

# LT-870 Wireless DMX512 transceiver



LT-870 Wireless DMX512 transceiver transfers the standard DMX512 protocol data by wireless transmission. One send, one receive or multiple receive. (Supporting point to point, point to multi-point), a sending end can configure multiple receiving ends as long as the receiving end and sending end are set as same frequency point.

The product is used for DMX console and lamp. The wireless data transmission between lamps replaces cable transmission which relies on twisted-pair, etc., for a long time. No delay and data is real-time and reliable during data transmission process.

The product adopts 2.4GHZ RF global open ISM frequency channel, which is a low-cost, powerful wireless DMX512 transceiver and widely applied to DMX512 controllers from various manufacturers.

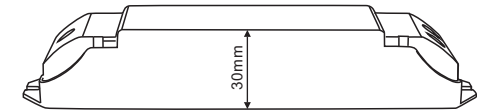
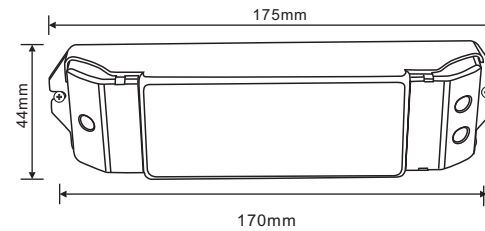
64 channels choices, users can use 64 groups wireless network independently without interference in one place.

Use relay Settings if need further increase the communication distance.

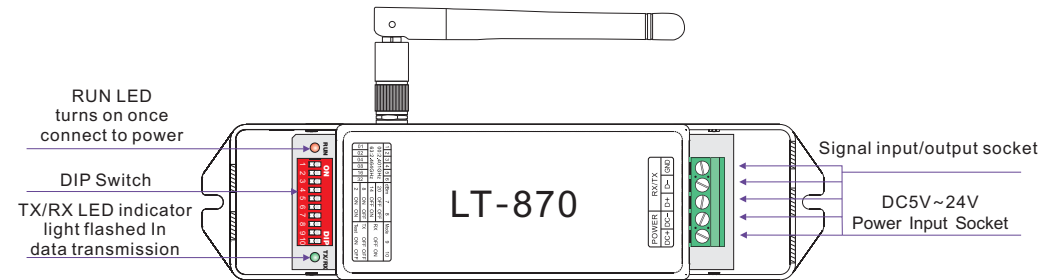
## 1. Technical Specs

LT-870	
Input/output signal	DMX512
Input voltage	DC5V~DC24V
Working frequency channel	2.4GHz ISM 64 channels
Maximum transmitted power	20dBm
Receiver sensitivity	-96dBm
Communication distance	350m (Exist differences in different conditions, such as the weather \ environment etc.)
Working temperature	-20°C~55°C
Dimension	L175×W44×H30mm
Package Size	L178×W48×H33mm
Weight (G.W)	110g

## 2. Product dimension



## 4. Connection Diagram



LT-870 wireless transceiver

## 5. Dip switch Operation

**The 10th Dip Switch:** it is configure as sending end when OFF and configure as receiving end when ON.



**The 9th Dip Switch:** it is valid when it is configure as sending end.

As figure 2, it is the normal mode when OFF, sending out the data from the DMX console;

As figure 3, it is the self-testing model when ON, sending out the auto-generated DMX console data (170 pixels full color smooth changing effect).



(Figure 2)



(Figure 3)

The 7-8 Dip switch : 4 levels transmission power to choose (see the below form)



