

LED Intelligent Driver

5W~50W 500~1750mA 10~54Vdc

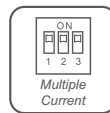
- Dimming interface: Triac/ELV, Push DIM
- Apply to leading edge / trailing edge Triac dimmers and dimming system.
- Built-in SCM, dimming curve and smoothing time can be customized.
- PWM digital dimming, no alter LED color rendering index.
- Dimming range: 0~100%, dimming depth: Max. 0.1%.
- Multi-current & wide voltage, suitable for different power LED.
- Short circuit / Over-heat / Over load / Non-load protection.
- Non-load output voltage 0V to prevent damages to LED caused by poor contact.
- Class 2 power supply, Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for internal lights application for I / II / III.



SELV



CE RoHS



Main Characteristics

Dimming interface:	Triac/ELV, Push DIM						
Input Voltage Range:	200~240Vac						
Frequency:	50/60Hz						
Input Current:	230Vac≤0.5A						
Efficiency:	>85%						
Inrush Current(typ.):	Cold start 40A at 230Vac						
Control Surge Capability:	L-N: 1kV						
Leakage Current:	<0.5mA/230Vac						
Operating Voltage:	10~54Vdc						
Output Power Range:	5W~50W						
Current Accuracy:	±3%						
Output Current :	500mA	700mA	900mA	1050mA	1200mA	1450mA	1750mA
Output Voltage :	10~54V	10~54V	10~54V	10~48V	10~42V	10~34V	10~29V
Output Power :	5~27W	7~37.8W	9~48.6W	10.5~50.4W	12~50.4W	14.5~49.3W	16~51.2W

Max Output Voltage:	58Vdc
Non-load Output Voltage:	0Vdc
PWM Frequency:	200Hz~500Hz
Dimming Range:	0~100%, dimming depth: Max. 0.1%.
Working Temperature:	ta: -30°C ~ 55°C tc: 85°C
Working Humidity:	20 ~ 95%RH, non-condensing
Storage Temp., Humidity:	-40 ~ 80°C, 10~95%RH
Temp. Coefficient:	±0.03%/°C(0~50°C)
Vibration:	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.

* The dimming range parameters adopted LUTRON® dimming system as testing standards. The parameters may differ by using Triac/ELV dimming systems of different brands.
We can customize program for clients' high requirements.

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Protection

Short Circuit Protection:	Shut down automatically if short circuit occurs, auto recovers after faulty condition is removed.
Over-heat Protection:	Shut down the output when PCB temp. ≥110°C, auto recovers when temp. back to normal.
Over Load Protection:	When O/P voltage exceed its range, O/P current declines, auto recovers when the load is reduced.
Non-load Protection:	Auto detecting, auto recovers when load back to normal.

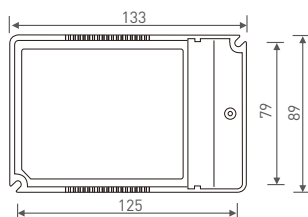
Safety & EMC

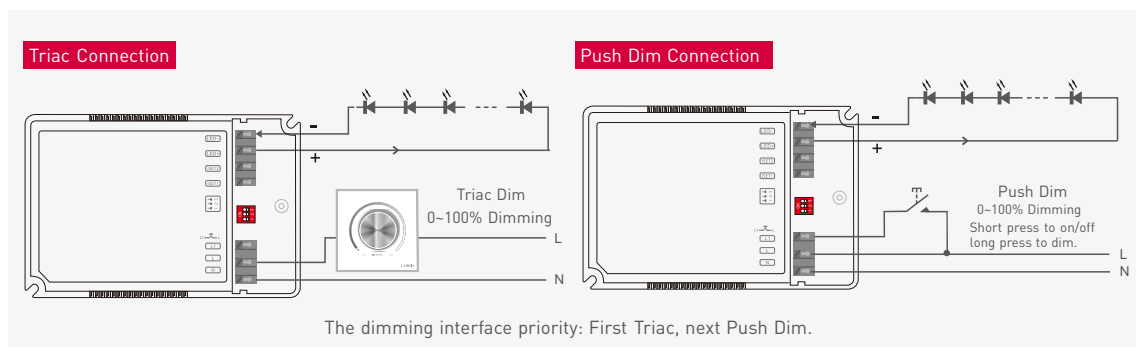
Withstand Voltage:	I/P-O/P: 3750Vac
Isolation Resistance:	I/P-O/P: 100MΩ/500VDC/25°C/70%RH
Safety Standards:	IEC/EN61347-1, IEC/EN61347-2-13

Others

Dimension:	133×89×30mm(L×W×H)
Packing:	135×90×35mm(L×W×H)
Weight(G.W.):	240g±10g

Dimensions





Selecting between ordinary dimmer and dimming system

Ordinary dimmer and dimming system have different dimming precision, precision of dimming system is higher. To meet customers' requirements on perfect dimming effects, LTECH have designed two programme options.



