LTECH

DMX512 DECODER

LT-904-DIP

4
CHANNELS

2 kinds of DMX interfaces

Short circuit / Over current / Overheat protection

RDM
DMX

Photoelectric isolation

www.ltech-led.com

Product introduction

1. Designed with 4 channels output, and Max. 6A current per channel, up to 576W output power.
2. 3-pin XLR, RJ45 DMX interface with photoelectric isolation, improve signal transmission efficiency and anti-interference ability.
3. With RDM remote management protocol, the operations can be completed via the RDM master console, such as parameters browsing & settings, DMX address settings, equipment recognition, etc.
4. With short circuit, over current and overheat protection, as well as warning function when a fault occurs.

3-pin XLR | RJ45 | Photoelectric isolation | RDM | Short circuit protection | Overheat protection | Over current protection

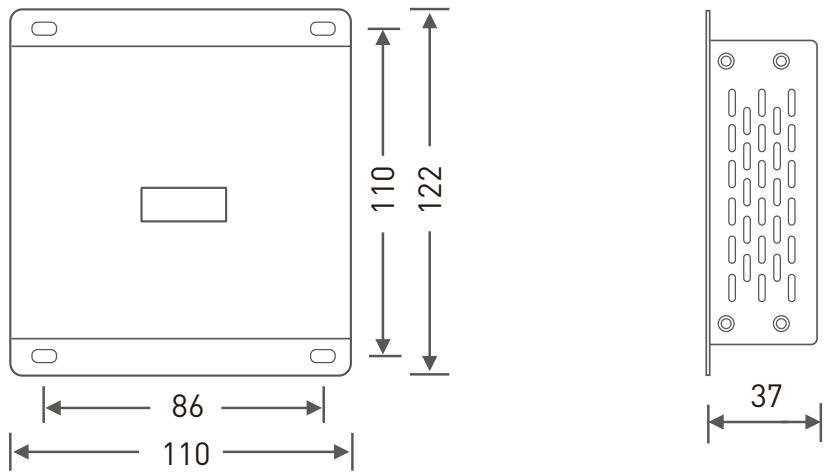
c UL us E500585 | TÜV SÜD | FC | CE | RoHS | 5-Year Warranty

Technical specs

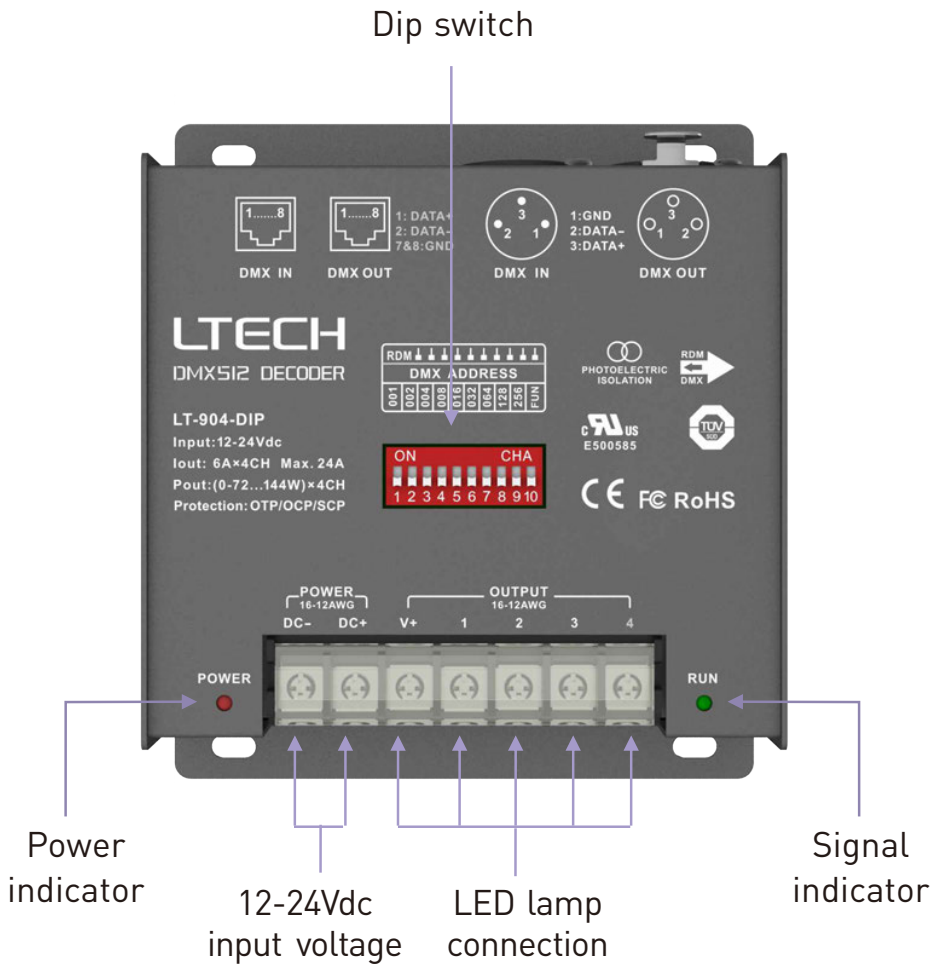
Model:	LT-904-DIP
Input signal:	DMX512/RDM
DMX interfaces:	3-pin XLR, RJ45
Input voltage:	12~24Vdc
Current load:	6A × 4CH Max. 24A
Output power:	(0~72W...144W) × 4CH Max. 576W
Photoelectric isolation:	Yes
Protection:	Short circuit / Overheat / Over current protection, recover automatically.
Working temperature:	-30°C ~65°C
Dimensions:	122×110×37mm(L×W×H)
Package size:	127×123×41mm(L×W×H)
Weight (G.W.):	550g

Product size

Unit: mm

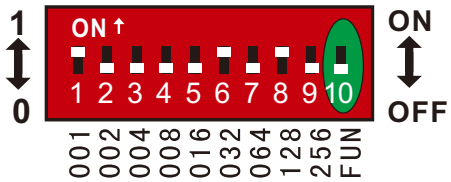


Main component description

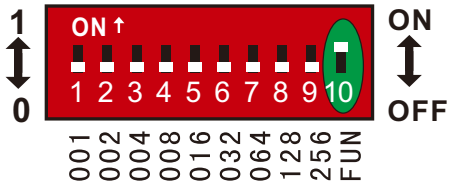


DIP switch

RDM mode: The DIP switch 1-10 are OFF.



