

### DMX/DALI To 0-10V Dimming Module

- Small size and light weight. Adopt SAMSUNG/COVESTRO V0 flame resistant polycarbonate protective housings.
- Dimming interfaces: DMX/RDM, DALI, Push Dim.
- Output signal: 0-10V
- With the RDM protocol, support DMX512 signal bidirectional communication.
- 4 channel output.
- Built-in relay for ON/OFF control of LED driver.
- Soft-on and fade-in dimming function enhances your visual comfort.
- Dimming range: 0~100%.
- Full protective plastic housing.
- DALI bus standard: IEC62386-101,102,207.
- Comply with Safety Extra Low Voltage standard.
- Suitable for indoor environments.



MODEL		LT-84A		
SPECIFICATIONS	Dimming interfaces	DMX/RDM,DALI,Push Dim		
	Output signal	0-10V×4CH		
	Dimming range	0~100%		
	Output signal logic	High potential		
	Input voltage	100-240Vac/277Vac (277 Vac for North America only)		
	Frequency	50/60Hz		
	AC current	0.055A		
	Inrush current	Cold start14A@230Vac		
	Leakage current	<0.5mA/240Vac		
	Power consumption	115Vac@3.0W MAX / 230Vac@3.5W MAX		
	Relay switch	240Vac/8A		
	Working temperature	ta: -30°C ~ 55°C tc: 70°C		
	Working humidity	20 ~ 95%RH, non-condensing		
	Storage temp/Humidity	-40 ~ 80°C, 10~95%RH		
Vibration	10-500HZ, 2G 12min/1cycle, 72 min for X,Y and Z axes respectively.			
SAFETY & EMC	Withstand voltage	I/P-O/P:3750Vac		
	Insulation resistance	I/P-O/P:500VdC/25°C/70%RH≥100MΩ		
	Safety standards	CE	European Union	EN61347-1, EN61347-2-13, EN62384
	EMC emission	CE	European Union	EN55015, EN61000-3-2, EN61000-3-3, EN61547
	EMC immunity	EN61000-4-2,3,4,5,6,8,11, EN61547		
OTHERS	Dimensions	175×44×30mm(L×W×H)		
	Pacakge size	178×48×33mm(L×W×H)		
	Weight	110g±10g		

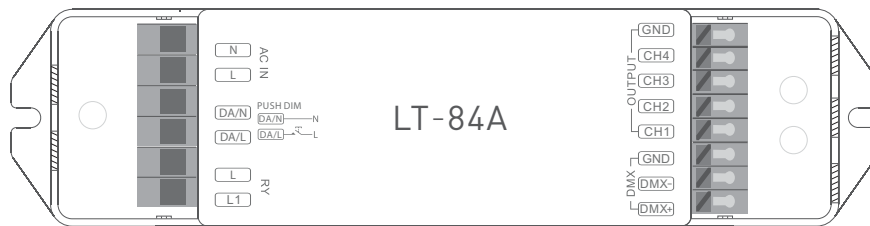
### Push Dimming



Reset switch

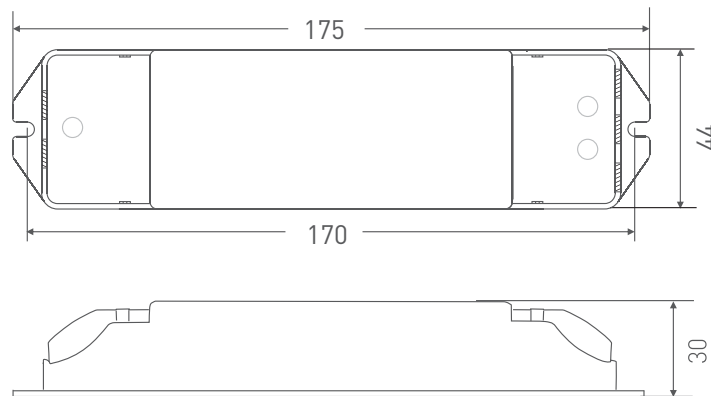
- On/off control: Short press .
- Stepless dimming: Long press.
- With every other long press, the light level goes to the opposite direction.
- Dimming memory: Brightness will be the same as previously adjusted when lights are turned off and on again.

