

Product Description

LF-SCD010C is a non-isolated signal converter used for transforming the DALI signal to PWM signal. It complies with the DALI protocol IEC 62386-101, 102, 103, 207. The input voltage range is 10-22.5Vdc. Besides, it has 1-to1 control dimming function, which means that one converter can control one LED driver. It provides more solutions for DALI system design.

Features

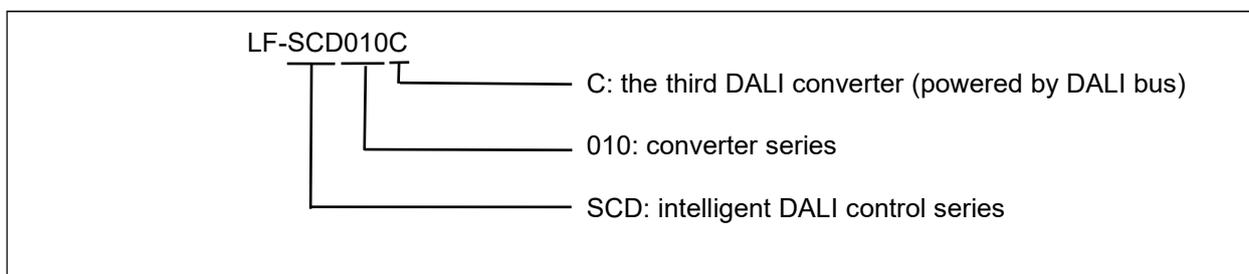
- High performance & high reliability
- PWM dimming signal output
- Compatible with PWM dimmable drivers
- Dimming range: 10%-100% (dim to off)
- Supports DALI dimming function (the logarithmic dimming curve and linear dimming curve can be selected via DALI interface)
- IP67 rating & waterproof casing
- Warranty: 5 yrs (Please refer to the warranty description.)



Applications

- Horticultural lighting
- Indoor office lighting
- Decorative lighting
- Commercial lighting
- Residential lighting

Product Naming



Electrical Characteristics

Model		LF-SCD010C
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
Environment Descriptions	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	Certifications	Complies with CE
	EMI	Complies with EN55015
Others	IP Rating	IP67
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty	5 years
	DALI Executive Standard	IEC 62386-101, 102, 103, 207

Remarks	<ol style="list-style-type: none"> 1. It is recommended that customer should install overvoltage and undervoltage protection devices and surge protection devices to ensure safety before connecting to electricity. 2. Disconnect the DALI input before connecting to the PWM dimmable drivers. Wire them only when they are not powered on. 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. 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. 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. 6. Please conduct compatibility test before using this converter.
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Dimming Operation Instructions

