

2.4G Wireless power repeater Manual



Wireless LED power repeater transfer 300Hz~20KHz PWM pulse signal by wireless transmission to expand power. It is consisted of sending end LT-3050 and receiving end LT-3053-5A, LT-3054-5A. A sending end can configure unlimited receiving ends. As long as the receiving end and sending end are set as same frequency point, both sides can communicate normally. Realize the signal synchronization on unlimited receivers within effective distance. A very good solution for the LED project needs sync control wirelessly. Such as the wireless remote control between buildings, both sides of the roads, river banks and bridges, etc. Use relay Settings if need further increase the communication distance.

1. Technical Specs

LT-3050 wireless transmitters

- Input voltage: DC5V~DC24V
- Input signal: PWM x3CH
- Working frequency channel: 2.4GHz ISM 64 channels
- Maximum transmitted power: 20dBm
- Communication distance: 350m (Exist differences in different conditions, such as the weather \ environment etc.)

- working temperature: -20°C ~ 55°C
- Dimension: L175xW44xH30mm
- Package Size: L178xW48xH33mm
- Weight (G.W): 110g

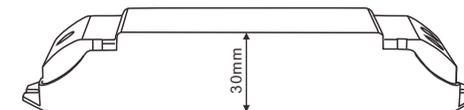
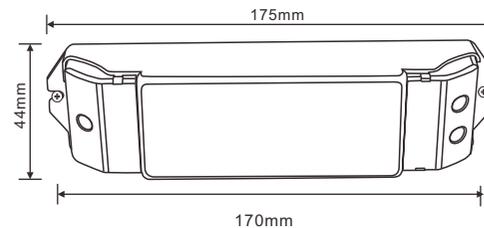
LT-3053-5A wireless transmitters

- Input voltage: DC5V~DC24V
- Max current load: 5Ax3CH Max 15A
- Max output power: 75W/180W/360W(5V/12V/24V)
- Working frequency channel: 2.4GHz ISM 64 channels
- Communication distance: 350m (Exist differences in different conditions, such as the weather \ environment etc.)
- Receiver sensitivity: -96dBm
- working temperature: -20°C ~ 55°C
- Dimension: L175xW44xH30mm
- Package Size: L178xW48xH33mm
- Weight (G.W): 110g

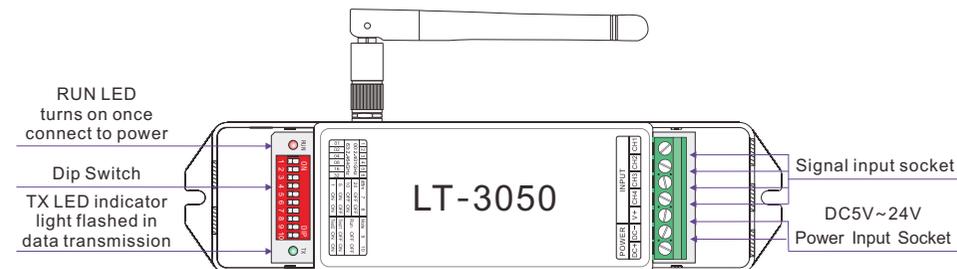
LT-3054-5A wireless transmitters

- Input voltage: DC5V~DC24V
- Max current load: 5Ax4CH Max 20A
- Max output power: 100W/240W/480W(5V/12V/24V)
- Working frequency channel: 2.4GHz ISM 64 channels
- Communication distance: 350m (Exist differences in different conditions, such as the weather \ environment etc.)
- Receiver sensitivity: -96dBm
- working temperature: -20°C ~ 55°C
- Dimension: L175xW44xH30mm
- Package Size: L178xW48xH33mm
- Weight (G.W): 110g

