

## LCP320AD-1H24V

### Summary

LCP320AD-1H24V is a constant voltage mode output LED driver. This driver complies with DALI standard protocol IEC 62386, and provides multiple dimming function (DALI, 0/1-10V active signal, PWM, adjustable resistance, and Touch DIM) to achieve a smooth dimming effect.

### Product Features

- Single channel constant voltage output, 13.3A Max
- Meet DALI protocol IEC 62386
- High input voltage of 220VAC ~ 240VAC
- Dimming effect smooth, no flicker
- Over load protection; short circuit protection
- IP20, suitable for indoor LED lighting application

### Application

For LED constant voltage strip light only



LED Strip Light



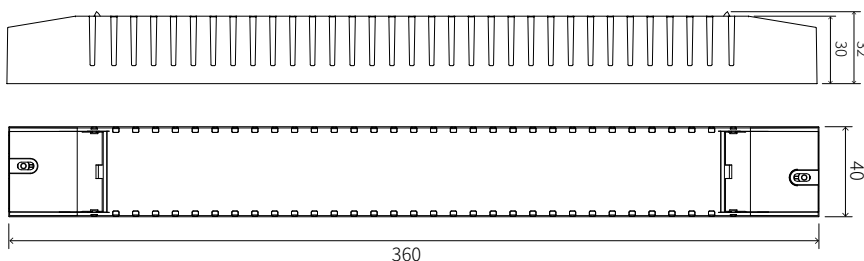
LED Tube



### Technical Parameters

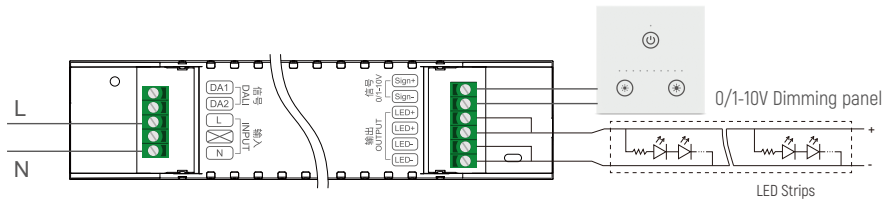
Model	LCP320AD-1H24V	
Input	Efficiency	≥92%@230VAC, Full load
	Voltage	220VAC-240VAC
	Frequency Range(Hz)	50/60Hz
	Power Factor	≥0.95@230VAC, Full load
	THD(full load)	<10%@230VAC, Full load
	AC Current(max)	1.6Amax@230VAC
	Standby power	<1W
	Inrush Current(max)	Cold start, 80A@230VAC
Output	Current(A)/Voltage (VDC) Power(W)	13.3A/24VDC/320W
	Channel	1
	Voltage Tolerance	±5%
	Turn on delay Time	0.8s, at 230Vac (When the light begins to shine)
	Ripple Voltage	3%
Function	Dimming Type	DALI/0&1-10V/PWM/PUSH
	Dimming Range	0.1%-100% Dimming to off
Protection	Over load	Close the output, recovers after fault condition is removed
	Short Circuit	Close the output, recovers after fault condition is removed
Safety & EMC	Surge	L-N: 1.2KV
	Withstand Voltage	I/P-O/P: 3000VAC/1min/5mA, O/P-DIM[ Signal port ]: 1500Vac/1min/<5mA
	DALI Standard	IEC 62386-101: 2014, IEC 62386-102: 2014; IEC 62386-207: 2009, DALI 2.0
	EMC Emission	EN55015
	Safety Standards	EN61347, GB19510
Others	Working Temp.	-20°C~50°C
	Storage Temp., Humidity	-40°C~85°C, 20-90%RH
	tc	90°C
	Material	PC
	IP Rating	IP20
	Lifetime	50,000h@tc:85°C
	Warranty Condition	5 years
	Switch Cycle	25,000 times
	Packing(weight)	Net weight: 630g±5%/PCS; 25PCS/Carton; 16.2kg±5%/Carton; Carton Size: 377*241*196mm(L*W*H)
	Dimension	360*40*32mm (L*W*H)