## Dimensions

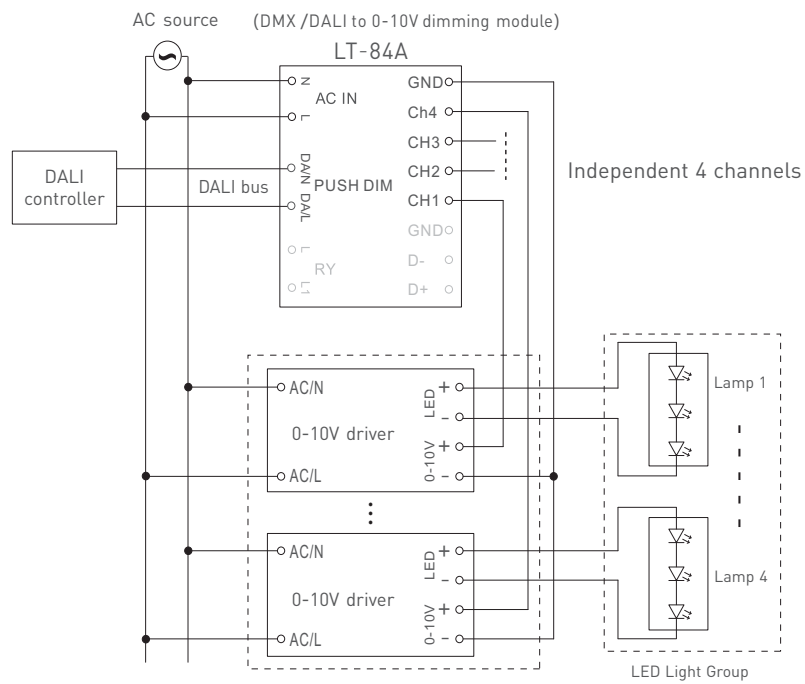


## Product Size

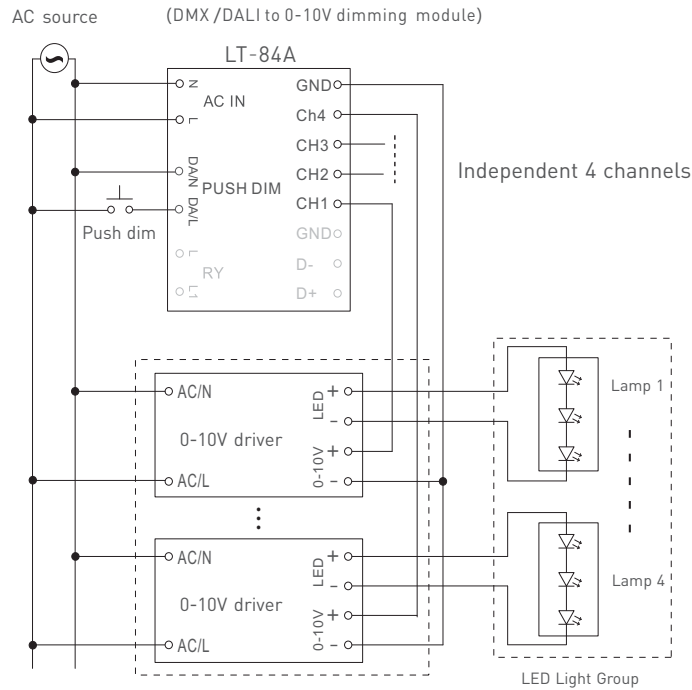
Unit: mm



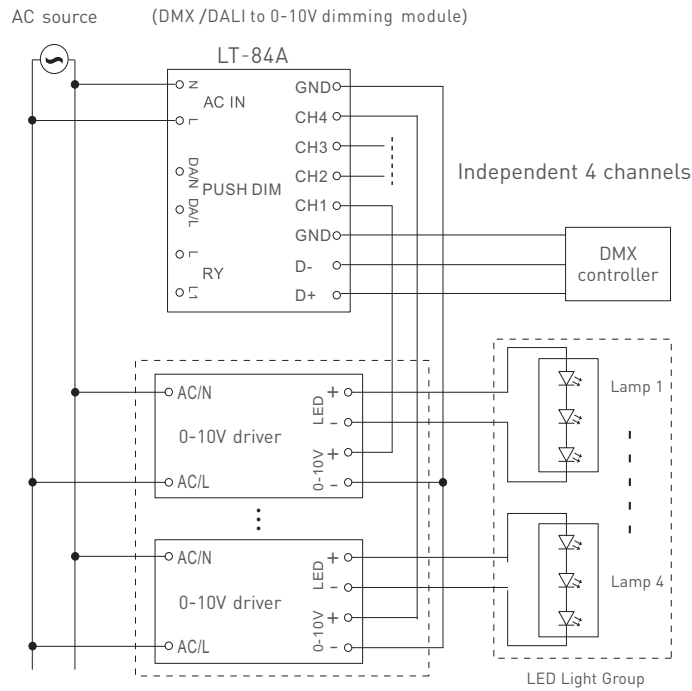
## DALI connection



### Push Dim connection



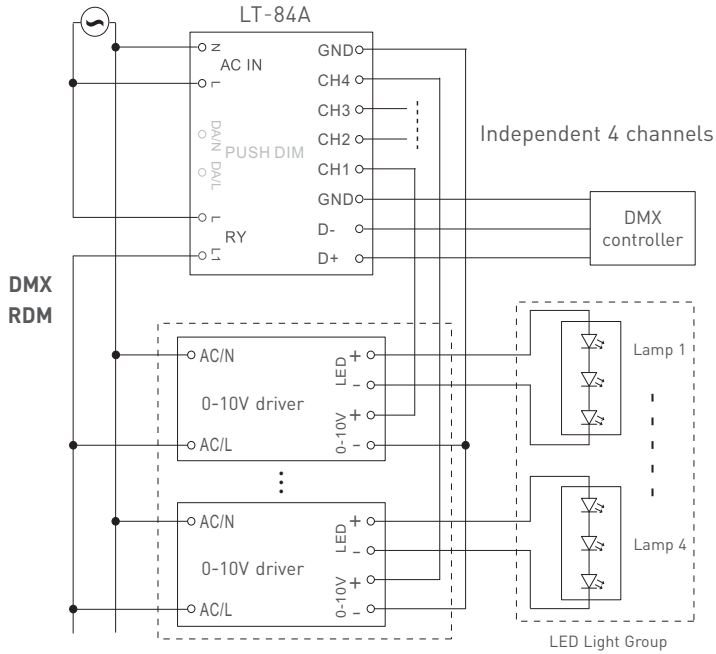
### DMX/RDM connection



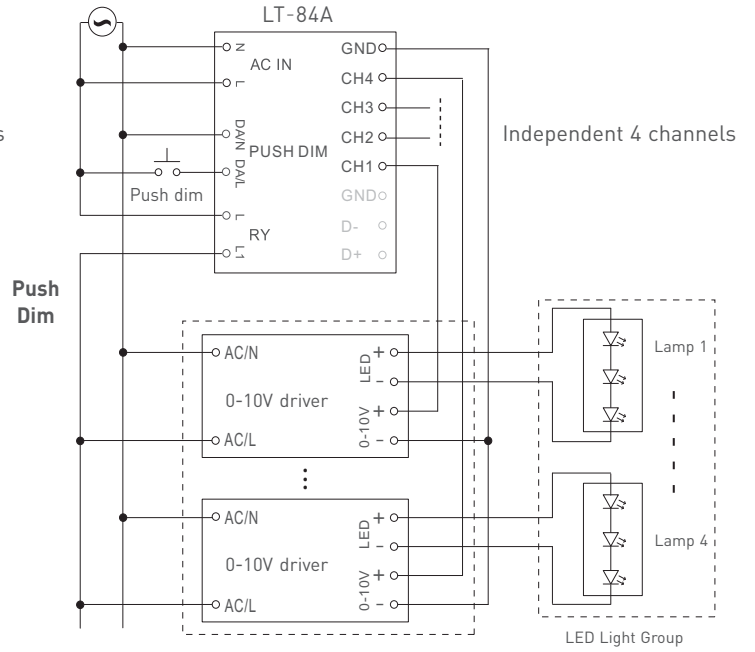
- \* Please make sure the maximum voltage drop between DMX/RDM, DALI controller and LT-84A should not be higher than 2V. Maximum cable length for 1.5mm<sup>2</sup> cables is 300m.
- \* Each channel is individually addressable, light intensity of LED driver connected to the same channel with be the same; the maximum allowable voltage drop between the LT-84A and LED driver should not be higher than 0.5V; Maximum cable length for 1.5mm<sup>2</sup> cable is 300m.