DMX mode: FUN=OFF (the 10th DIP switch = OFF)
Setting DMX addresses with DIP switch 1-9



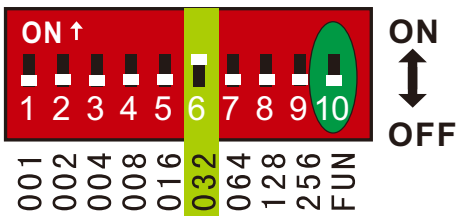
Self-testing mode: FUN=ON (the 10th DIP switch=ON)

How to set DMX address via DIP switch:

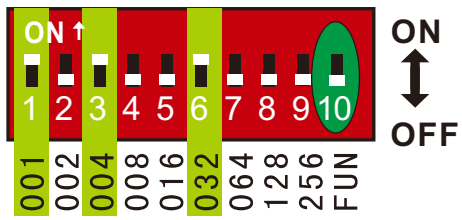
FUN=OFF (the 10th dip switch=OFF) **DMX mode**

DMX address value = the total value of (1-9), to get the place value when in "on" position, otherwise will be 0.

E.g.1: Set initial address to 32.

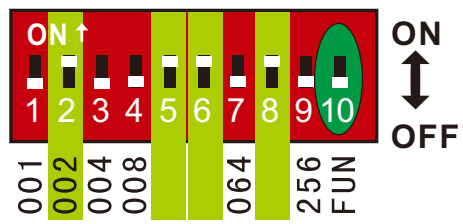


E.g.2: Set initial address to 37.



001+004+032=37

E.g.3: Set initial address to 178.



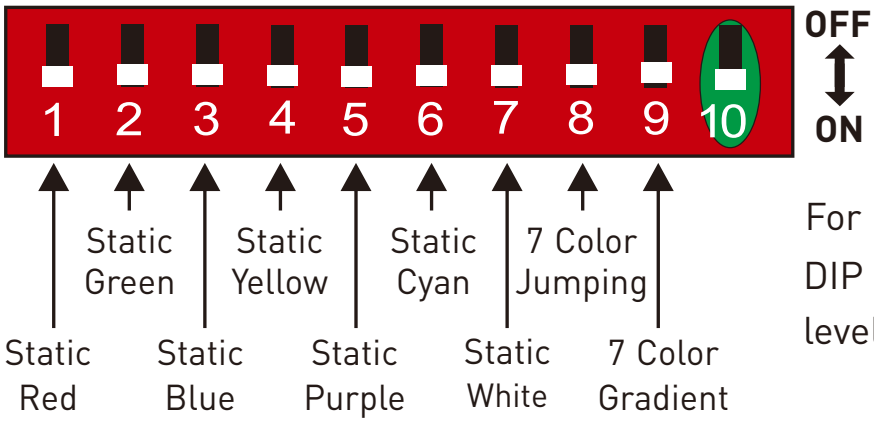
002+016+032+128=178

✻ When DIP switch 1-9 are OFF, the defaulted initial DMX address is 1.

Self-testing mode

FUN=ON (the 10th dip switch=ON) **Self-testing Mode**

Dip Switch	1-9=off	1=on	2=on	3=on	4=on	5=on	6=on	7=on	8=on	9=on
Self-test Function	Static Black	Static Red	Static Green	Static Blue	Static Yellow	Static Purple	Static Cyan	Static White	7 Color Jumping	7 Color Gradient



For changing effects (Dip Switch 8/9=on): DIP switch 1-7 is used to realize 7 speed levels. (7=on, the fastest level)

[Attn] When several dip switches are on, subjected to the highest switch value. As the figure above shows, the effect will be 7 color gradient at 7 speed level.

DMX dimming instruction

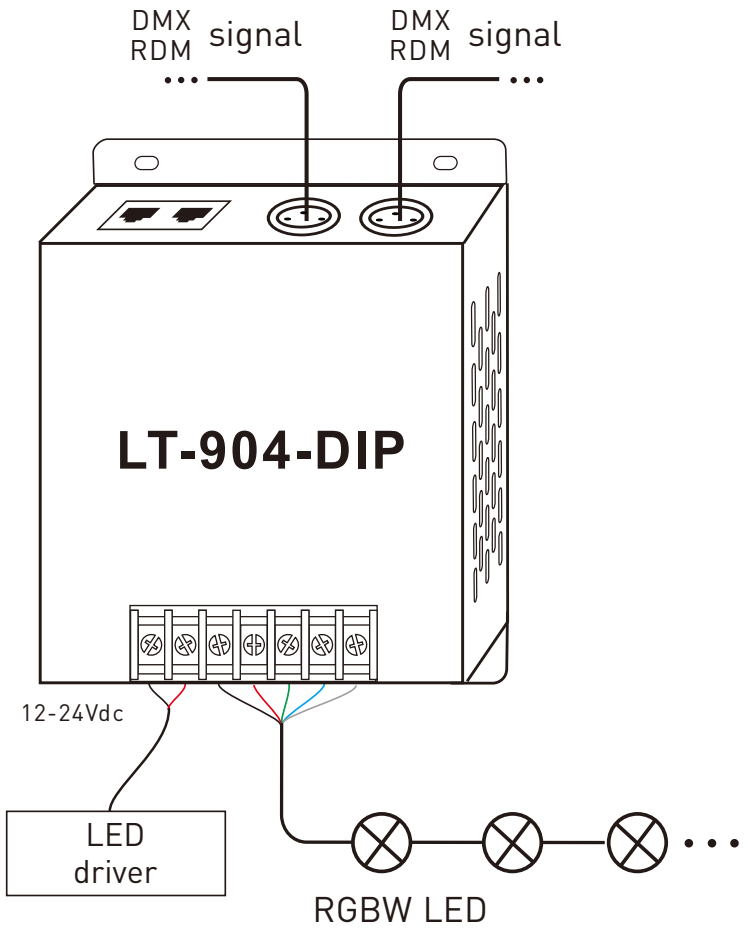
Each LT-904-DIP DMX decoder occupied 4 DMX addresses when connecting the DMX console.