Ordinary dimmer

Method: Turn off the power and then remove the housing of the LED driver to find right component on the PCB.

Shift system by selecting different contact pin (For installation professionals use only). Factory default as 1-2 (For ordinary dimmer).



Dimming system

Push Dimming



Reset Switch

- On/off control: Short press.
- Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when turning off and on again.

LED Current Selection

Quick options: DIP switch for 8 optional currents' quick selection[see the table below].



500mA/ISET	700mA	900mA	1050mA	1200mA	1450mA	1600mA	1750mA	ON	OFF	
10-54V	10-54V	10-54V	10-48V	10-42V	10-34V	10-32V	10-29V			

* After current setting by DIP switch, power off and then power on to make the new current effective.

* E.g. LED 3.2V/pcs: 10-54V can power 3-16pcs LEDs in series, 10-29V can power 3-9pcs LEDs, the max quantity of LEDs in series will be subject to the actual voltage of LED.

Advanced options: Dial DIP switch down , connect ISET port with resistors of different values to set up any current from 500mA to 1750mA (specific resistor values refer to the table).



Connect to resistor

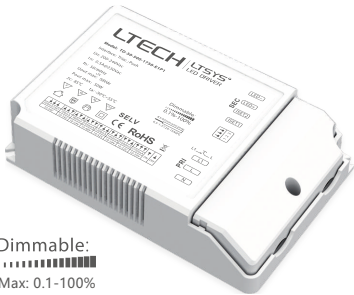
Connecting ISET with resistors can obtain the following typical currents.										
Current(mA)	500mA	550mA	600mA	650mA	700mA	750mA	800mA	850mA	900mA	
Resistor(KΩ)	∞	130.08KΩ	83.5 KΩ	60.02 KΩ	46.37KΩ	37.01 KΩ	30.1 KΩ	25.24 KΩ	21.28 KΩ	
Current(mA)	950mA	1000mA	1050mA	1100mA	1150mA	1200mA	1250mA	1300mA	1350mA	
Resistor(KΩ)	18.15 KΩ	15.65 KΩ	13.5 KΩ	11.62 KΩ	10.8 KΩ	8.78 KΩ	7.57 KΩ	6.41 KΩ	5.65 KΩ	
Current(mA)	1400mA	1450mA	1500mA	1550mA	1600mA	1650mA	1700mA	1750mA		
Resistor(KΩ)	4.81 KΩ	4.07 KΩ	3.4 KΩ	2.68KΩ	2.13 KΩ	1.63 KΩ	1.18 KΩ	0 KΩ		

* No further notice if any changes in the manual.
Product function depends on the goods.
Please feel free to contact our official distributor if any question.

LED 智能调光驱动器

5W~50W 500~1750mA 10~54Vdc

- 调光接口：Triac/ELV, Push DIM
- 适用前沿/后沿可控硅调光器及调光系统
- 内置单片机，可定制调光曲线及渐变时间等
- PWM数字调光，不改变LED显色指数
- 调光范围：0~100%，调光深度Max. 0.1%
- 多电流、宽电压，适用不同功率的LED
- 短路、过温、过载、空载保护
- 空载0V输出，防止接触不良损坏LED
- Class 2电源，全防护塑胶外壳
- 符合SELV安全特低电压标准
- 适合室内 I、II、III类灯具应用



Dimmable:
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Max: 0.1-100%

SELV



主要特性

调光接口：Triac/ELV, Push DIM
输入电压：200-240Vac
频率范围：50/60Hz
输入电流：230Vac≤0.5A
效率：>85%
浪涌电流：冷启动40A/230Vac
抗浪涌：L-N: 1kV
漏电流：<0.5mA/230Vac
工作电压范围：10-54Vdc
输出功率范围：5W-50W

输出电流精度：±3%
最大输出电压：58Vdc
空载输出电压：0Vdc
PWM频率：200Hz~500Hz
调光范围：Max. 0.1~100%
工作温度：ta: -30 ~ 55°C tc: 85°C
工作湿度：20 ~ 95%RH, 无冷凝
储存温度 湿度：-40 ~ 80°C, 10~95%RH
温度系数：±0.03%/°C(0-50°C)
耐震动：10-500HZ, 2G 12分钟/周期, X,Y,Z轴各72分钟。

电流输出：	500mA	700mA	900mA	1050mA	1200mA	1450mA	1600mA	1750mA
电压输出：	10-54V	10-54V	10-54V	10-48V	10-42V	10-34V	10-32V	10-29V
功率输出：	5-27W	7-37.8W	9-48.6W	10.5-50.4W	12-50.4W	14.5-49.3W	16-51.2W	17.5-50.8W

