

# LT-800 DMX Controller (V5.0)



LT-800 DMX512 controller is the output signal of international standard DMX512/1990. It not only can control all the LED lights that receiving the standard DMX signal in the market, but also can work with our DMX decoder to control the general LED lights without DMX512.

LT-800 DMX512 controller is easy to operate with a LCD screen. Available with wireless control and keying control on the changing modes, speed and brightness, automatic timing and more than 580 modes for your choices.

### 1. Product Parameter:

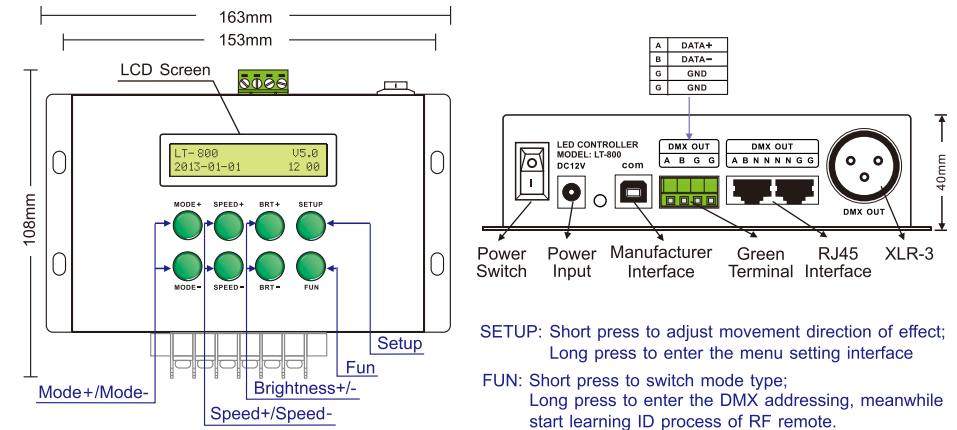
## LT-800 DMX Controller (Version 5.0)

- Working Voltage: 12VDC (with an adapter to convert 100-240VAC to 12VDC)
- Power Consumption: <2W
- Output Signal: DMX512
- Output Loop: 1 Port
- Transmission Speed: 250Kbps
- Lighting Mode: 580 Modes
- Control Quantity: 512 DMX Channels(170 pixels)
- Working Temperature: -30℃~65℃
- Dimensions: L163×W108×H40mm
- Package Size: L260×W132×H46mm
- Weight(G.W.): 815g

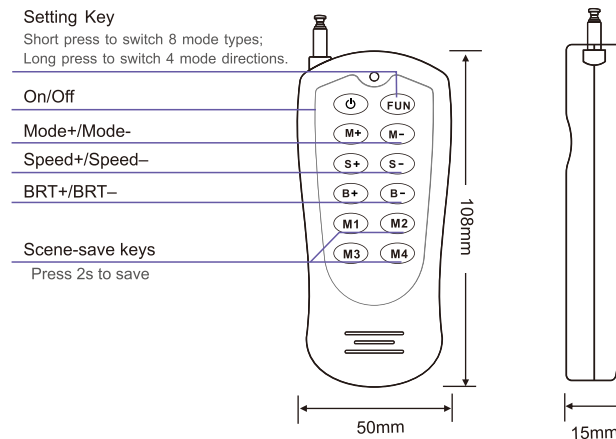
## 2. Features:

- 2.1 With a LCD screen, easy to operate in showing all functions.
- 2.2 Built-in perpetual calendar, real-time display system clock, can be set up to play different programs in any time, Monday to Sunday or holiday.
- 2.3 580 lighting modes, such as, 7 static color, jumping synchronism, smooth synchronism, color flow, color chasing, color smooth and flow and Meteor shower trailing, etc.
- 2.4 Multilevel changing speed, brightness, RGB grey scale adjustment and effect of movement direction for your choices.
- 2.5 Feel free to define many changing modes into a step, 8 independent cycle steps maximum.
- 2.6 Output with international standard signal DMX512/1990, can control 512 DMX channels (170 full color RGB pixels)
- 2.7 Support different output ports like standard XLR-3, RJ45 and green terminals. etc.
- 2.8 With the functions of anti-interference and automatic breakdown recovery.

### 3. Structural Drawings:




## Controller



## RF Remote Control

**Buzzer on/off:** Long press "On/Off" button on the remote.

### ID Learning Method:

Long press  button on the controller for 2 seconds, there is a buzzer beep, keep pressing:

**Learning ID:** Press any key on the remote in 3 seconds.

**Canceled ID:** Press any key on the remote **over 3 seconds.**

#### 4. Operating Instructions:

8 function keys on the controller : MODE+/MODE-, SPEED+/SPEED-, BRT+/BRT-(brightness),  
SETUP, FUN(function).