### Built-in Relay connection

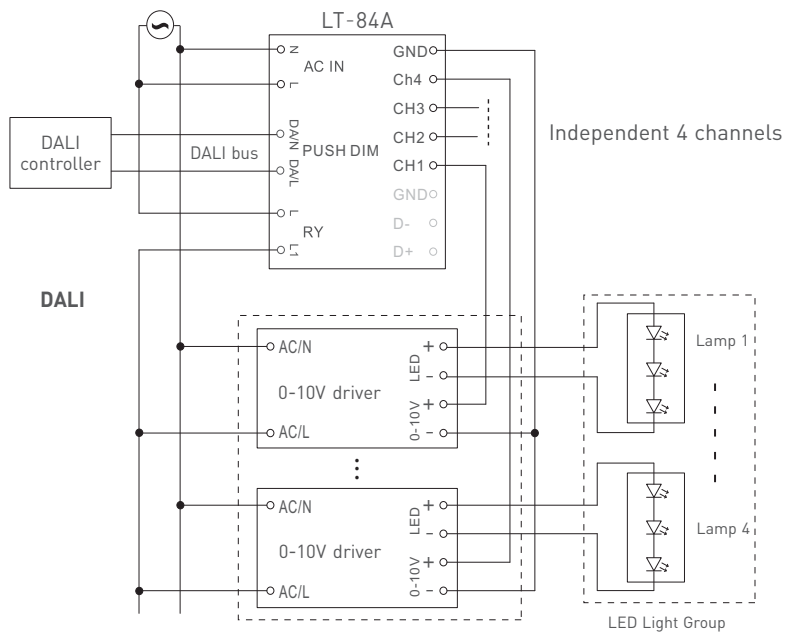
AC source (DMX/DALI to 0-10V dimming module)



AC source (DMX/DALI to 0-10V dimming module)



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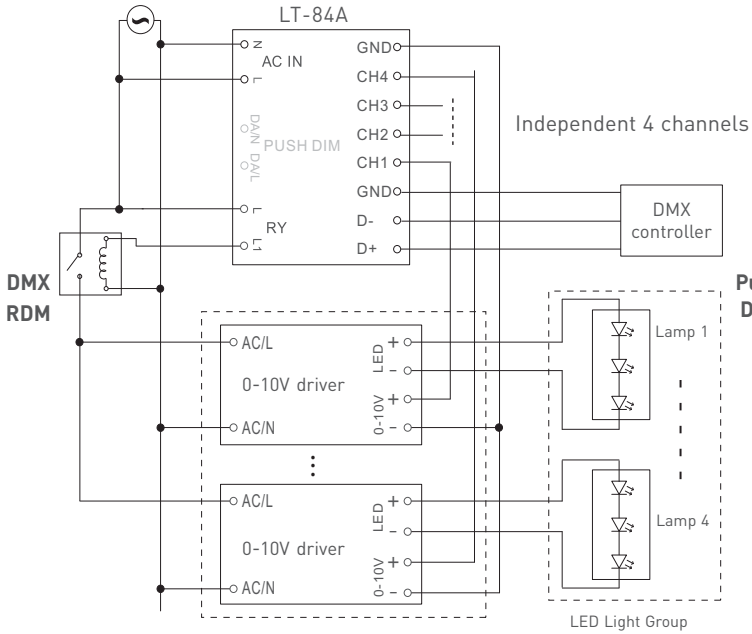


- \* LT-84A is equipped with a relay that can be used to turn ON/OFF LED driver. The relay is in the closed position when the CH1 generates dimming signal, the relay is in the open position when there is no output signal on the CH1.
- \* The maximum load of built-in relay: 8A resistive current load or less than 50A inrush current load. The breakdowns caused by overloading is not covered by the warranty.