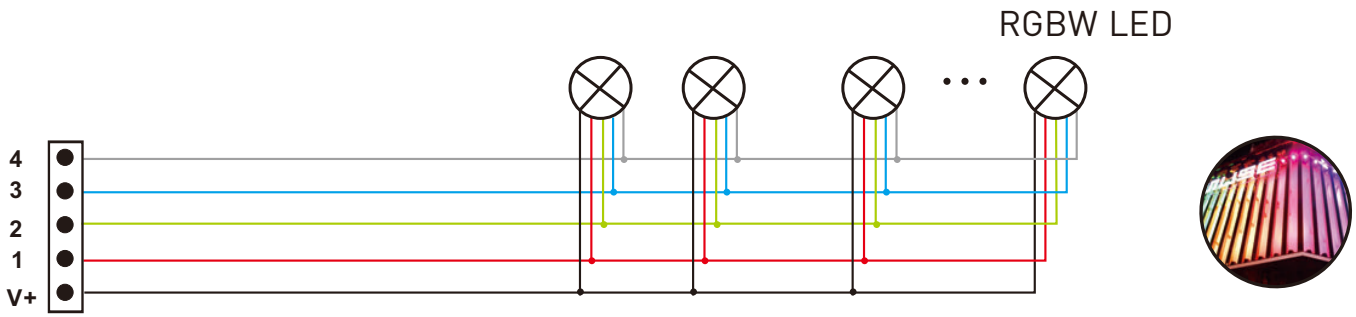
E.g., the defaulted initial address is 1, please find their corresponding relationships in the form.

DMX Console	DMX Decoder
CH1 0-255	CH1 PWM 0-100% (LED R)
CH2 0-255	CH2 PWM 0-100% (LED G)
CH3 0-255	CH3 PWM 0-100% (LED B)
CH4 0-255	CH4 PWM 0-100% (LED W)