Table of Changing Modes.

No.	Color	Display	No.	Color	Display
1	Black ●	01 BLACK 2014-11-24 12:00	16	Red/Purple ●●	16 R/P FLOAT SPEED:8 BRT:8
2	Red ●	02 RED FLOAT SPEED:8 BRT:8	17	Green/Yellow ●●	17 G/Y FLOAT SPEED:8 BRT:8
3	Green ●	03 GRN FLOAT SPEED:8 BRT:8	18	Green/Cyan ●●	18 G/C FLOAT SPEED:8 BRT:8
4	Blue ●	04 BLU FLOAT SPEED:8 BRT:8	19	Blue/Purple ●●	19 B/P FLOAT SPEED:8 BRT:8
5	Yellow ●	05 YLW FLOAT SPEED:8 BRT:8	20	Blue/Cyan ●●	20 B/C FLOAT SPEED:8 BRT:8
6	Purple ●	06 PUR FLOAT SPEED:8 BRT:8	21	Yellow/Purple ●●	21 Y/P FLOAT SPEED:8 BRT:8
7	Cyan ●	07 CYN FLOAT SPEED:8 BRT:8	22	Yellow/Cyan ●●	22 Y/C FLOAT SPEED:8 BRT:8
8	White ○	08 WHI FLOAT SPEED:8 BRT:8	23	Purple/Cyan ●●	23 P/C FLOAT SPEED:8 BRT:8
9	Red & White ●○	09 R/W FLOAT SPEED:8 BRT:8	24	Red/Green ●●	24 R/G FLOAT SPEED:8 BRT:8
10	Green/White ●○	10 G/W FLOAT SPEED:8 BRT:8	25	Red/Blue ●●	25 R/B FLOAT SPEED:8 BRT:8
11	Blue/White ●○	11 B/W FLOAT SPEED:8 BRT:8	26	Green/Blue ●●	26 G/B FLOAT SPEED:8 BRT:8
12	Yellow/White ●○	12 Y/W FLOAT SPEED:8 BRT:8	27	Red/Green/Blue ●●●	27 RGB FLOAT SPEED:8 BRT:8
13	Purple/White ●○	13 P/W FLOAT SPEED:8 BRT:8	28	Yellow/Purple/Cyan ●●●	28 Y/P/C FLOAT SPEED:8 BRT:8
14	Cyan/White ●○	14 C/W FLOAT SPEED:8 BRT:8	29	Six Color ●●●●●●	29 SIX FLOAT SPEED:8 BRT:8
15	Red/Yellow ●●	15 R/Y FLOAT SPEED:8 BRT:8	30	All Color ●●●●●●○	30 ALL FLOAT SPEED:8 BRT:8

## 1-30

## General Modes

## [Attn]

How to select 7 static colors:

In the mode 2-8, select JUMP type and change the speed in Max. 8 or Min. 1.

## For mode 1~30:

Press or to switch 8 mode types: JUMP, (on controller) (on remote)

FLASH, SMOOTH, FADE, FLOW, CHASE, METEOR, FLOAT.

Adjust speed by press or (on controller) (on remote)

For mode types FLOW/CHASE/METEOR/FLOAT,

press or long press to switch 4 directions: (on controller) (on remote)

(↑)forward, (↓) reverse, (X)close, (S) split.

Adjust brightness by press or (on controller) (on remote)

31	Play1 off	31 PLAY1 OFF 2014-11-24 12:00	35	Play5 off	35 PLAY5 OFF 2014-11-24 12:00
32	Play2 off	32 PLAY2 OFF 2014-11-24 12:00	36	Play6 off	36 PLAY6 OFF 2014-11-24 12:00
33	Play3 off	33 PLAY3 OFF 2014-11-24 12:00	37	Play7 off	37 PLAY7 OFF 2014-11-24 12:00
34	Play4 off	34 PLAY4 OFF 2014-11-24 12:00	38	Play8 off	38 PLAY8 OFF 2014-11-24 12:00

## 31-38:

## Automatic Change Modes

## 39: Automatic Time Running Mode

Press "MODE+" / "MODE-" button to switch modes.