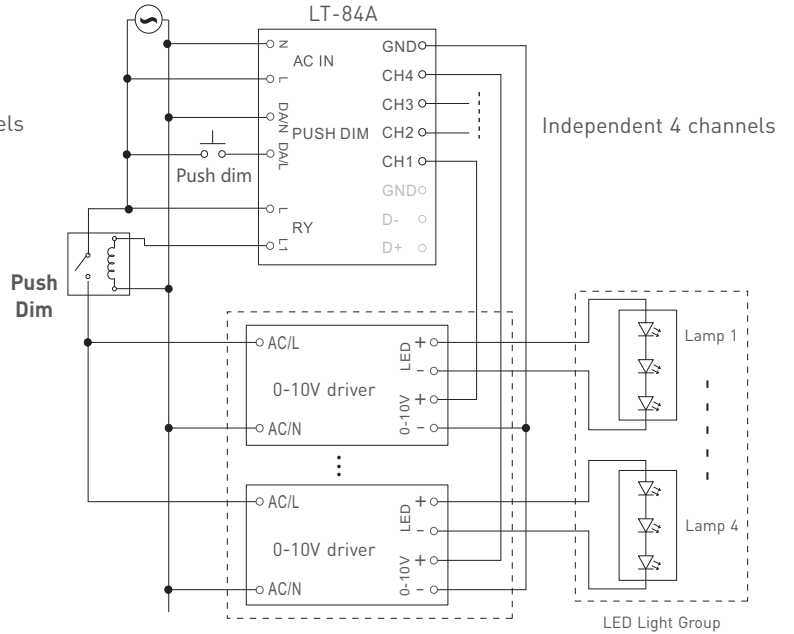
### External Relay connection

An additional relay or magnetic switch is needed when the total input current of the LED driver is higher than 8A or inrush current is more than 50A. Connection diagram as below:

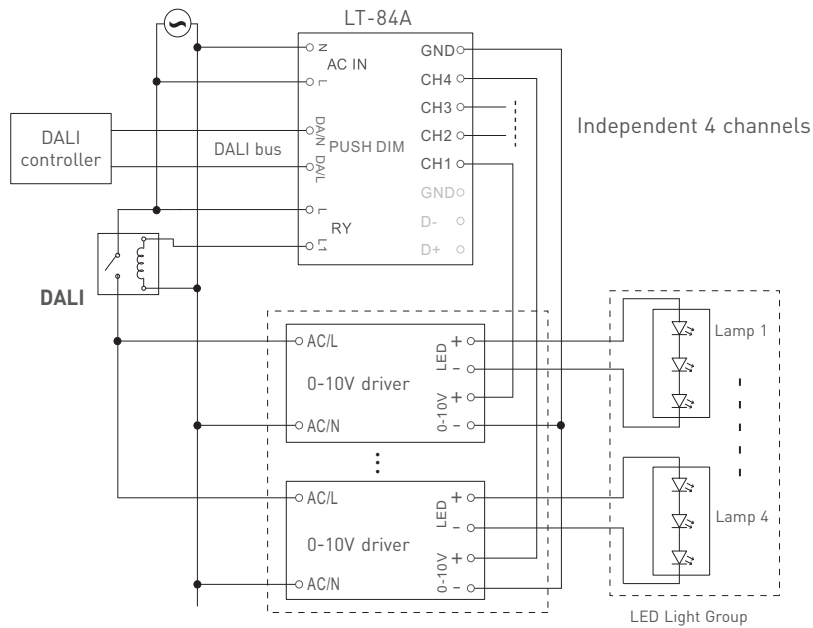
AC source (DMX /DALI to 0-10V dimming module)



AC source (DMX /DALI to 0-10V dimming module)



AC source (DMX /DALI to 0-10V dimming module)



\* Note: Light intensity of LEDs in the same group may be decreased when one of the LED driver is AC OFF (This only happens in LED drivers of some certain brands).

## Attentions

- Products shall be installed by qualified professionals.
  - LTECH products are non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure it is mounted in a water proof enclosure.
  - Good heat dissipation will extend the working life of products. Please ensure good ventilation.
  - Please check if the working voltage used complies with the parameter requirements of products.
  - The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
  - Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
  - If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.
- \* This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

## Warranty Agreement

Warranty periods from the date of delivery : 5 years.

Free repair or replacement services for quality problems are provided within warranty periods.