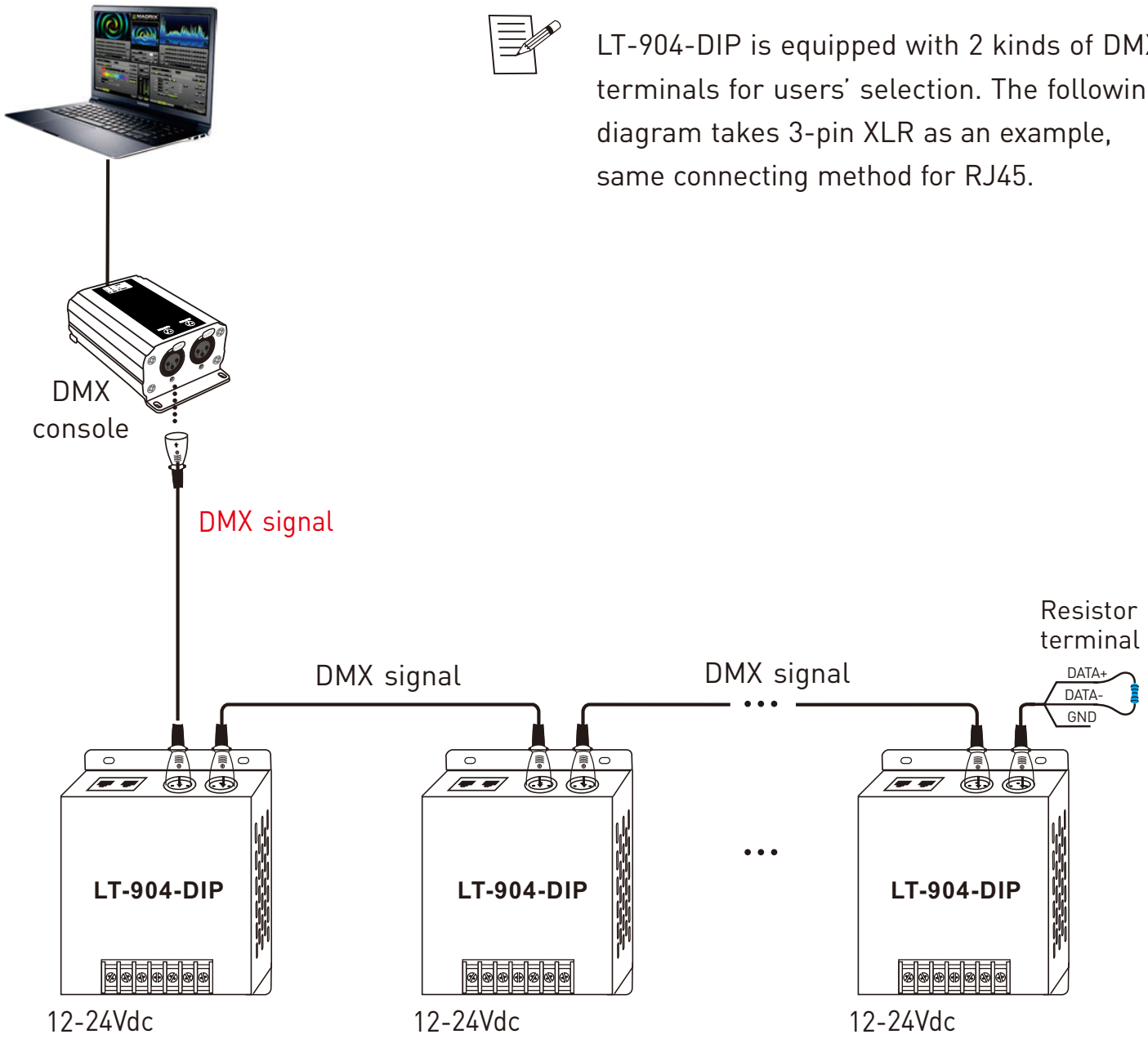
Wiring diagram

1 Connecting LED lights:





2. DMX console connection:

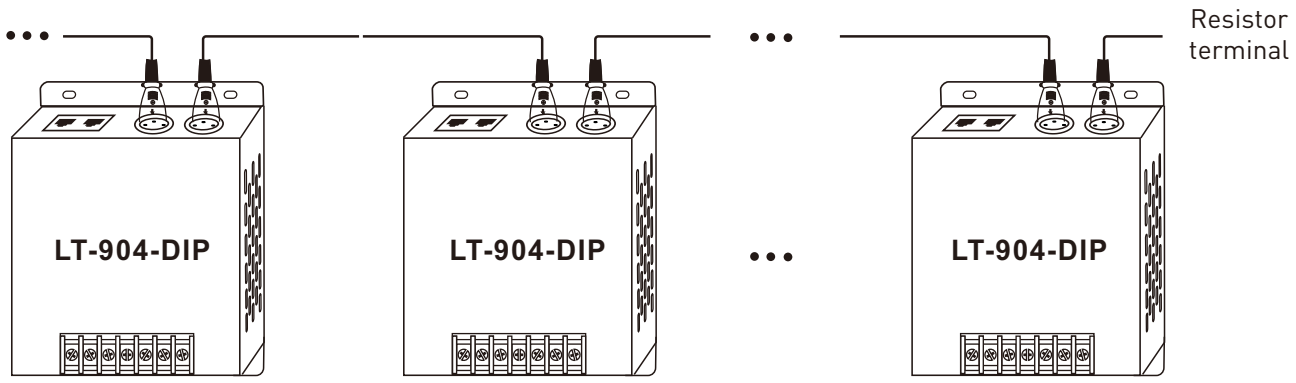


LT-904-DIP is equipped with 2 kinds of DMX terminals for users' selection. The following diagram takes 3-pin XLR as an example, same connecting method for RJ45.

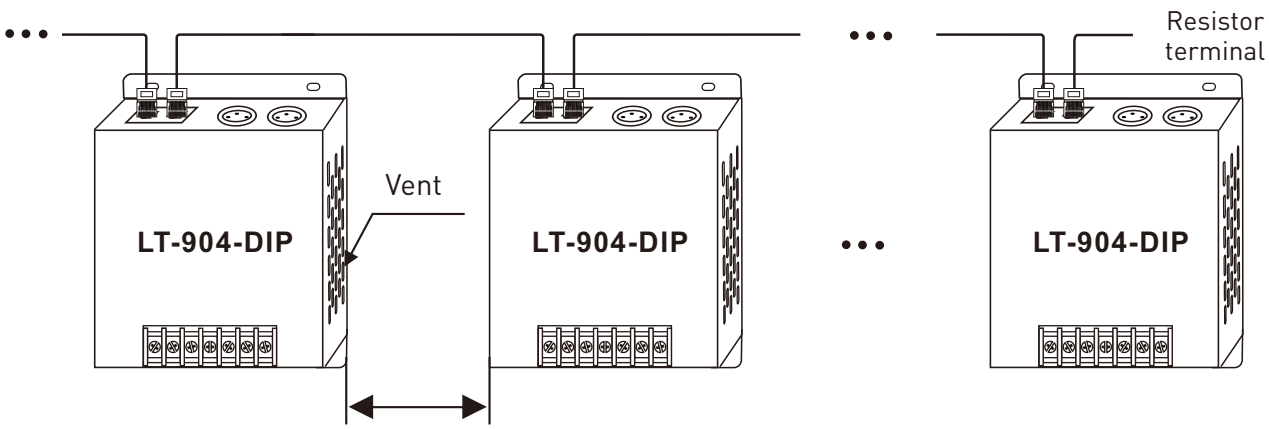
* An amplifier is needed if more than 32 decoders are connected or use overlong signal line, signal amplification should not be more than 5 times continuously.

* If the recoil effect occurs because of longer signal line or bad line quality, please try to connect 0.25W 90-120Ω terminal resistor at the end of each line.

3. The connection diagram of 2 kinds of DMX/RDM terminals:



3-pin XLR connected in parallel



Rj45 connected in parallel

These 2 terminals can be connected in a mixed way.

✻ **Installation attentions:** please reserve enough ventilation distance between decoders (>20mm), be sure not to block the vent, or it will affect lifetime of decoder for poor heat dissipation.

Attentions

1. Products shall be installed by qualified professionals.
2. 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.
3. Good heat dissipation will extend the working life of products. Please ensure good ventilation.
4. Please check if the working voltage used complies with the parameter requirements of products.
5. The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
6. Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
7. 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.

