# LT-870 Wireless DMX512 Transceiver













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

LT-870 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.

Adopt 2.4GHz global open ISM frequency channel, 64 groups wireless network can be chosen independently to avoid interference.

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

## 1. Technical Specs:

#### LT-870 Wireless DMX512 Transceiver

Input/Output Signal: DMX512

Input Voltage: 5~24VDC

Working Frequency: 2.4GHz ISM 64 Channels
Package Size: L178×W56×H33(mm)

Max. Transmitted Power: 20dBm

Receiver Sensitivity: -96dBm

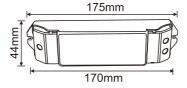
· Communication Distance: 350m (weather/environment affects the actual values) • Working Temperature: -20°C~55°C

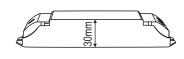
Dimensions: L175×W44×H30(mm)

Weight (G.W): 125g

## LTECH

## 2. Product Size:





## 3. Configuration Diagram:



## 4. Dip Switch Operation:

4.1 The 10th Dip Switch.



The 10th is On, LT-870 works as a receiver.

8 9 10 The 10th is Off, LT-870 works as a emitter.

4.2 The 9th Dip Switch.

The 9th only works when LT-870 as a emitter(the 10th is Off).



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



The 9th is Off, normal mode, sending out the data from the DMX console.

#### 4.3 The 7-8th Dip Switch.

4 levels transmission power to choose (see the form)



dBm	7	8	Diagram
20	OFF	OFF	
14	OFF	ON	
8	ON	OFF	
2	ON	ON	

#### 4.4 The 1st-6th Dip Switch.



 $\begin{array}{c} 001\\ 000\\ 000\\ 000\\ 016\\ 032\\ \end{array}$ 

64 frequency option(2401-2464MHz)

Frequency interval: 1MHz.

Frequency value = 2400+the total value of (1~6) To get the place value when in "On" position, otherwise namely "Off" position will be 0.



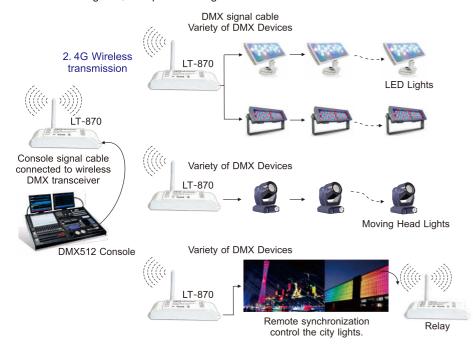
E. g.: Set the frequency to 2437M.

The value summation from  $1\sim6$  is 001+004+032=37. so the transceiver frequency is 2400+37=2437M.

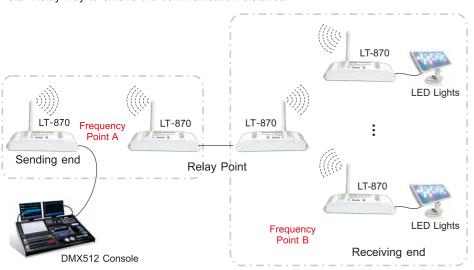


# 5. Wiring Diagram:

5.1 One sending end, multiple receiving ends:



5.2 Relay way to extend the communication distance:

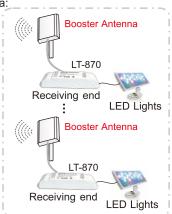




5.3 Extend the communication distance by boost antenna:



#### [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
- 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
- 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.

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