### Warranty exclusions below:

- Beyond warranty periods.
  - Any artificial damage caused by high voltage, overload, or improper operations.
  - Products with severe physical damage.
  - Damage caused by natural disasters and force majeure.
  - Warranty labels and barcodes have been damaged.
  - No any contract signed by LTECH.
1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
  2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

## Update Log

Version	Updated Time	Update Content	Updated by
A0	2020.08.25	Original version	Xu Shujun
A1	2021.06.17	Deleted the description " (Default), 5V PWM ×4CH, 10V PWM ×4CH (Default 0-10V, Please specify if the other two output signals are needed)", which was placed after "Output Signal: 0-10V×4CH" on P1. Changed the "Optional output: 0-10V" to "Output signal: 0-10V" on P1.	Xu Shujun

## DMX/DALI转0-10V调光模块

- 体积小、重量轻；采用SAMSUNG/COVESTRO PC V0阻燃保护壳
- 输入信号：DMX/RDM, DALI, Push Dim
- 输出信号：0-10V
- 加入RDM远程设备管理协议，支持DMX512信号双向通讯
- 独立可调4通道输出
- 内置继电器可开/关后端LED电源
- 软启动渐亮功能，让人眼视觉更舒适
- 调光范围：0~100%
- 全防护塑胶外壳
- DALI总线标准 IEC62386-101,102,207
- 符合SELV安全特低电压标准
- 适合室内应用



SELV     

型号	LT-84A			
技术参数	输入信号	DMX/RDM,DALI,Push Dim		
	输出信号	0-10V×4CH		
	调光范围	0~100%		
	输出信号逻辑	高电位		
	输入电压	100-240Vac/277Vac(277 Vac for North America only)		
	频率范围	50/60Hz		
	交流电流(Typ.)	0.055A		
	浪涌电流	冷启动14A(在50%I <sub>peak</sub> 下测试twidth=200us)@230Vac		
	漏电流	<0.5mA/240Vac		
	功率消耗	115Vac@3.0W MAX 230Vac@3.5W MAX		
	继电器开关	240Vac/8A		
	工作温度	ta: -30°C ~ 55°C tc: 70°C		
	工作湿度	20 ~ 95%RH, 无冷凝		
	储存温度/湿度	-40 ~ 80°C, 10~95%RH		
耐振动	10-500HZ, 2G 12分钟/周期, X,Y,Z轴各72分钟			
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	CE	欧盟	EN61347-1, EN61347-2-13, EN62384
	电磁兼容发射	CE	欧盟	EN55015, EN61000-3-2, EN61000-3-3, EN61547
其他	电磁兼容抗扰度	EN6100-4-2,3,4,5,6,8,11, EN61547		
	产品尺寸	175×44×30mm(L×W×H)		
	包装尺寸	178×48×33mm(L×W×H)		
	产品重量	110g±10g		

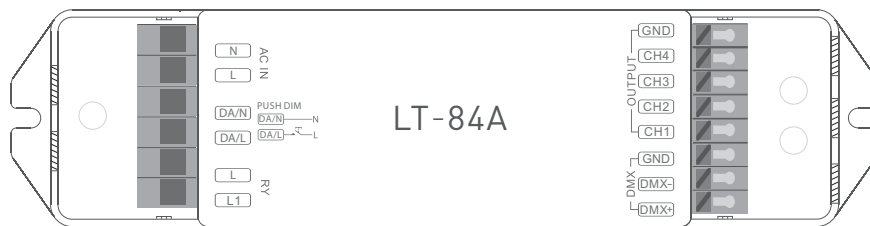
## Push Dimming



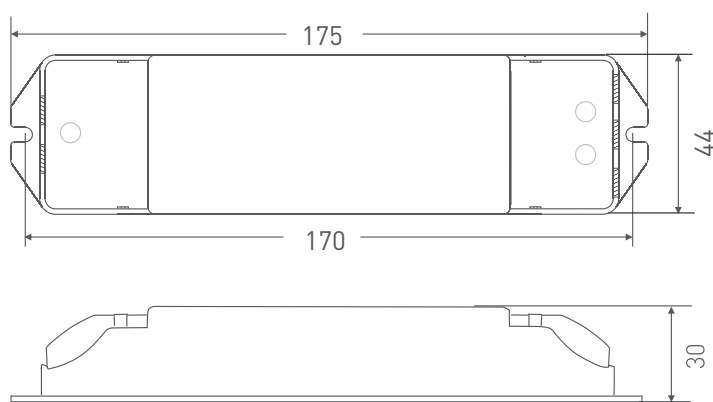
复位开关

- 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.
- 内置永久记忆: 当再次开关时, 灯光会回到先前调整的高度水平.

