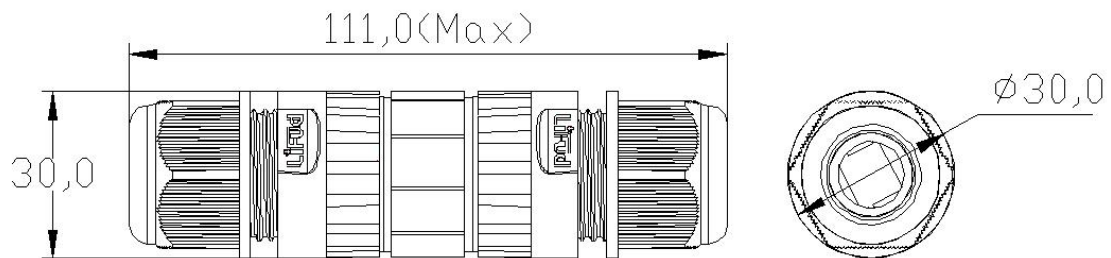


### Instruction of DALI Dimming

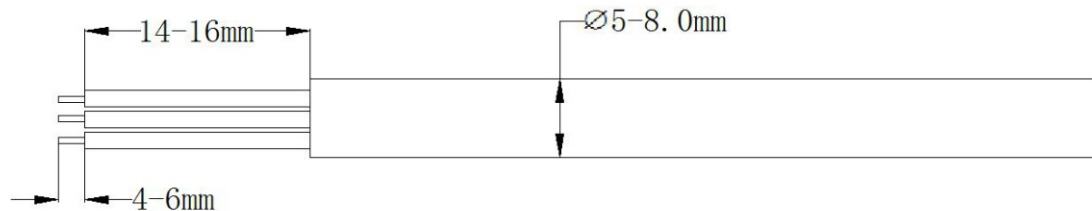
- \* The default setting is 100%, the maximum output.
- \* Connect the DALI signal to DA1 and DA2 terminals.
- \* The DALI protocol includes 16 groups and 64 IP addresses.
- \* The minimum dimming depth of the DALI dimming is 10%.



### Structure & Dimension (unit: mm)



- \* The wire outlets are compatible with 22# to 16# two-core or three-core cables. (Expose 4mm to 6mm wire core. Peel 14mm to 16mm sheath. Use cables with diameter of 5mm to 8mm.)



## Package Specifications

Model Number	SC-DALI-1
Independent Package Size	35×35×116mm (L×W×H)
Box Size	400×325×140mm (L×W×H)
Quantity	100 pcs/layer; 1 layer/ctn; 100 pcs/ctn
Weight	85g /pc; 7.1kg±5%/ctn

## Transportation & Storage

### 1. Transportation

- \* Transportation means: vehicles, boats and aircraft.
- \* During transportation, there should be awnings or sun protection. Civilized loading and unloading are required. There should be no severe vibration or impact.

### 2. Storage

- \* Storage in accordance with the provisions of GB 3873-83. Products which have been stored for more than one year must be re-inspected. Use them only after passing the re-inspection.

## Attention

- \* Due to the diameter differences of the cables used by customers, there may be gaps between nuts and studs during assembly. It's a normal phenomenon. To ensure the waterproof function, please make sure the torque is within 2.8-3.7N/m.
- \* Use this product according to the specifications, please. Otherwise there may be malfunction.
- \* Use luminaires that have not been certified or are not compatible with the drivers may cause fire, explosion or other hazards.
- \* Man-made damage is not covered by warranty.