



領冠電源

# DALI dimming LED Driver—LKAD019D-D



## 产品参数/Specification

Model	LKAD019D-D	备注
输入 Input	输入电压范围/Input Voltage range	200–240V
	频率/Frequency	50/60hz
	谐波/THD	≤15%
	功率因数/Power factor	0.92/240VAC
	输入电流 Input current (mA)	60MA/240VAC
	待机功耗 stand_by power	≤0.8W
	浪涌电流 Inrush Current (Max.)	≤30A@240VAC
	漏电流 Leakage Current	<1MA/240VAC
输出 Output	额定电压/Rated voltage	40V
	空载电压/No-load Voltage	≤42V
	工作电压范围/working voltage range	10–40V
	额定电流规格/Rated current specification	250MA
	电流精度/Current precision	(+/-) 3%
	额定功率/Rated power	12W
	开机延时/Setup Time	≤0.5s/230VAC
	输出线性调整率Output Line Regulation	±5%
	温度漂移temperature drift	±10%

### —产品特性/Feature—

- 200–240VAC (50/60Hz) 输入/200–240VAC (50/60Hz) Input;
- 可以通过外加 DALI 主控实现平滑的调光效果./ It can perform smooth dimming effect through connecting with a DALI main controller.
- 单通道恒流输出;/ Single channel constant current output;
- 遵循DALI协议标准 IEC62386;/ Follow the DALI protocol of standard IEC62386
- 高效率、高功率因素，稳定性好/ Hight efficiency, hight PF, good steady;
- 短路保护, 过流保护/ Short circuit/over current protection;
- 100%满载老化测试/ 100% full load burn-in test;
- 独立外置, Class II 恒流类型/ independent, Class II constant current type;
- 防护等级 IP20/ degree of protection IP20;
- 适用于面板灯/天花灯/筒灯等照明应用/ suitable for LED lighting, ceiling light, down light and panel light;
- 3年质保期/ 3 years warranty.

保护特性 Protection	开路保护Output open circuit protection	有/Enable		
	短路保护Short Circuit Protection	打嗝模式/Hiccup mode		
使用环境 Environment Requirements	工作温度/湿度要求 Operating Temp. /RH	-30~+45°C/20~95%		
	储存温度, 湿度要求 Storage Temp. /RH	-40~+80°C/10~95%		
安全和电磁兼容 Safety & EMC	认证编号/Certificate	符合CE/ meet CE		
	耐压 withstand voltage	3750VAC/60S		
	绝缘阻抗insulation resistance	500V>100M		
	浪涌等级EMS immunity	IEC6100-4-5 (L-N: 1KV)		
	安规标准Safety standard	EN61347, GB19510		
	电磁干扰electromagnetic interference	EN55015, EN61000-3-2		
	电磁抗干扰Electromagnetic Susceptibility	EN61000-4-2. 3. 4. 5. 6. 8. 11. EN61547		
其他 Others	IP等级说明 IP level description	IP20		
	质保说明Warranty instructions	3年/3 years		
	尺寸/Size	88*37*24MM		
	重量/Netweight			
注意事项 matters needing attention	1. 建议客户在灯具供电回路中安装过欠压保护与浪涌保护装置，以确保用电安全 1. pls suggest the client to install the undervoltage protection device and surge protection device to ensure Electricity safety 2. 电源作为整灯灯具中的一个零部件与终端设备结合使用，因EMC性能受LED灯具及走线的影响，终端设备制造商需对整套装置重新进行EMC确认。 2. The power supply is considered a component which will be installed a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 3. 客户在使用电源时，注意电源通风散热和环境温度，超过TA时要做降额使用 3. Be careful of ambient temperature and heat dissipation during the client use this unit, When exceeding TA, the power supply shall be derated			