LTECH雷特

DMX512 DECODER

LT-904-DIP

4 CHANNELS

2种DMX接口

短路、过温、过流保护

RDM DMX

光电隔离

www.ltech.cn

产品介绍

1、本产品共有4个通道输出，每通道最大6A电流，总功率可高达 576W。

2、提供3针XLR、RJ45两种具有光电信号隔离功能的DMX接口，提高信号传输效率和抗干扰能力。

3、具有RDM远程管理协议，通过RDM主控可对其进行参数浏览与设置、DMX地址修改、设备识别等操作。

4、具有短路、过温、过流自动保护与恢复功能, 并有故障警示提示功能。

光电隔离　3针XLR　RJ45　RDM　短路保护　过温保护　过流保护

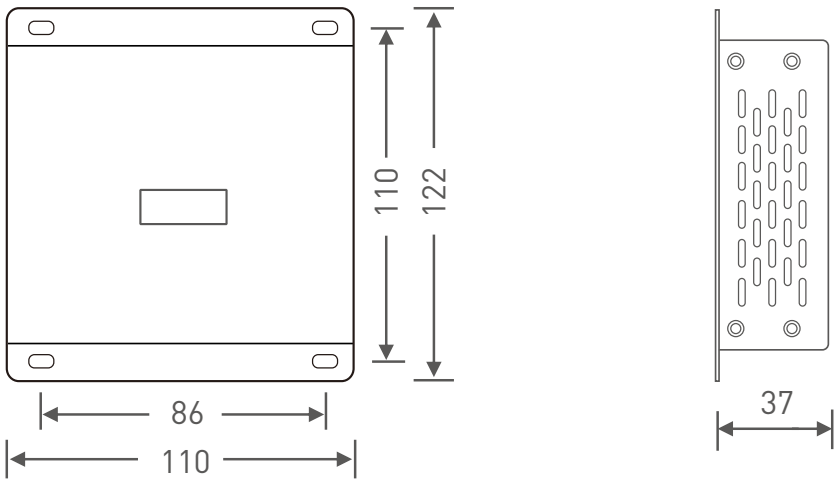
E500585　质保5年

性能参数

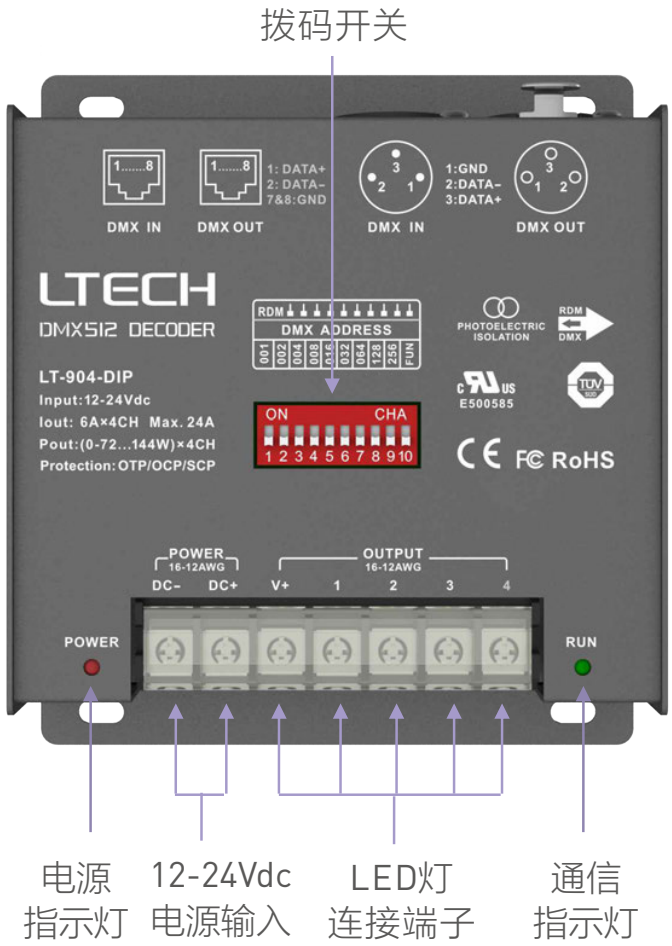
产品型号：	LT-904-DIP
输入信号：	DMX512/RDM
DMX接口：	3针XLR, RJ45
输入电压：	12- 24Vdc
负载电流：	6A×4路　Max. 24A
输出功率：	(0~72W...144W)×4路　Max. 576W
光电隔离：	有
保护：	短路、过温、过流保护，可自动恢复
工作温度：	-30°C ~65°C
产品尺寸：	L122×W110×H37mm
包装尺寸：	L127×W123×H41mm
重量(毛重)：	550g

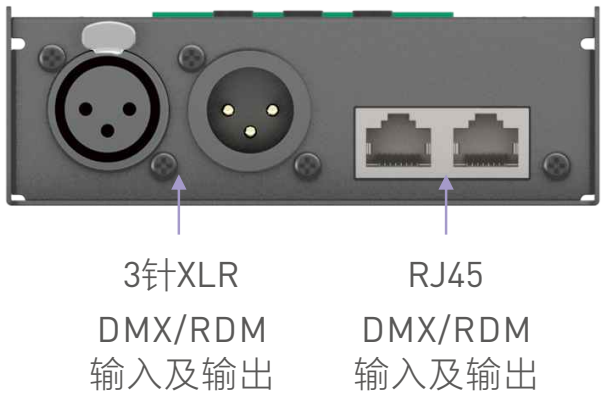
产品尺寸

单位： mm

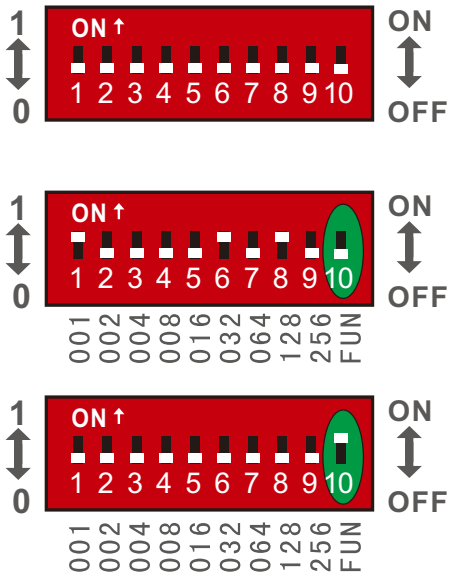


部件图


拨码开关
DMX IN
DMX OUT
1: DATA+
2: DATA-
7&8:GND
DMX IN
DMX OUT
1:GND
2:DATA-
3:DATA+
LTECH
DMX512 DECODER
LT-904-DIP
Input:12-24Vdc
Iout: 6A×4CH Max. 24A
Pout:(0-72...144W)×4CH
Protection: OTP/OCP/SCP
DMX ADDRESS
ON
CHA
1 2 3 4 5 6 7 8 9 10
PHOTOELECTRIC ISOLATION
RDM DMX
E500585
RoHS
POWER 16-12AWG
DC- DC+
OUTPUT 16-12AWG
V+ 1 2 3 4
POWER
RUN
电源
指示灯
12-24Vdc
电源输入
LED灯
连接端子
通信
指示灯