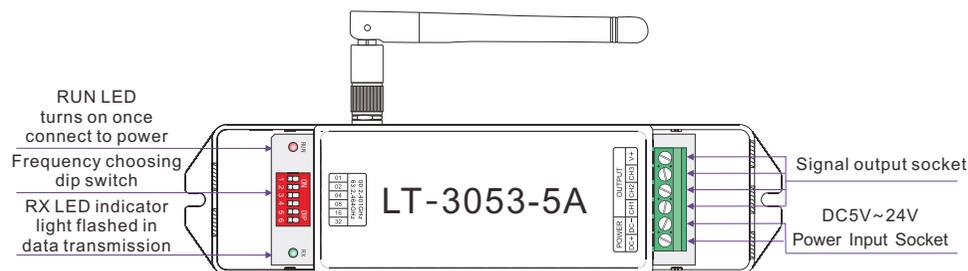
2. Product dimension



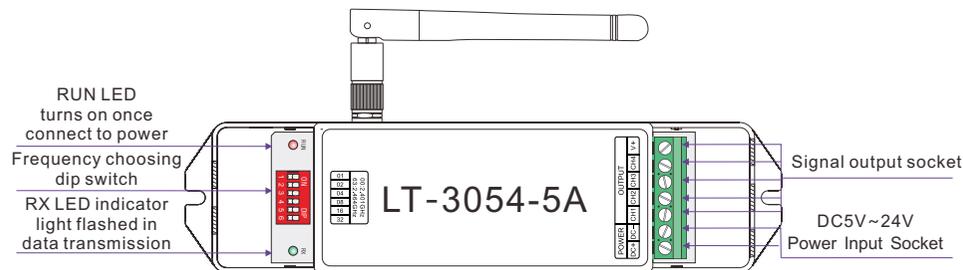
3. Conjunction Diagram



LT-3050 wireless transmitters



LT-3053-5A wireless receiver



LT-3054-5A wireless receiver

4 Dip Switch Operation



LT-3050 Dip switch



LT-3053-5A/LT-3054-5A Dip switch

The 10th Dip Switch: OFF means conventional transmitting modes, ON means self testing transmitting modes

The 9th Dip Switch: When the 10th Dip switch is on, transmit the data of full color gradual in the 9th ON and transmit the data of full color jump in the 9th OFF.

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

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

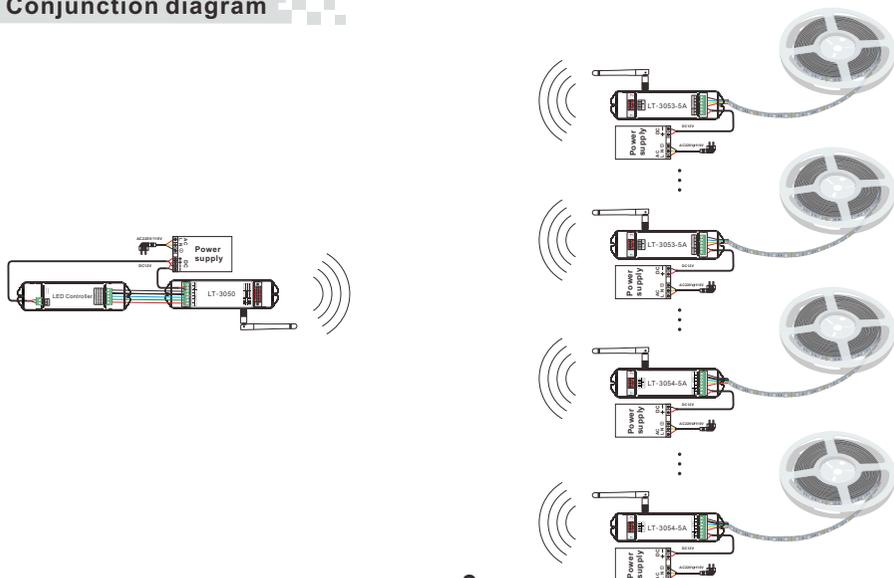
The 1-6 Dip switch: 64 frequency to choose(2401~2464MHz), the interval of frequency is 1MHZ. (see the below form)

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.					

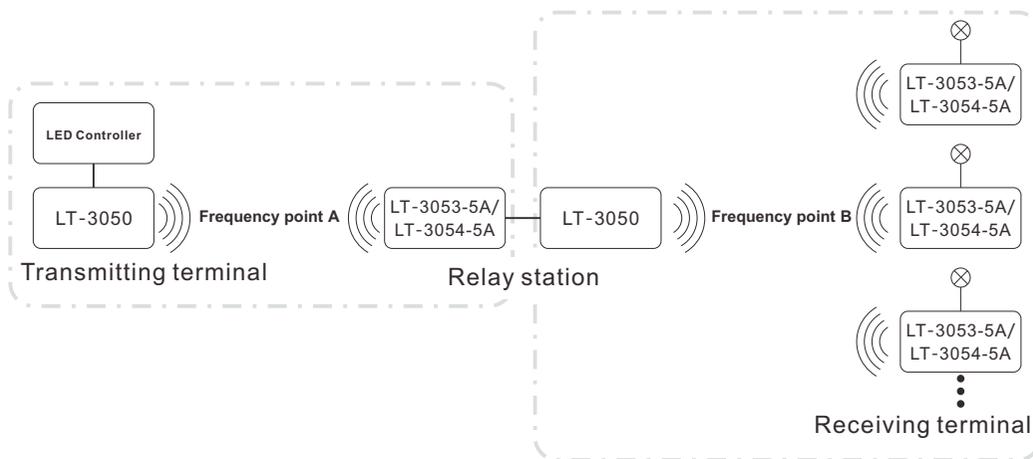


Example: Above figure, the repeater frequency is 2437M, set the 1st, 3rd, 6th dip switch to "1", the rest to "0", the Value summation from 1-6 is 1+4+32=37, so the repeater frequency is 37+2400=2437M.

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.