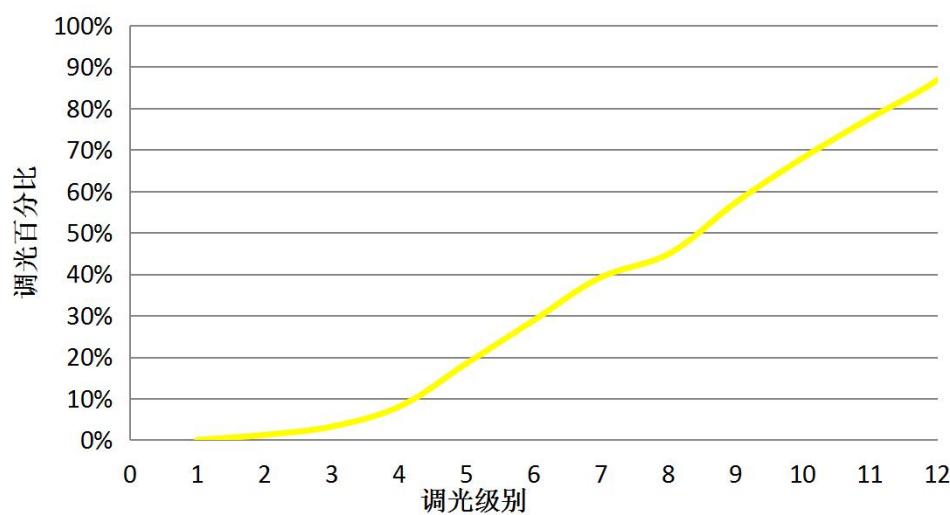
### DALI测试数据/DALI Test data

输入电压 Input voltage ( Vac )	输入电流 Input current ( mA )	输入功率 Input power ( W )	功率因数 PF	输出电压 Output voltage ( Vdc )	输出电流 Output current ( mA )	输出功率 Output Power ( W )	转换效率 Efficiency (%)
240V	54.11	11.95	0.918	40.00	250.00	10.00	83.7%
	44.12	9.38	0.883	30.00	251.00	7.53	80.3%
	33.95	6.66	0.814	20.00	254.00	5.08	76.3%
	24.20	3.87	0.663	10.00	260.00	2.60	67.2%
200V	62.23	11.89	0.954	40.00	248.00	9.92	83.4%
	49.73	9.30	0.933	30.00	251.00	7.53	81.0%
	36.97	6.57	0.886	20.00	254.00	5.08	77.3%
	24.67	3.77	0.763	10.00	260.00	2.60	69.0%

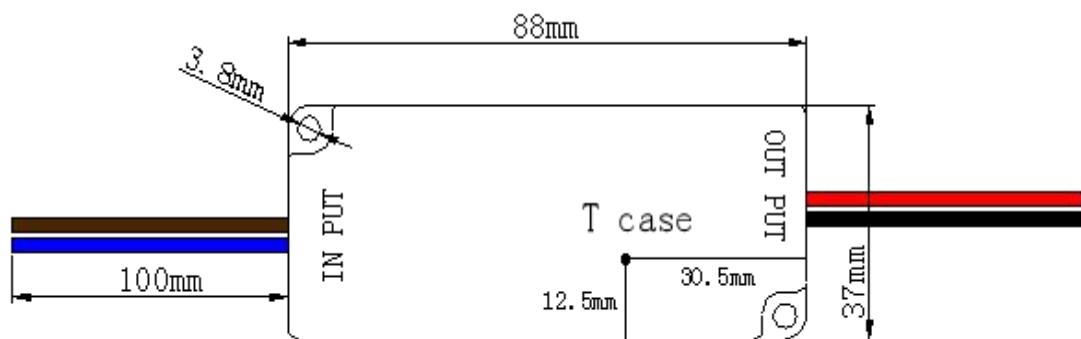
# DALI 调光测试数据 DALI Dimming test data

输入电压 Input voltage ( Vac )	输出电压 Output voltage ( Vdc )	输出电流 Output current ( mA )	C-通道百分比	调光级别 Level
240V	36.00	0.00	0.00%	1
240V	36.00	3.00	1.20%	2
240V	36.00	8.00	3.20%	3
240V	36.00	20.00	8.00%	4
240V	36.00	46.00	18.40%	5
240V	36.00	72.00	28.80%	6
240V	36.00	98.00	39.20%	7
240V	36.00	112.00	44.80%	8
240V	36.00	143.00	57.20%	9
240V	36.00	170.00	68.00%	10
240V	36.00	194.00	77.60%	11
240V	36.00	217.00	86.80%	12
240V	36.00	250.00	100.00%	13

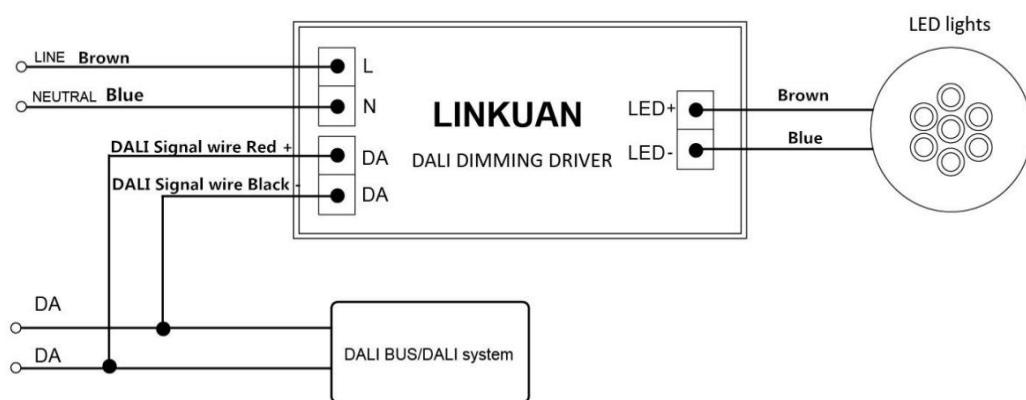
**DALI调光曲线**  
**DALI Dimming Curve Graph**