### Dimension(mm)

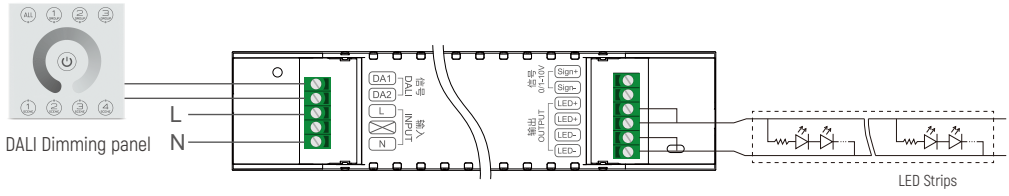


## DALI Wiring

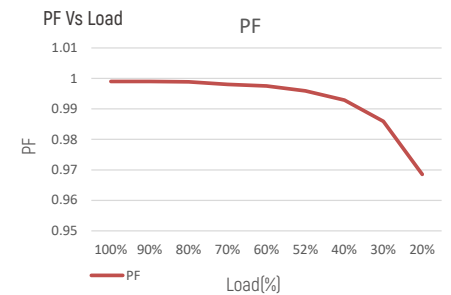
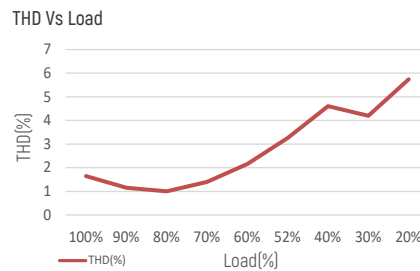
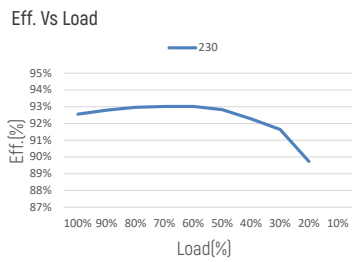
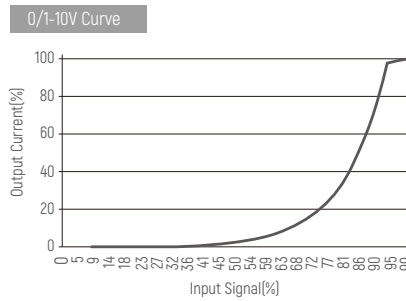
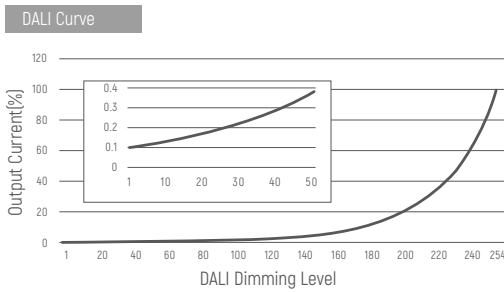
### 0/1-10V Wiring



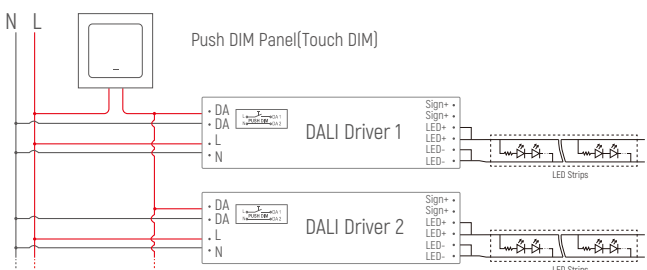
### DALI Wiring



## Dimming Curve



## Push DIM(Touch DIM) Diagram



Remark: Only use open push button without indicator light. Maximum cable length between each Unit: 20 meters.

## Push DIM Function

1. Press the Push DIM (Touch DIM) switch for 8s or more, the driver can be controlled via Push DIM switch.
2. Short press the Touch DIM switch (<0.5s) to control the lamp on or off.
3. Long press the Touch DIM switch (>0.5s) to dim the brightness of light. The dimming direction will change every time after pressing switch.
4. Double-click the Touch DIM switch (<0.3s), then all lamps connected on the device will be set maximum brightness.
5. The brightness adjustment range is 1%-100%, and the light can be turned off through short pressing when doing the adjustment with long pressing Touch DIM switch.
6. With the Power off memory function, the power-down state will be recovered when power on again.

## Cautions

1. This product should be installed by qualified personnel.
2. This product is non waterproof, need to avoid sun and rain. In case of outdoor use, please ensure it is mounted in a water proof enclosure.
3. Good heat dissipation conditions extend product life. Please install the product in a well-ventilated environment.
4. Please make sure LED power supply output voltage, current is used to meet the product requirements.
5. Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured tightly in the connector.
6. Due to safety concerns, PVC or rubber cord of 0.75- 1.5mm<sup>2</sup> is recommended for input and output terminal(s) (excluding signal terminals). Flat power cord is not suitable. Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
7. In case of malfunction, do not repair it yourself.

※ The contents of this manual are updated without prior notice. If the function of the product you are using is inconsistent with the instructions, the function of the product shall prevail. Please contact us if you have any questions.