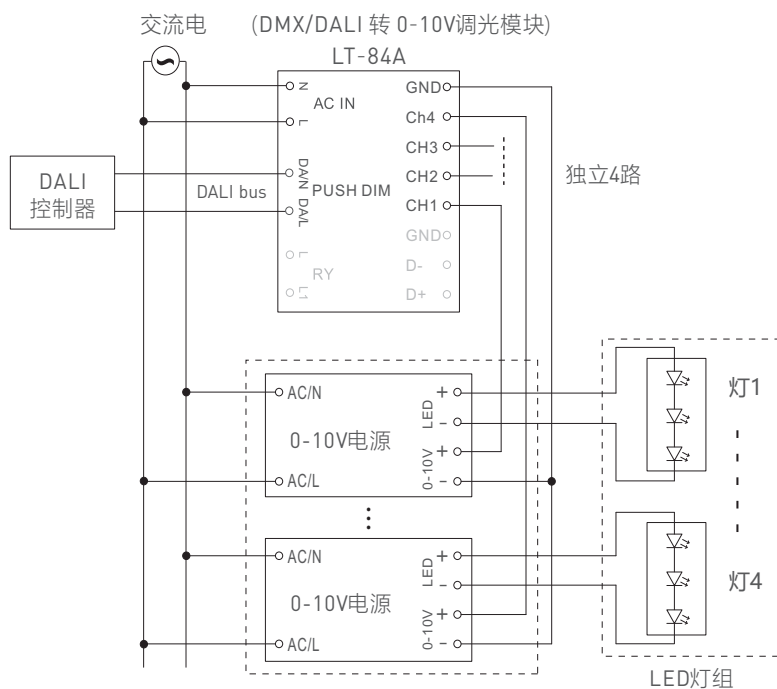
## 端子定义



## 尺寸图

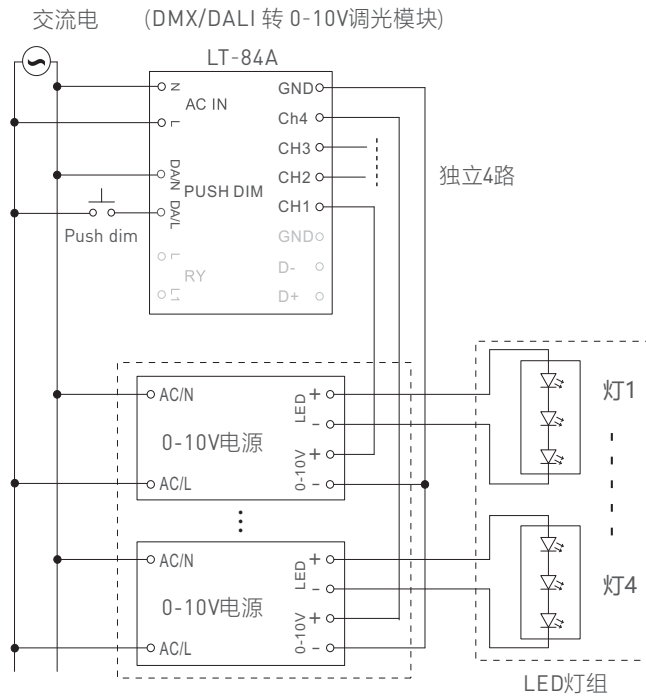


## DALI 连接方式

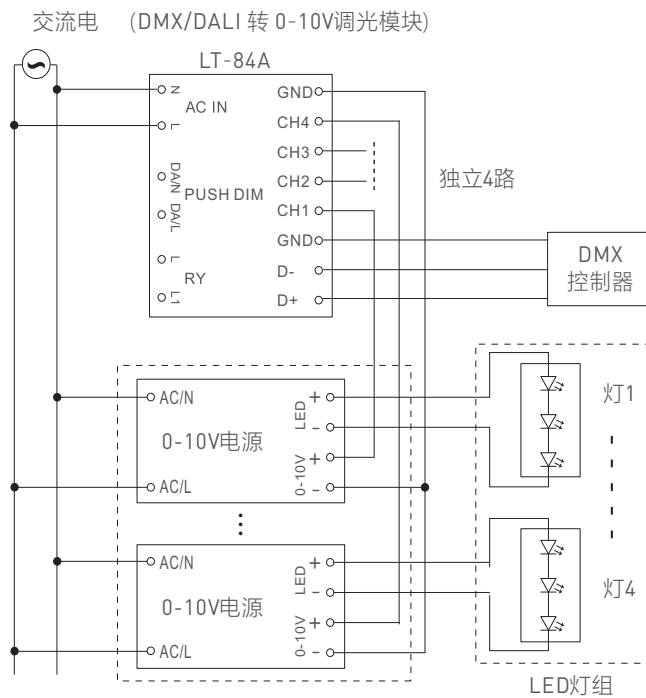




### Push Dim 连接方式



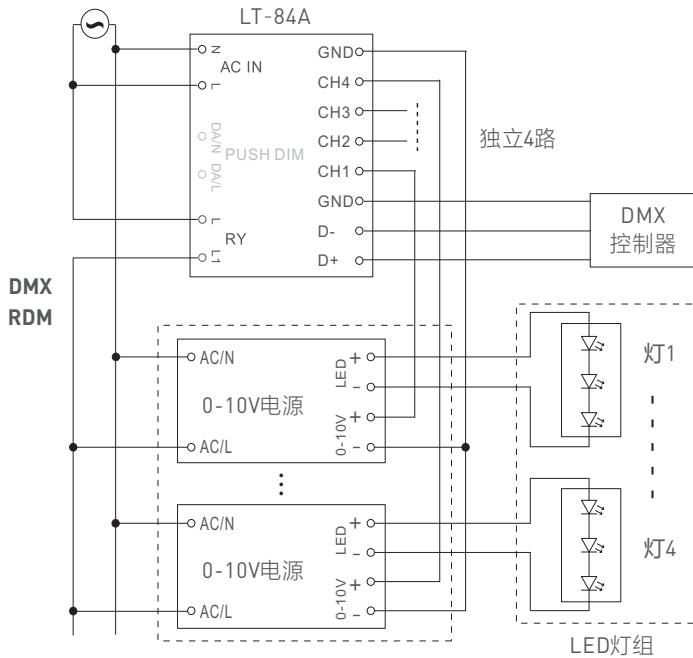
### DMX/RDM 连接方式



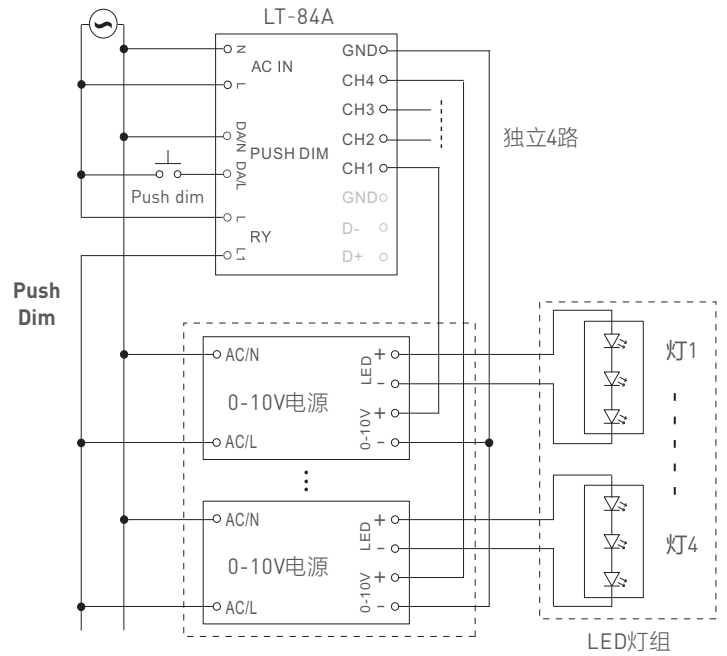
- \* 请确保DMX/RDM, DALI控制器与最远的LT-84A之间的线压降小于2V; 使用1.5mm<sup>2</sup>线材时, 最长300米。