## 产品尺寸图/ Product Size Diagram

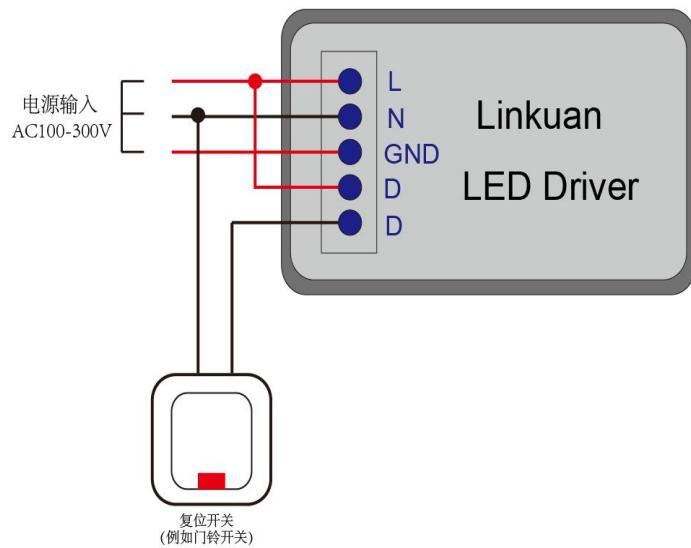


## 产品接线示意图/ Product Connection Diagram



## USH调光的使用说明: Instructions for use of push dimming

### 1. PUSH调光操作接线示意图: Wiring diagram of push dimming operation



## 2. PUSH调光操作说明: Operation instructions for push dimming:

短按: 迅速按下复位按钮后松手, 按钮自动恢复断开状态, 按下按钮的持续时间<600ms.

Short press: release after pressing the reset button quickly, the button will automatically return to the off state, and the duration of pressing the button is less than 600ms

长按: 迅速按下复位按钮, 保持不松开, 持续>1000ms

Long press: press the reset button quickly, keep it still, lasting for > 1000ms

序号 Serial number	功 能 Function	操作 operation	说明 Explain
1	开灯/关灯 ON /OFFlights	短按 Short press	如果灯原来是亮的, 则短按之后灯灭, 如果灯原来是灭的, 短按之后为灯亮, 这时的照度为前一次关灯前的照度(照度记忆功能)。 If the light is on, the light will be off after short press. If the light is off, the light will be on after short press. The illumination at this time is the illumination before the last light off (illumination memory function).
2	调光 Dimming	长按 Long press	长按住复位开关, 灯会进入调光状态, 如果前一次为调亮, 则下一次自动转为调暗, 松开复位按钮后, 调光停止, 保持当前照度 Press and hold the reset switch for a long time, and the light will enter the dimming state. If the previous time is dimming, the next time will automatically turn to dimming. After releasing the reset button, the dimming will stop and maintain the current illumination

说明: 1. DALI模块内置在LED驱动内, 由LED驱动内部提供+5V电源给DALI模块供电, DALI模块输入接口(DALI接口)通过LED驱动的端子与外部线路连接。

Note: 1. The Dali module is built in the LED driver, which provides + 5V power supply to the Dali module. The Dali module input interface (Dali interface) is connected with the external line through the LED driver terminal.

2. 如上图所示, LDE驱动的输入电源为AC100~300V, 输入电源的线路上, 通过一个复位开关将电源LL, N端连接到DALI接口, 此时, Push功能的线路已连接完成, 非常简单。

2. As shown in the figure above, the input power supply of the LDE drive is ac100~300v. On the line of the input power supply, connect the LL and n ends of the power supply to the Dali interface through a reset switch. At this time, the line of the push function has been connected, which is very simple

3. 进入Push模式后, 如果需要恢复到DALI模式, 则需要把Push高压线路去掉, 按照DALI接品标准接线, 则自动恢复到DALI模式。

3. After entering the push mode, if it is necessary to restore to Dali mode test, it is necessary to remove the push high-voltage line, and connect according to Dali connection standard, then automatically restore to Dali mode.

### 2. Push操作说明:

在Push模式下, LED驱动上电时, 会恢复LED驱动断电前的记忆, 如果LED驱动断电前是关灯的, 则上电之后依然为关灯状态, 如果LED驱动断电前是50%亮度, 则上电之后自动恢复为50%亮度

2. Push operation instructions:

In push mode, when the LED drive is powered on, the memory before the power-off of the LED drive will be restored. If the LED drive is turned off before the power-off, it will still turn off after the power on. If the LED drive is 50% brightness before the power-off, it will automatically return to 50% brightness after the power on

备注/Note:

"1. 所有没提及到的参数都是在230V输入，额定负载和在周围温度为25°C的情况下测试的；

All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature;

2.注意接线的方向，不要搞反输入和输出端。

Pay attention to the direction of wiring, do not reverse the input and output terminals."

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