## LCP320AD-1H24V

### 概述

LCP320AD-1H24V是一款恒压输出的LED调光驱动器。这款驱动器符合DALI标准协议IEC62386。支持DALI,0/1-10V有源信号，可调电阻，PWM, Touch DIM多种调光方式。

### 产品特点

- 单通道恒压输出，最大输出电流为13.3A
- 遵循DALI协议标准 IEC62386
- 宽电压输入：220VAC~240VAC
- 过载保护，短路保护
- 调光曲线平滑，无闪烁
- IP20，适用于室内LED灯具

### 应用

仅用于LED恒压灯带



LED灯带



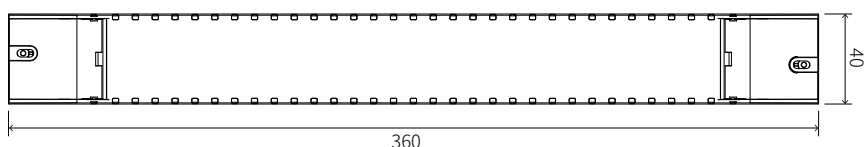
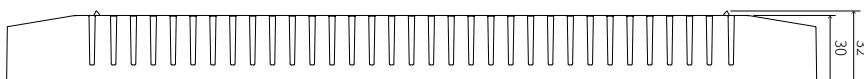
LED硬灯条



### 技术参数

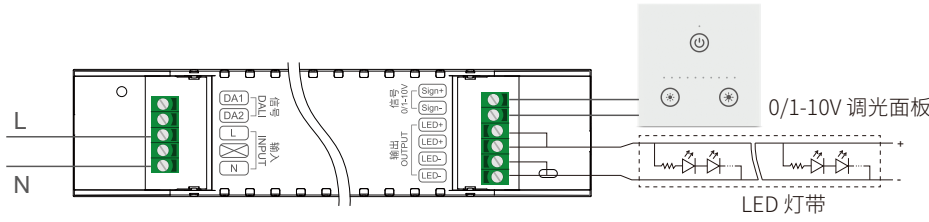
型号	LCP320AD-1H24V	
输入	效率	≥92%@230VAC, 满载
	电压	220VAC-240VAC
	频率	50/60Hz
	功率因素	≥0.95@230VAC, 满载
	THD	<10%@230VAC, 满载
	电流	1.6Amax@230VAC
	浪涌电流	冷启动, 80A@230VAC
输出	电流/电压/功率	13.3A/24VDC/320W
	通道	1
	电压公差	±5%
	启动延时	0.8s, at230Vac{灯光开始亮起}
	纹波电压	3%
功能	调光方式	DALI/0&1-10V/PWM/PUSH
	调光范围	0.1%-100%
	调光曲线	对数
保护	过载	关闭输出，移除故障后自恢复
	短路	关闭输出，移除故障后自恢复
安全 & 电磁兼容	浪涌	L-N:1.2KV
	耐压标准	I/P-O/P: 3000VAC/1min/5mA, O/P-DIM{信号口}: 1500Vac/1min/<5mA
	DALI 标准	IEC 62386-101: 2014, IEC 62386-102: 2014; IEC 62386-207: 2009, DALI 2.0
	电磁兼容	EN55015
	安全标准	EN61347, GB19510
其它	工作温度	-20°C-50°C
	储存温度、湿度	-40°C-85°C, 20-90%RH
	tc	90°C
	材质	PC
	防水等级	IP20
	寿命	50,000小时@tc:85°C
	质保	5年
	开关周期	25,000次
	包装尺寸(重量)	净重:630g±5%/PCS; 25PCS/箱; 16.2kg±5%/箱; 外箱尺寸:377*241*196mm[长*宽*高]
	尺寸	360*40*32mm (长*宽*高)