3针XLR
DMX/RDM
输入及输出
RJ45
DMX/RDM
输入及输出

拔码开关



RDM模式： 拔码开关1-10全部拨向下时

DMX模式： FUN=OFF （第10位拔码开关拨向下时）
此时可通过1-9拨码开关设置DMX地址

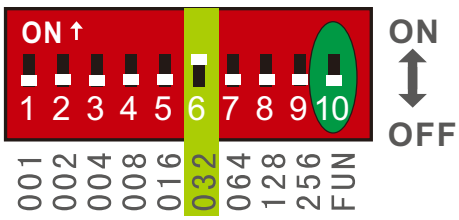
自测模式: FUN=ON （第10位拔码开关拨向上时）

用拔码开关设置首地址:

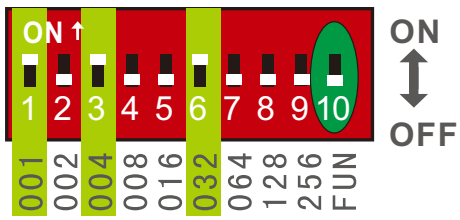
FUN=OFF (第10位拔码开关=OFF) DMX模式

DMX512起始地址码=编码开关1-9位的位值总和, 将编码开关拨向下（ON置"1"), 可获得该位的位值; 编码开关拨向上（置"0"), 则该位的位值为0。

例1: 设置首地址为32。

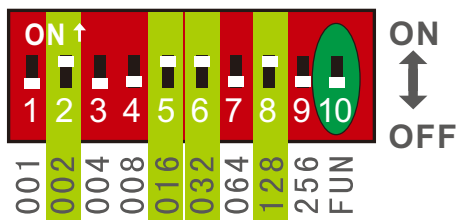


例2: 设置首地址为37。



001+004+032=37

例3: 设置首地址为178。



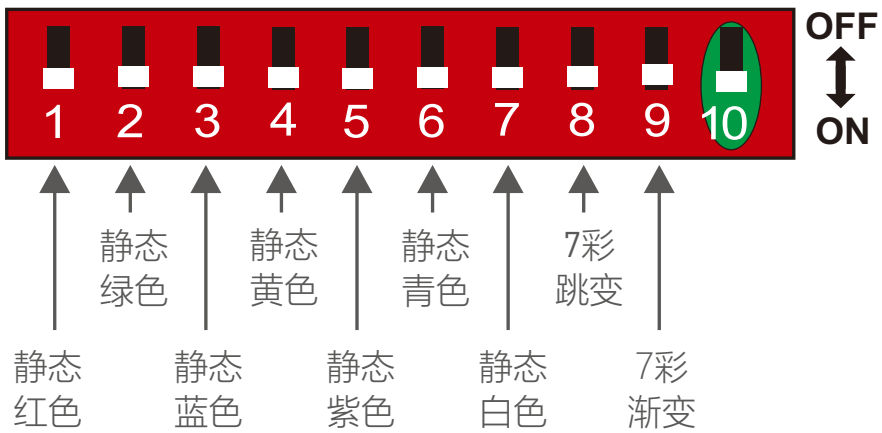
002+016+032+128=178

拔码开关第1~9位全部OFF时，DMX首地址默认为1。

自测功能

FUN=ON (第10位拨码开关=ON)　　自测模式

拨码开关	1-9=off	1=on	2=on	3=on	4=on	5=on	6=on	7=on	8=on	9=on
自测模式	静态 黑色	静态 红色	静态 绿色	静态 蓝色	静态 黄色	静态 紫色	静态 青色	静态 白色	7彩 跳变	7彩 渐变



拔码开关8/9=on时，为动态效果:

拔码开关1-7 可用于调节速度(7=on, 为最快速度)。

[注] 当多位拔码开关为on时, 以高位为准（如上图所示，表现为7级速度的7彩渐变）。

DMX 调光示意

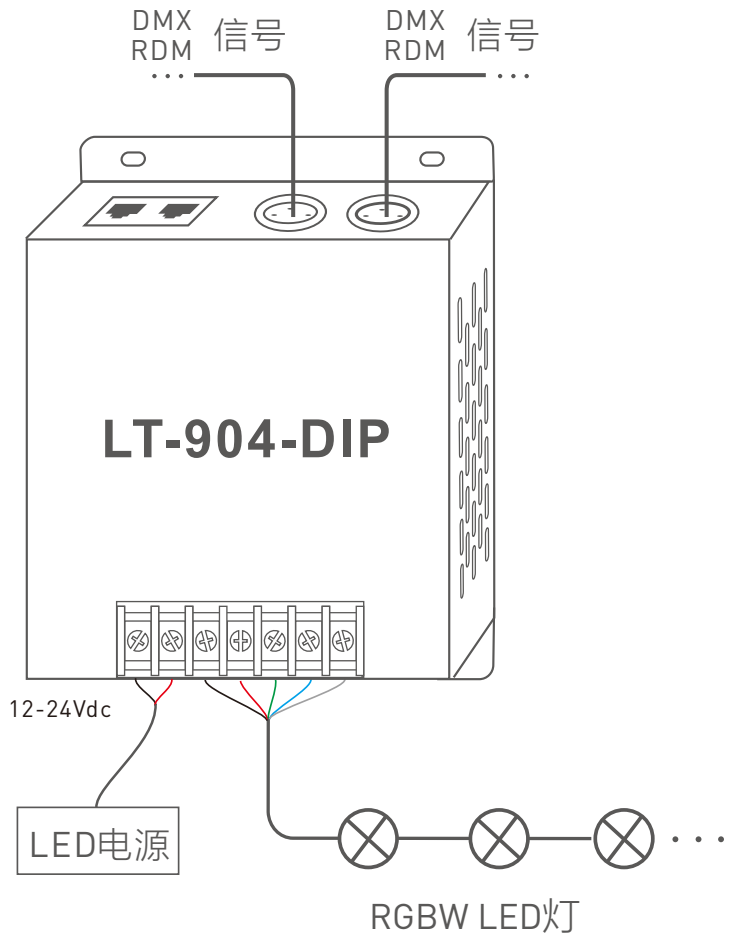
DMX控台连接DMX解码器调光, 每台LT-904-DIP解码器占用4个DMX地址。