* 调光范围参数以美国路创®(LUTRON®)调光系统为测量标准，不同品牌Triac/ELV调光系统参数会有差异，我们可为高标准要求的客户定制程序。
注：路创® LUTRON®为路创电子公司在美国及其他国家的注册商标。

保护

过温保护：当PCB温度≥110°C关闭输出, 温度正常后自动恢复
过载保护：超过输出电压时, 输出电流下降, 减轻负载自动恢复
短路保护：输出线路短路自动关闭, 检测正常后自动恢复
空载保护：自动检测，当负载正常时自动恢复。

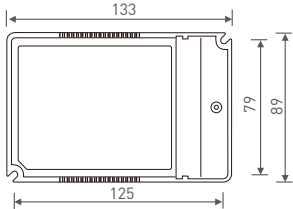
安规和电磁规格

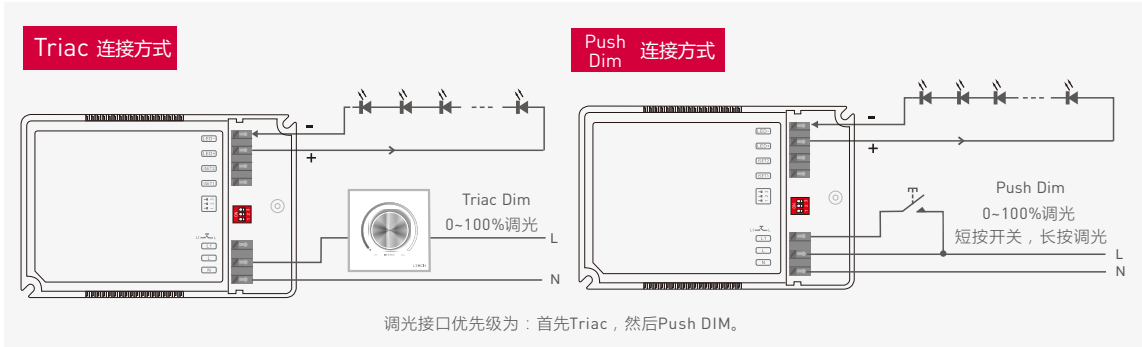
耐压：输入对输出：3750Vac
绝缘阻抗：输入对输出：100MΩ/500VDC/25°C/70%RH
安全规范：IEC/EN61347-1, IEC/EN61347-2-13

其他

产品尺寸：133×89×30mm(L×W×H)
包装尺寸：135×90×35mm(L×W×H)
产品重量(G.W)：240g±10g

尺寸图





普通调光器与调光系统的选择

普通调光器与调光系统的调光精度不同, 调光系统精度更高, 为满足客户追求完美调光效果的需求, 雷特设计了两套程序以供选择.

设置方法: 断开电源, 打开电源外壳, 在电路板上找到右侧部件, 通过选择不同的插针进行系统变换 (仅限专业安装人士操作), 出厂默认设置为1-2 (普通调光器)



Push Dimming



复位开关

- 开关控制: 短按.
- 无级调光: 长按.
- 每隔一次长按, 明暗度会向相反方向调整.
- 调光记忆: 当再次开关时, 灯光会回到先前调整的亮度水平.

LED 电流选择

快捷选择: DIP开关快速选择 8 档电流值(具体方法见表格)

500mA/ISET	700mA	900mA	1050mA	1200mA	1450mA	1600mA	1750mA	ON	OFF
10-54V	10-54V	10-54V	10-48V	10-42V	10-34V	10-32V	10-29V		

* DIP开关设置不同的电流后, 需要断电后再通电, 这样新设置的电流才有效。

* 假设LED的电压是3.2V/颗：电源10-54V的输出电压范围可串联3-16颗LED，10-29V的输出电压范围可串联3-9颗LED，最大串联数量以LED实际电压为准。

高级选择: 拨码开关拨向下 , ISET端口连接不同阻值的电阻, 可实现500-1750mA内的任意电流(具体电阻值见参考表)。

500mA/ISET	700mA	900mA	1050mA	1200mA	1450mA	1600mA	1750mA	ON	OFF
10-54V	10-54V	10-54V	10-48V	10-42V	10-34V	10-32V	10-29V		

连接电阻

ISET连接电阻可得到以下典型值电流									
电流(mA)	500mA	550mA	600mA	650mA	700mA	750mA	800mA	850mA	900mA
电阻(KΩ)	∞	130.08KΩ	83.5 KΩ	60.02 KΩ	46.37KΩ	37.01 KΩ	30.1 KΩ	25.24 KΩ	21.28 KΩ
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电阻(KΩ)	4.81 KΩ	4.07 KΩ	3.4 KΩ	2.68KΩ	2.13 KΩ	1.63 KΩ	1.18 KΩ	0 KΩ	

* 本说明书的内容如有变更, 恕不另行通知。
若内容与您使用的功能有所不同, 则以实物为准。
如有疑问, 欢迎向我司授权的经销商咨询。