### 尺寸(mm)

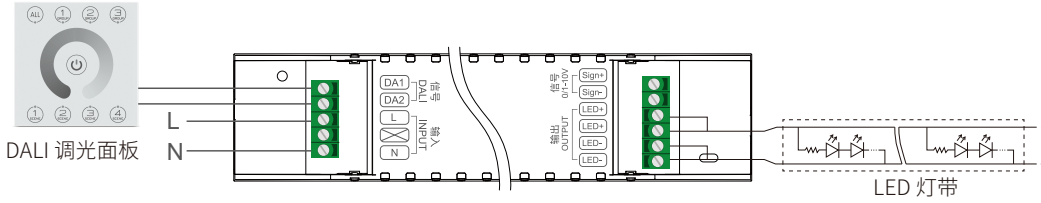


## 接线图

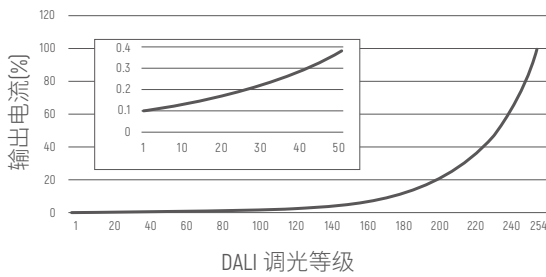
### 0/1-10V 接线



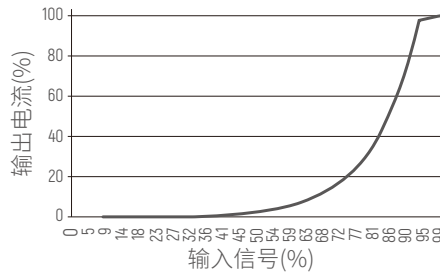
### DALI 接线



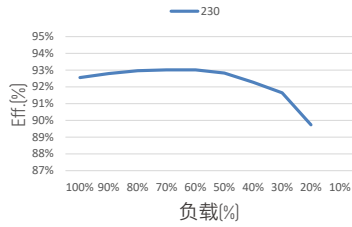
### DALI 曲线



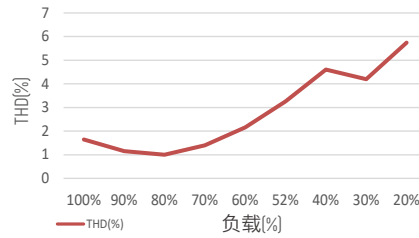
### 0/1-10V 曲线



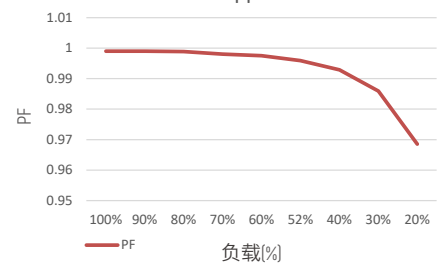
### 效率 Vs 负载



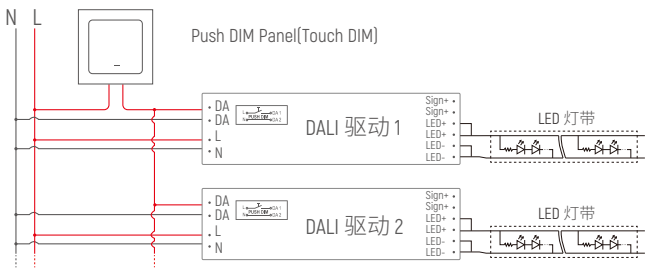
### THD Vs 负载



### PF Vs 负载



## Push DIM (Touch DIM)应用图



## Push DIM 功能

1. 长按Push DIM(Touch DIM)开关8s, 进入Push DIM (Touch DIM)模式。
2. 短按Touch DIM 开关 (<0.5秒) 进行灯的亮暗控制。
3. 长按Touch DIM 开关 (>0.5秒) 进行灯具的亮度调节, 光是调亮还是调暗, 随着每次按压的开关变化而变换。
4. 双击Touch DIM 开关 (<0.3秒), 连接的所有灯具将达到最亮状态。
5. 亮度调节范围为1%-100%。
6. 具有断电记忆功能, 重新上电将恢复到上一次断电的状态。

备注: 只能使用开路的按压式开关(不带指示灯). 采用同步连线时每个设备和设备之间的线长不超过20米.

## 注意事项:

1. 本产品请由具有专业资格的人员进行调试安装。
2. 本产品不能防水, 需避免日晒雨淋, 如安装在户外, 请用防水箱。
3. 良好的散热条件会延长产品的使用寿命, 请把产品安装在通风良好的环境。
4. 请检查使用的LED电源输出电压电流, 是否符合产品要求。
5. 出于安全考虑, 推荐输入和输出(信号端除外)用0.75-1.5mm<sup>2</sup> PVC或橡胶线缆, 并确保接线牢固, 以免电线过热或接触不良触发事故。扁平电源线不适用。
6. 通电调试前, 应确保所有接线正确, 以避免因接线错误而导致灯具损坏。
7. 如果发生故障, 请勿私自维修; 如果有疑问, 请联系供应商。

※ 本说明书内容如有更新, 恕不另行通知。若您使用的产品功能与说明书不一致时, 请以产品为准。如有疑问请与我们联系。