# LTECH

# DMX512 DECODER

LT-904-DIP









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



R 1//5



Photoelectric isolation



RDM



protection



protection



protection















### 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

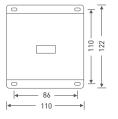
Dimensions: 122×110×37mm(L×W×H)

Package size: 127×123×41mm(L×W×H)

Weight (G.W.): 550q

#### 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=0N (the 10th DIP switch=0N)

#### 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.

ON † ON 1 2 3 4 5 6 7 8 9 10 OFF





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

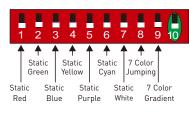


## Self-testing mode

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

Dip Switch										
Self-test	Static	7 Color	7 Color							
Function	Black	Red	Green	Blue	Yellow	Purple	Cyan	White	Jumping	Gradient

OFF



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.

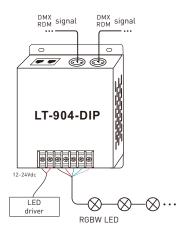
E.g., the defaulted initial address is 1, please find their corresponding relationships in the form.

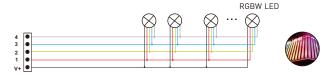
DMX Console	DMX Decoder
CH1 0-255	CH1 PWM 0-100% (LED R)
CH2 0-255	CH2 PWM 0-100% (LED G)
CH3 0-255	CH3 PWM 0-100% (LED B)
CH4 0-255	CH4 PWM 0-100% (LED W)



# Wiring diagram

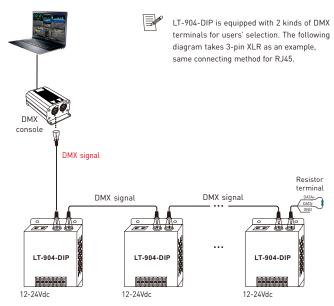
### 1 Connecting LED lights:







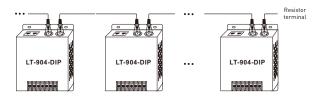
#### 2. DMX console connection:



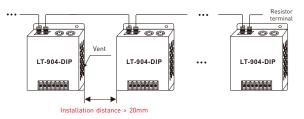
- \* An amplifier is needed if more than 32 decoders are connected or use overlong signal line, signal amplification should not be more than 5 times continuously.
- If the recoil effect occurs because of longer signal line or bad line quality, please try to connect 0.25W 90-120Ω terminal resistor at 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.
- 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.
- Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
- 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.
- 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.
- LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

9