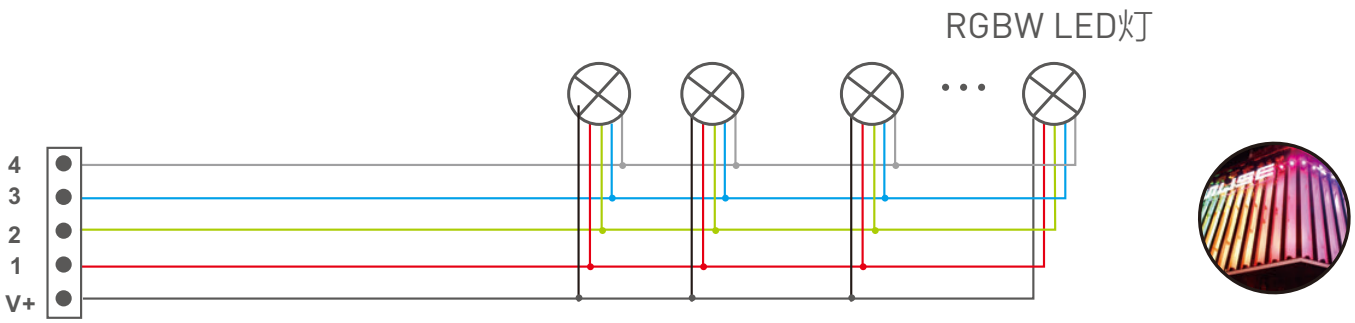
例如: DMX解码器默认首地址为1, 控台与解码器调光对应关系如表格。

DMX控台通道	DMX解码器输出通道
CH1 0-255	CH1　PWM 0-100% (LED R)
CH2 0-255	CH2　PWM 0-100% (LED G)
CH3 0-255	CH3　PWM 0-100% (LED B)
CH4 0-255	CH4　PWM 0-100% (LED W)