- \* 每个通道皆可独立控制, 接在同一组通道的LED电源的亮度一致, LT-84A与LED电源的连接线压降应小于0.5V; 使用1.5mm<sup>2</sup>线材时, 最长300m

### 内置继电器连接方式

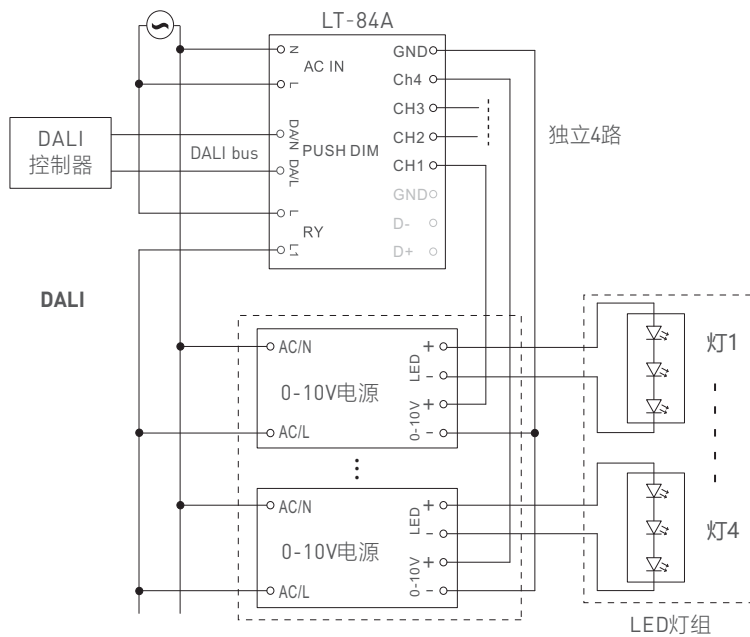
交流电 (DMX/DALI 转 0-10V调光模块)



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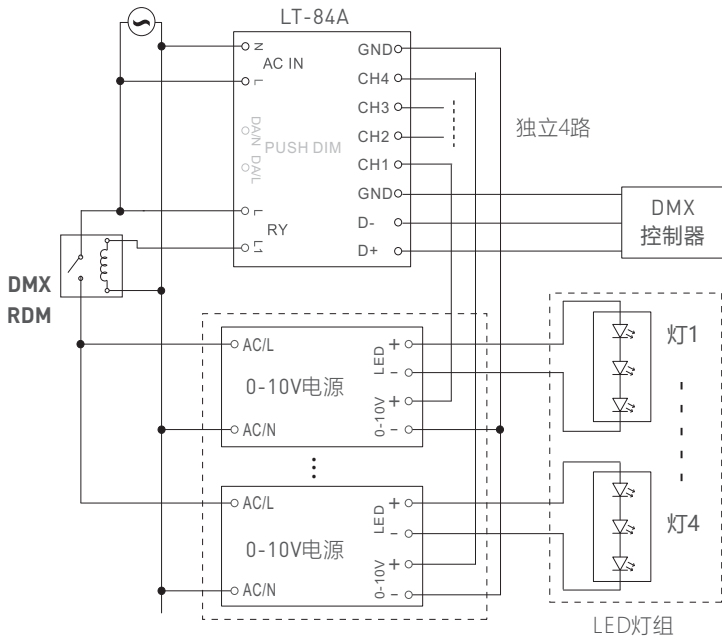


- \* LT-84A内置继电器可以开关LED电源,当CH1有调光信号时,继电器处于闭合状态,当CH1没有调光信号时,继电器处于开路状态。
- \* 内置继电器最大可负载8A电流阻性负载或浪涌电流小于50A的负载,超载使用造成继电器的损坏不在保修范围内。

