

# LT-870S

## Wireless DMX512 Transceiver



LT-870S wireless DMX512 transceiver transfers the standard DMX512 protocol data wirelessly. One emitter matches one or multiple receivers if using the same ID. (Supporting point-to-point, point to multi-point communication),

LT-870S is used for data transmission between DMX console and lights, or between lights and lights, which replace the wired transmission. The data will not be delayed, will be true and reliable during transmission process.

LT-870S with automatic frequency hopping function, LT-870S will automatically choose clear channel to send DMX512 data when works as an emitter. and can search and match the correct channel to receive DMX 512 data when works as a receiver.

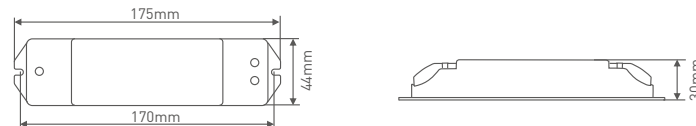
Use relay settings or connect to booster antenna to further the communication distance.

### 1. Technical Specs:

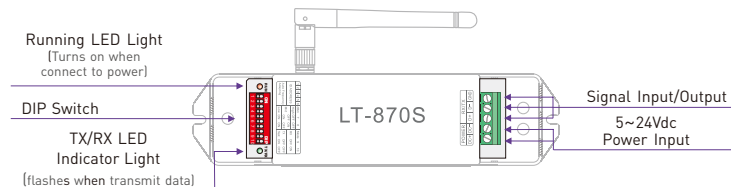
#### LT-870S Wireless DMX512 Transceiver

Input/Output Signal:	DMX512	Communication Distance:	350m (weather/environment affects the actual values)
Input Voltage:	5~24Vdc	Working Temperature:	-30℃~55℃
Working Frequency:	2.4GHz	Dimensions:	L175xW44xH30(mm)
Max. Transmitted Power:	20dBm	Package Size:	L178xW56xH33(mm)
Receiver Sensitivity:	-96dBm	Weight [G.W]:	125g

### 2. Product Size:



### 3. Configuration Diagram:



### 4. Dip Switch Operation:

#### 4.1 Dip Switch 9-10: Mode



The 10th is ON, the 9th is OFF  
LT-870S works as a receiver.



The 10th is OFF, the 9th is OFF  
LT-870S works as an emitter.  
Sending out the data from the DMX console.



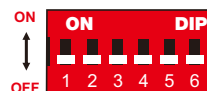
The 10th is OFF, the 9th is ON  
Self-testing mode,  
Sending out the auto-generated DMX console data (170 pixels full color smooth changing effect).

#### 4.2 Dip Switch 7-8: transmission power



dBm	7	8	Diagram
High	OFF	OFF	
Middle	OFF	ON	
	ON	OFF	
Low	ON	ON	

#### 4.3 Dip Switch 1-6:



Communication between emitter and receiver will be normal if they have the same ID.

E.g.:



Emitter

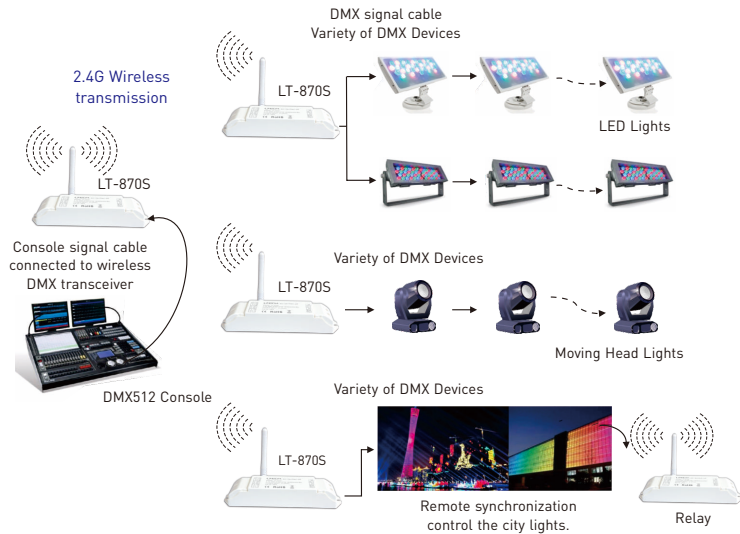


Receiver

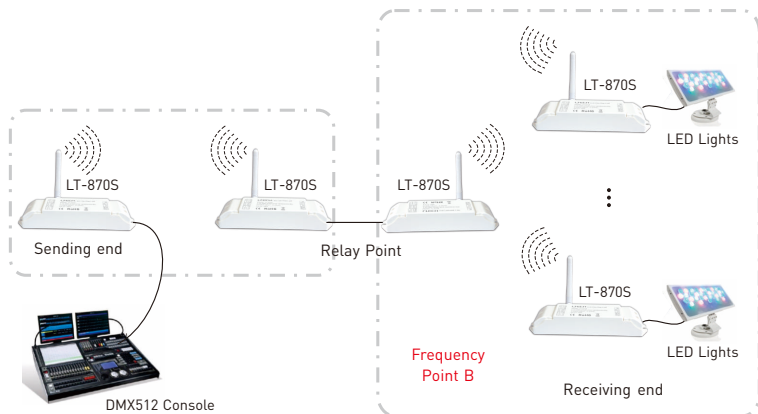
\* 64 kinds of ID combinations in total.