dBm	7	8
20	OFF	OFF
10	OFF	ON
5	ON	OFF
1	ON	ON

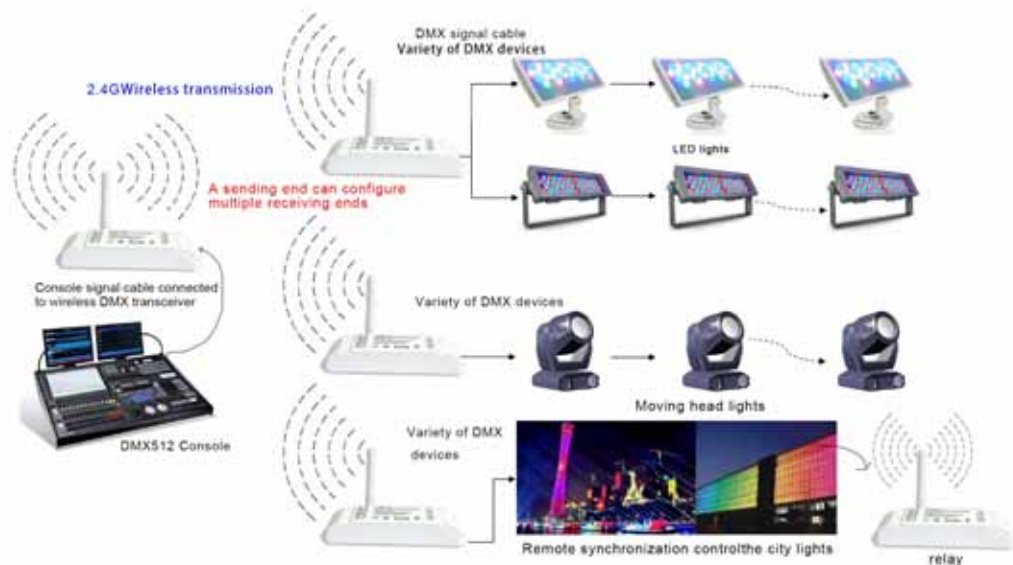
The 1-6 Dip switch : 64 frequency to choose (2401~2464MHz), the interval of frequency is 1MHZ. (see the below form)

DIP	1	2	3	4	5	6
Value	001	002	004	008	016	032
Remark	Frequency value = the total place value amount of 1-6 dip switch+2400, put the dip switch to ON position, user can get its place value, put dip switch to OFF position, its place value is 0.					

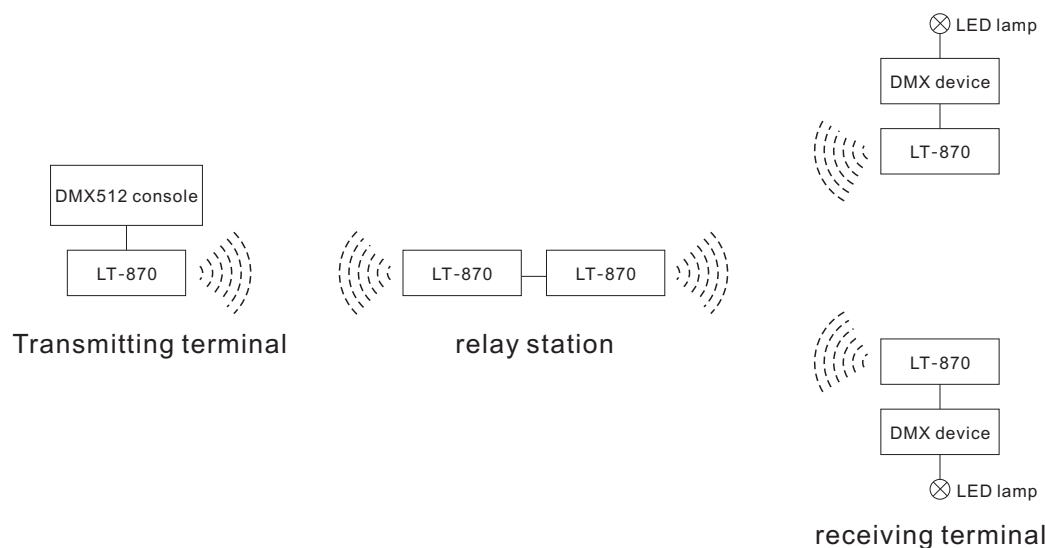
Example, As figure 5, the repeater frequency is 2437M, set the 1st, 3rd, 6th dip switch to "1", the rest to "0", the Value summation from 1-6 is 1+4+32=37, so the repeater frequency is 37+2400=2437M.



### 5. Conjunction diagram



Can extend the communication distance by relay point way,



### 6. Attention

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

### 7. Warranty Agreement

- 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 and covers manufacturing faults only.
  - For faults beyond the 5-year warranty we reserve the right to charge for time and parts.
- 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.
- 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.
- 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.