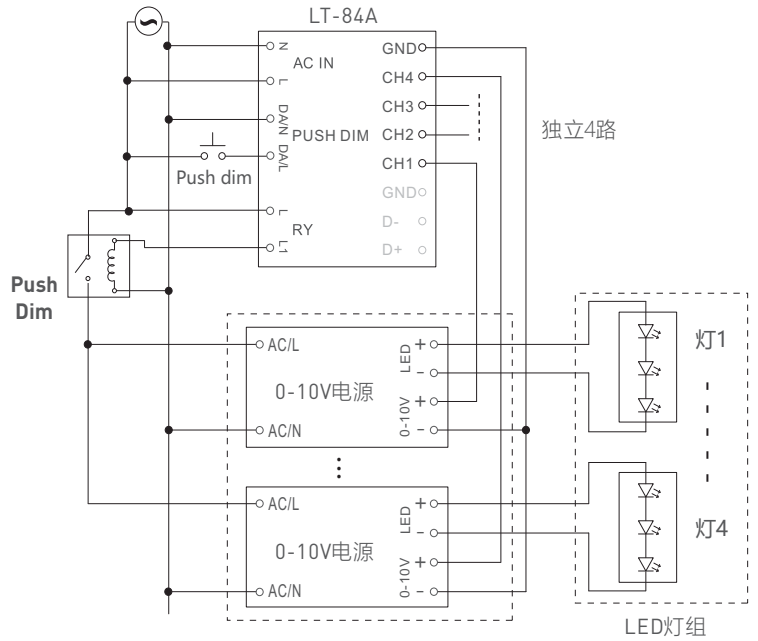
### 外置继电器连接方式

当LED电源输入电流大于8A或浪涌电流大于50A时, 用户需要一个额外的继电器或电磁开关, 接线图如下

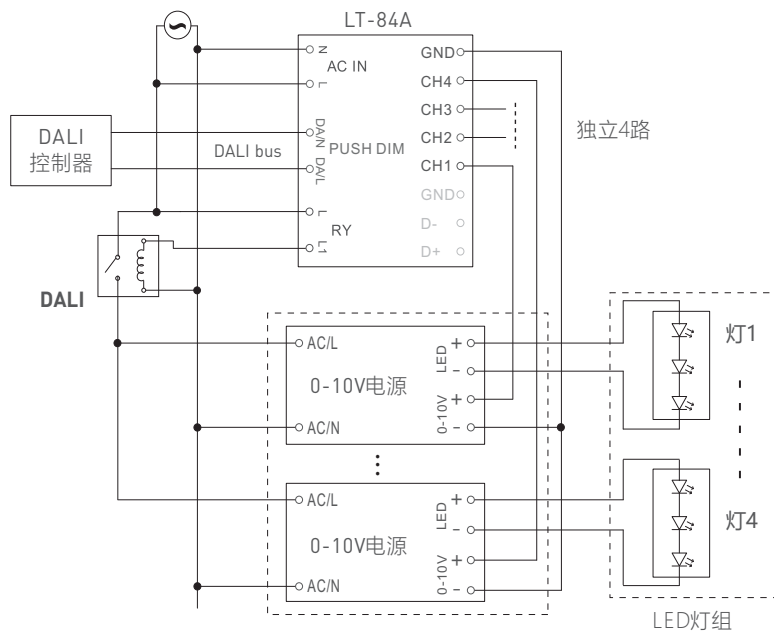
交流电 (DMX/DALI 转 0-10V调光模块)



交流电 (DMX/DALI 转 0-10V调光模块)



交流电 (DMX/DALI 转 0-10V调光模块)



\* 请注意当其中一台LED电源市电off时, 可能会导致其他LED电源输出调光亮度下降 (这种情况只在某些品牌的电源上产生)。

## 注意事项

- 请由具有专业资格的人员进行调试安装。
- 雷特产品（专有型号除外）不能防水，需避免日晒雨淋，如安装在户外，请用防水箱。
- 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。
- 请检查使用的工作电压是否符合产品的参数要求。
- 使用的电线直径大小必须能够负载连接的LED灯具，并确保接线牢固。
- 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。
- 如果发生故障，请勿私自维修；如有疑问，请联系供应商。

\* 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，请与供应商联系。

## 保修条例：

自出厂之日起保修服务期为5年。

### 非保修条例：

属下列情况不在免费保修或更换服务范围之内：

- 已经超出保修服务期；
- 过高电压、超负载、操作不当等人为造成的损坏；
- 产品外形严重损坏或变形；
- 自然灾害以及人力不可抗拒原因造成的损坏；
- 产品保修标签和产品唯一条形码损坏；
- 无雷特签订的合同或发票凭证。

1. 修理或更换是雷特对客户的一补救措施。雷特不承担任何附带引起的损害赔偿 responsibility，除非在适用法律范围之内。
2. 雷特享有修正或调整本保修条款的权利，并以书面形式发布为准。

## 更新日志

版本	更改日期	更改内容	更改人
A0	2020.08.25	正稿	许淑钧
A1	2021.06.17	把P1处的输出信号后面的 “(默认),5V PWM × 4CH,10V PWM × 4CH(默认0-10V, 如需其它两种订货时请注明)”表达删除 把P1处的产品特征的“可选输出：0-10V” 修改为“输出信号：0-10V”	许淑钧