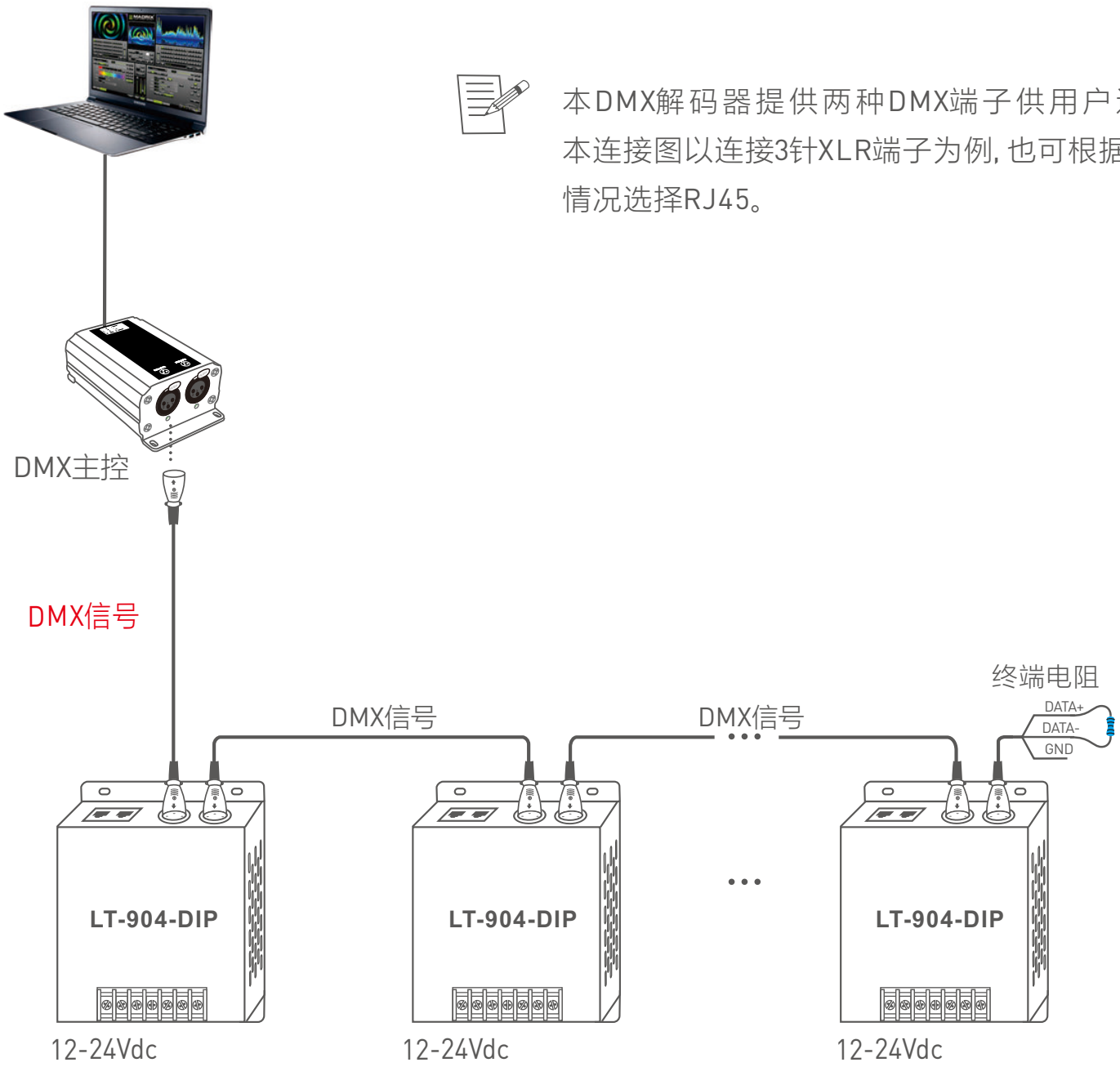
连接示意图

1 连接LED灯





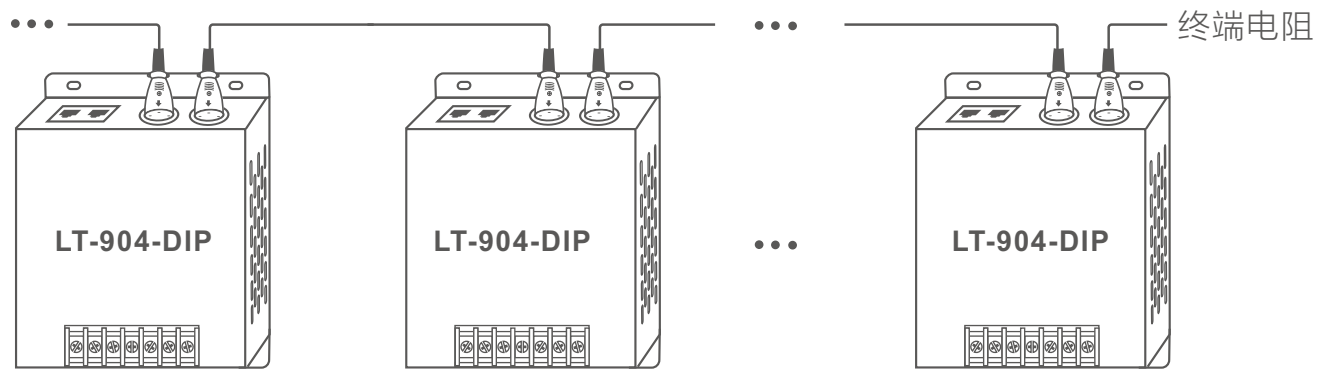
2. DMX系统连接



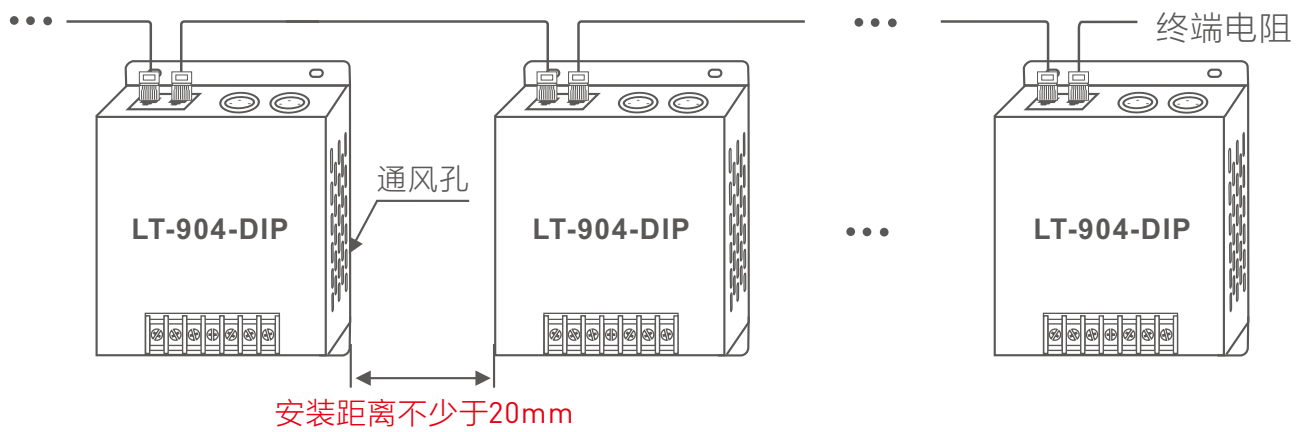
本DMX解码器提供两种DMX端子供用户选择，本连接图以连接3针XLR端子为例，也可根据实际情况选择RJ45。

* 当DMX解码器过多(超过32台)或信号线过长，需加信号放大器，信号放大不能连续超过5次。
* 当信号线较长或者线材质量等原因造成信号反冲效应影响使用，可以尝试在每路信号线末端连接0.25W 90-120Ω终端电阻解决。

3. 两种DMX端口的连接示意图



3针XLR并联连接



RJ45并联连接

以上两种方式可以任意混合连接

* 安装注意事项： 请在解码器与解码器之间预留通风距离（最少20mm），切勿堵塞通风孔，否则会因设备散热不畅影响使用寿命。

注意事项

1、请由具有专业资格的人员进行调试安装。

2、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。

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、请检查使用的工作电压是否符合产品的参数要求。

5、使用的电线直径大小必须能足够负载连接的LED灯具，并确保接线牢固。

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。

保修条例

- 自出厂之日起保修服务期为5年。
- 在保修服务期内出现产品质量问题雷特将给予免费修理或更换服务。

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唯一补救措施。雷特不承担任何附带引起的损害赔偿责任, 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。

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