# LT-8048 3CH CV DMX-512 Decoder













LT-8048 DMX512 decoder adopts the advanced microelectronic technique to convert the universal standard DMX512 signal into PWM signal to drive LEDs, it works with DMX512 console, 256 grayscale output per channel, 0-100% dimming range with various changing effects. Equipped with DMX standard XLR-3, green terminal interface, control single color, bi-color, RGB LED lamps.

### 1. Product Parameter:

#### LT-8048

• Input Signal: DMX512

• Input Voltage: 12~48VDC

• Max Current Load: 4A×3CH Max 12A

Max Output Power: 144W/432W/576W(12V/36V/48V)

• DMX512 Socket: Standard XLR-3, Green Terminal

Dimming Range: 0~100%

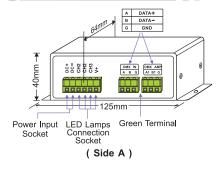
Working Temperature: -30°C~65°C

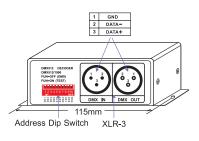
• Dimensions: L125×W64×H40(mm)

Package Size: L137×W70×H50(mm)

Weight (G.W.): 305g

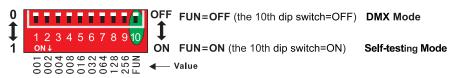
# 2. Configuration Diagram:





(Side B)

### 3. Dip Switch Operation:



#### 3.1 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. E.g.2: Set Initial Address To 37. E.g.3: Set Initial Address To 178.



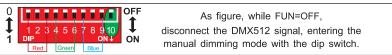
\* When Dip switch 1-9 are OFF, the defaulted initial DMX address is 1.

#### 3.2 DMX Dimming Instruction:

Each LT-8048 DMX decoder occupied 3 DMX addresses when connecting the DMX console, e.g., the defaulted initial address is 1, please find their corresponding relationships in the following form.

DMX Console Channel	DMX Decoder Output Channel				
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)				

#### 3.3 Manual Dimming Functions:

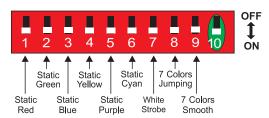


Brightness	DIP1-3(CH1)	DIP4-6(CH2)	DIP7-9(CH3)	Figure	
0	000	000	000	0 1 1	
14%	100	100	100	0 1 1 1	
28%	010	010	010	0 1 1	
43%	110	110	110	0 1 1	
57%	001	001	001	0 1	
71%	101	101	101	0 1 1	
86%	011	011	011	0 1 1	
100%	111	111	111	0 1	

#### 3.4 Self-testing Mode:

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

Dip Switch	1-9=off	1=on	2=on	3=on	4=on	5=on	6=on	7=on	8=on	9=on
Self-test	Static	Static	Static	Static	Static	Static	Static	White	7 Colors	7 Colors
Function	Black	Red	Green	Blue	Yellow	Purple	Cyan	Strobe	Jumping	Smooth



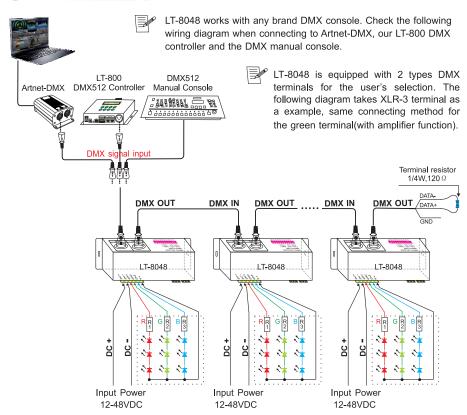
For changing effects (Dip Switch 8/9=on): DIP switch 1-6 is used to realize 6 speed levels. (6=on, the fastest level)

For changing effect (Dip Switch 7=on): Static color will be showed when 1=on or 6=on, 2-5=on will be white strobe effect.

[Attn] When several dip switches are on, subjected to the highest switch value.

As the figure above shows, the effect will be 7 colors smooth at 6 speed level.

# 4. Wiring Diagram:



# 5. Attention

- 5.1 The product shall be installed and serviced by the qualified person.
- 5.2 This product is non-waterproof. Please avoid the sun and rain. When installed outdoors please ensure it is mounted in a water proof enclosure.
- 5.3 Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
- 5.4 Please check if the output voltage of the LED power supply used comply with the working voltage of the product.
- 5.5 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.
- 5.6 Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
- 5.7 If a fault occurs, please return the product to your supplier. Do not attempt to fix this product by yourself.

### 6. Warranty Agreement:

- 6.1 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.
- 6.2 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.
- 6.3 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.
- 6.4 Any amendment or adjustment to this warranty must be approved in writing by LTECH only.
- ★This manual only applies to this model. LTECH reserve the right to make changes without prior notice.