Definitions of Terminals

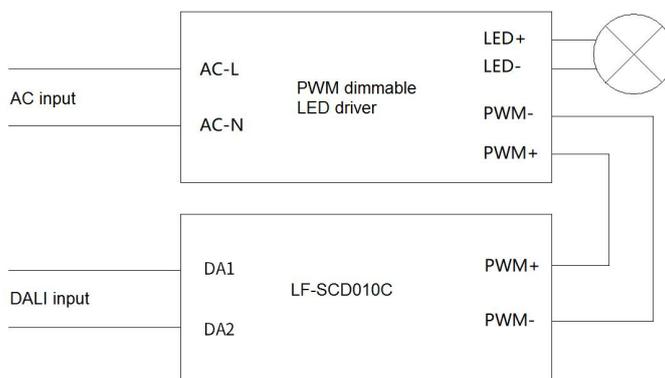
INPUT

DA1	DA1 dimming input terminal
DA2	DA2 dimming input terminal

OUTPUT

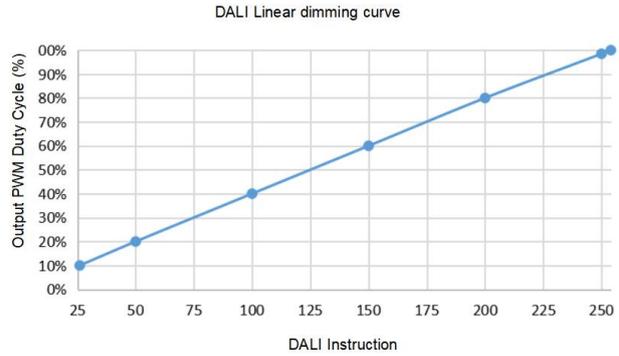
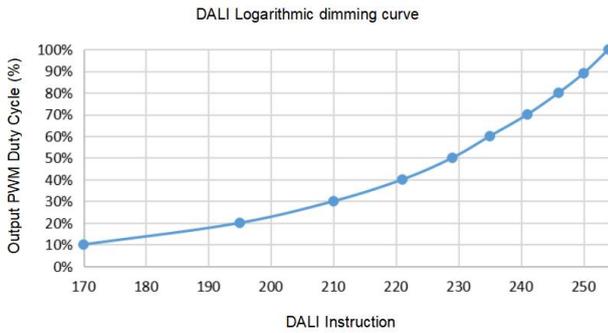
PWM+	PWM signal output terminal +
NC	Vacant
PWM-	PWM signal output terminal -

Wiring Diagram of DALI Dimming

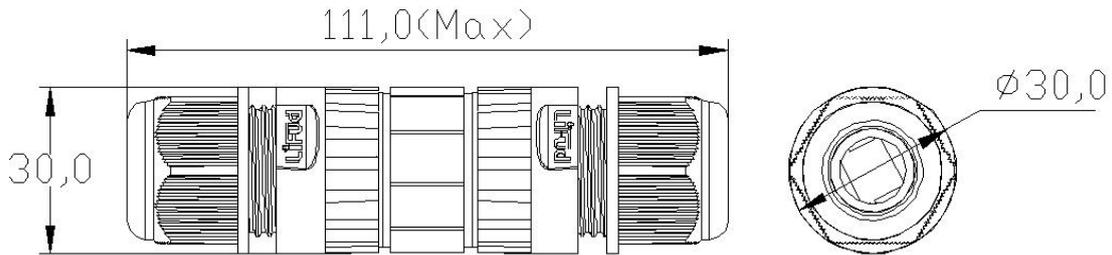


Instructions of DALI Dimming

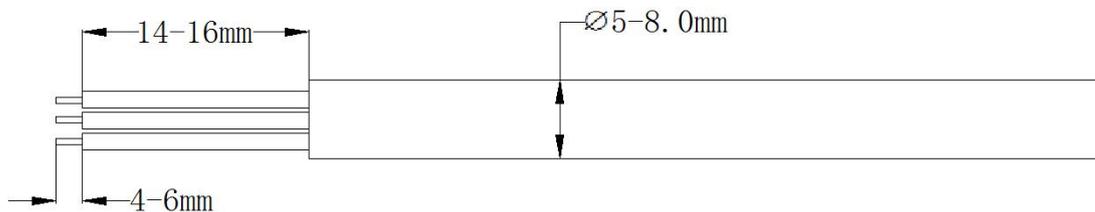
- * The default setting is the maximum output of 100%.
- * DALI signal is connected to DA1 and DA2 terminals.
- * DALI protocol includes 16 groups and 64 IP addresses.
- * The minimum dimming depth of DALI dimming is 10%.



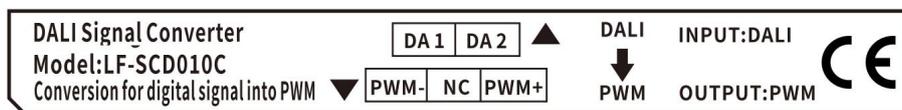
Structure & Dimensions (unit: mm)



* The wire outlets are compatible with No. 22 to No.16 rubber wires or two-core or three-core sheathed wires. (exposed length of wire cores: 4-6mm; peeled length of sheathed wires: 14-16mm; outer diameter of wires: 5-8mm)



Label



Packaging Specifications

Model	LF-SCD010C
Individual Packaging Size	35×35×116mm (L×W×H)
Box Size	400×325×140mm (L×W×H)
Quantity	90 pcs/layer; 1 layer/ctn; 90 pcs/ctn
Weight	0.068 kg/pc; 6.6 kg±5%/ctn

Transportation & Storage

■ Transportation

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

■ Storage

- Storage in accordance with the provisions of Class I environment. For products which have been stored for more than six months, they mustn't be used until they pass the re-inspection.

Attention

- Please use this product according to its specifications otherwise there may be malfunction.
- Use light fixtures that have not been certified or are not compatible with the LED drivers may cause fire or other hazards.
- Man-made damage, any use beyond the specification and non-original-factory modification are not covered by warranty.

Remark: The final interpretation right of the contents of this data sheet belongs to Lifud Technology Co., Ltd.