## 5. Wiring Diagram:

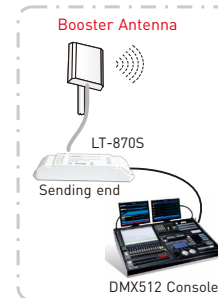
### 5.1 One sending end, multiple receiving ends:



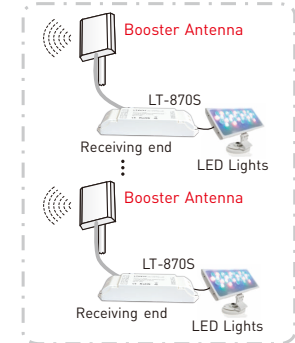
### 5.2 Relay way to extend the communication distance:



### 5.3 Extend the communication distance by boost antenna:



**【Attn】**  
Please install the booster antenna in high open place. the communication distance can up to 1000-2000 meters generally.



## 6. Attention:

- 6.1 The product shall be installed and serviced by the qualified person.
- 6.2 This product is non-waterproof. Please avoid the sun and rain. When installed outdoors please ensure it is mounted in a water proof enclosure.
- 6.3 Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
- 6.4 Please check if the output voltage of the LED power supply used comply with the working voltage of the product.
- 6.5 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.
- 6.6 Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
- 6.7 If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.

## 7. Warranty Agreement:

- 7.1 We provide lifelong technical assistance with this product:
  - A 5-year warranty is given from the date of purchase. The warranty is for free repair or replacement if cover manufacturing faults only.
  - For faults beyond the 5-year warranty we reserve the right to charge for time and parts.
- 7.2 Warranty exclusions below:
  - Any man-made damages caused from improper operation, or connecting to excess voltage and overloading.
  - The product appears to have excessive physical damage.
  - Damage due to natural disasters and force majeure.
  - Warranty label, fragile label and unique barcode label have been damaged.
  - The product has been replaced by a brand new product.
- 7.3 Repair or replacement as provided under this warranty is the exclusive remedy to the customer. LTECH shall not be liable for any incidental or consequential damages for breach of any stipulation in this warranty.
- 7.4 Any amendment or adjustment to this warranty must be approved in writing by LTECH only.

★This manual only applies to this model. LTECH reserves the right to make changes without prior notice.

LT-870S  
2.4G无线DMX512收发器



LT-870S 收发器以无线的方式传输标准的DMX512协议数据。一台发射一台接收或多台接收(支持点对点, 点对多点), 一台发送端可配置多台接收端, 只要接收端与发送端地址ID设为一致。

该产品用于DMX控制台与灯, 灯与灯之间的无线数据传输, 代替长期以来所依赖的双绞线等线材的有线传输。在数据的传输过程中做到无延时, 数据实时可靠!

LT-870S收发器具有自动跳频功能, 作为发射器时, 当发现周围无线环境干扰到正在使用的频道时, 自动选择另一个无干扰的频道来发送DMX512数据。作为接收器时, 能够自动搜索并匹配正确的频道来接收DMX512数据。

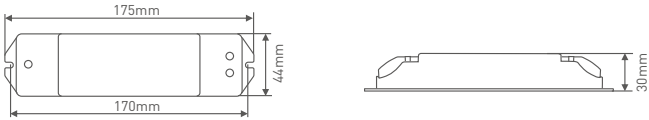
一 性能参数:

LT-870S		
输入电压:	5-24Vdc	通讯距离: 350米(具体以天气\环境等不同条件有差异)
传输信号:	DMX512	工作温度: -30℃~55℃
工作频段:	2.4GHz	产品尺寸: L175×W44×H30mm
最大发射功率:	20dBm	包装尺寸: L178×W48×H33mm
接收灵敏度:	-96dBm	重量(毛重): 125克

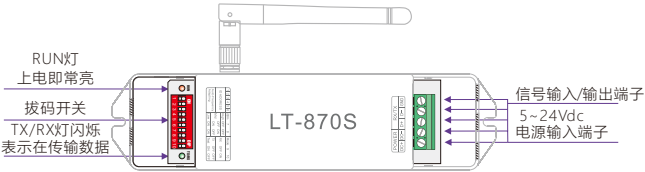
二 功能特点:

- 1、产品采用2.4G全球开放ISM频段, 免许可证使用, 高效GFSK调制。
- 2、一台发送端可配置多台接收端, 只要接收端与发送端频点设为一致, 双方即可正常通讯。
- 3、具有监控周围无线环境, 受到干扰自动跳频功能。
- 4、高保真数据传输, 保障数据无损还原。
- 5、需要测试无线链路质量或工程安装调试时, 具有自测检验模式。
- 6、如需更远距离, 可使用中继设置方式, 可中继一次或多次以达到需要的距离。
- 7、一机多用, 可设置为接收模式或发送模式, 使用非常方便。

三 外型尺寸:



四 接线示意图:



五 拨码开关的操作说明:

- 1、拨码开关第9-10位：模式选择
- 第10位ON, 第9位为OFF  
LT-870S配置为接收端。
- 第10位OFF, 第9位为OFF  
LT-870S配置为发射端。  
将DMX控台传来的数据发送出去
- 第10位OFF, 第9位为ON  
自测模式  
自行生成DMX控台数据(170个像素七彩渐变效果)发送出去。

2、拨码开关第7-8位：发射功率选择

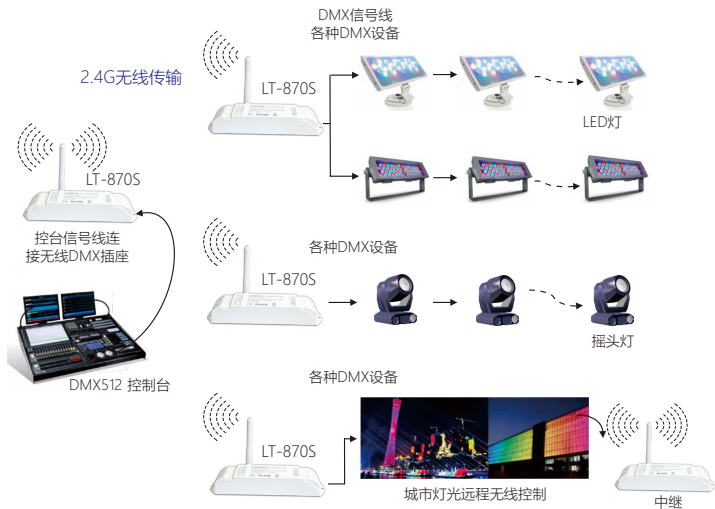
	dBm	7	8	图示
高	OFF	OFF	OFF	
中	OFF	ON	OFF	
低	ON	OFF	ON	

3、拨码开关第1-6位

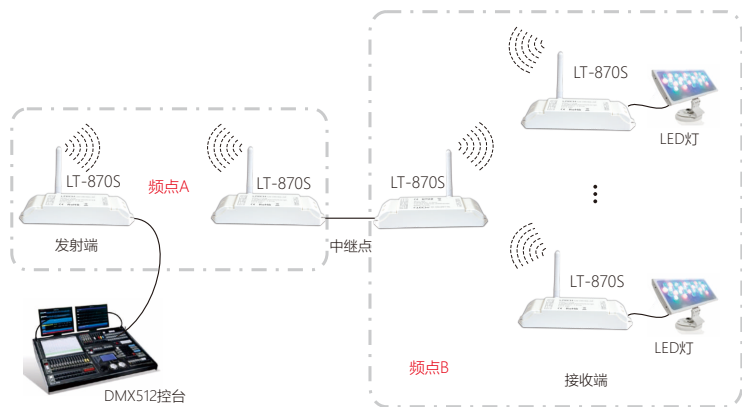


## 六 连线示意图:

### 1、1个发射端，多个接收端：



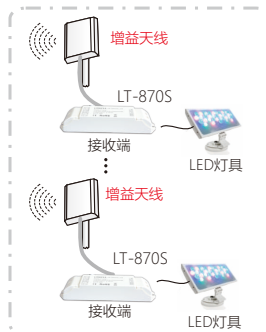
### 2、采用中继方式延长通讯距离:



### 3、外置增益天线以延长通讯距离:



【注】  
增益天线尽量  
安装在比较高的、  
无阻挡物地方。  
一般距离可达到  
1000-2000米。



## 七 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LED控制器的使用寿命，请把产品安装在通风良好的环境。
- 4、请检查使用的LED电源输出电压是否符合产品电压范围要求。
- 5、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。
- 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。

## 八 保修协议:

1. 购买雷特LED控制器产品享受终身技术支持和保修服务：
  - 免费保修：自购买之日起五年内出现产品质量问题雷特将给予免费修理或更换服务。
  - 有偿保修：超过免费保修期的产品收取适当的维修材料成本费用。
2. 以下情况不在免费保修或更换服务范围之内：
  - 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。
  - 产品已经更新换代。
3. 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。
4. 只有雷特享有修正或调整本保修条款的权利，并以书面形式发布认定为准确。

★ 本说明书仅适用于本型号产品，如有更新恕不另行通知。