## 5. "SETUP" Key Instruction:

5.1 In the **mode 1-30**, press button for 3 seconds to enter submenu, see the form below.

No.	Submenu Function (Press MODE+/- to Change Menu Below)	LCD Display	Setting Method
1	Pixel number choice (range 004~170) Color pixel length choice (range 08~64)	PIXEL NUM : 032 COLOR PIXEL : 08	Press   to adjust pixel quantity Press   to switch items
2	Operation times choice (range 000~255)	RUN TIMES: 255 000-NOT RUNNING	Press   to adjust operation times. (only work between mode 31-38)
3	RGB grey scale adjust (127~255 per RGB) (The white of mode 8 is made from RGB 0~255)	RGB BRIGHT ADJ R255 G255 B255	Press   to adjust RGB value. Press   to switch R/G/B. (This feature with caution, 255 steps per default value RGB)
4	Recover to default mode	LOAD DEFAULT SET PRESS BRT+ - KEY	Press   to restore current mode to default.

press to save and exit submenu.

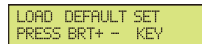
5.2 In the **mode 31-38**, press button for 3 seconds to enter submenu, see the form below.

NO.	Submenu Function (Press MODE+/- to switch)	LCD Display	Setting Methods
1	Setting switch state	31 PLAY1 OFF OPEN1 SAVE1	Press   to switch items.  OFF  SAVE1 Press   to switch 2 options: ON/OFF Select "ON" to 39 automatic time running mode. Load the operation times of 1-30 modes, press   to confirm. Save the setting about the operation times, press   to confirm.
2	Setting operation week	RUN WEEK : MTWTFSS TIME : 18:00-06:00	Press   to switch items.  MTWTFSS (day of the week) 00:00-00:00 (time) Press   to adjust value. (if you do not choose the Monday to Sunday, the screen will appear "_" the one mark)
3	Operate time and date 1	DATE01: 0101-0103 TIME: 00:00-00:00	Press   to switch items.  0101-0103 (date) Press   to adjust value.  00:00-00:00 (time)

NO.	Submenu Function (Press MODE+/- to switch)	LCD Display	Setting Methods
4	Operate time and date 2	DATE02: 0501-0503 TIME: 00:00-00:00	Press   to switch items. 0501-0501 (date) Press   to adjust value. 00:00-00:00 (time)
5	Operate time and date 3	DATE03: 1001-1007 TIME: 00:00-00:00	Press   to switch items. 1001-1007 (date) Press   to adjust value. 00:00-00:00 (time)
6	System clock setting	DATE/TIME SETUP 2012-01-01 12:00	Press   to switch items 2012-01-01 12:00 Press   to adjust value.
7	RGB sequence setting	RGB ORDER: RGB	Press   to choose the RGB sequence: RGB, RBG, GRB, GBR, BRG, BGR.
8	Modes restore default value	LOAD DEFAULT SET PRESS BRT+ - KEY	Press   to restore default value of the current setting automatic mode.

press to save and exit submenu.

5.3 In the mode 39, press button for 3 seconds to enter submenu.

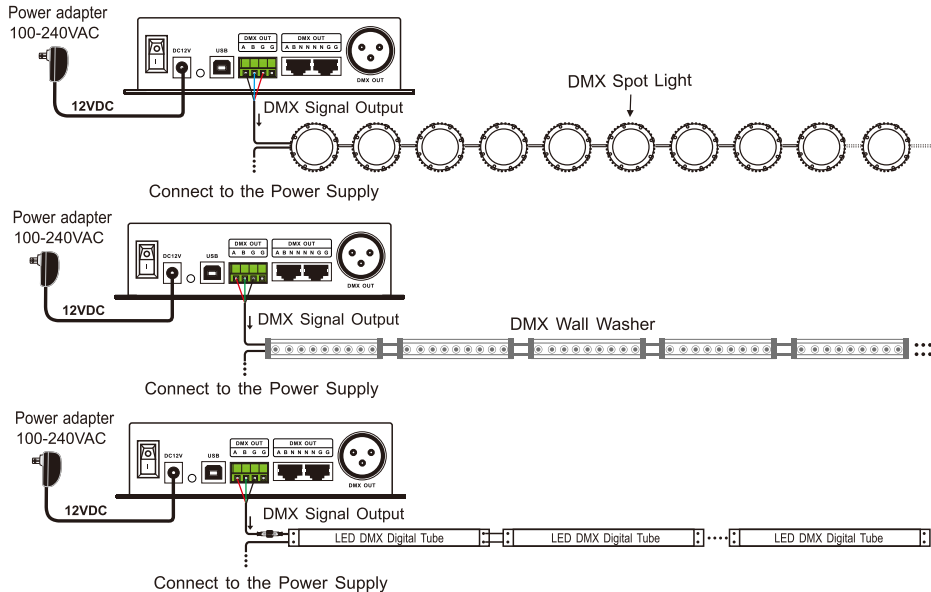


Press to restore default value of mode 39.

When set the 39<sup>th</sup> mode, according to the present switch condition and running time of automatic change modes 31-38, run the corresponding mode. The submenu only has the item that restore to default status (Please carefully choose the item).

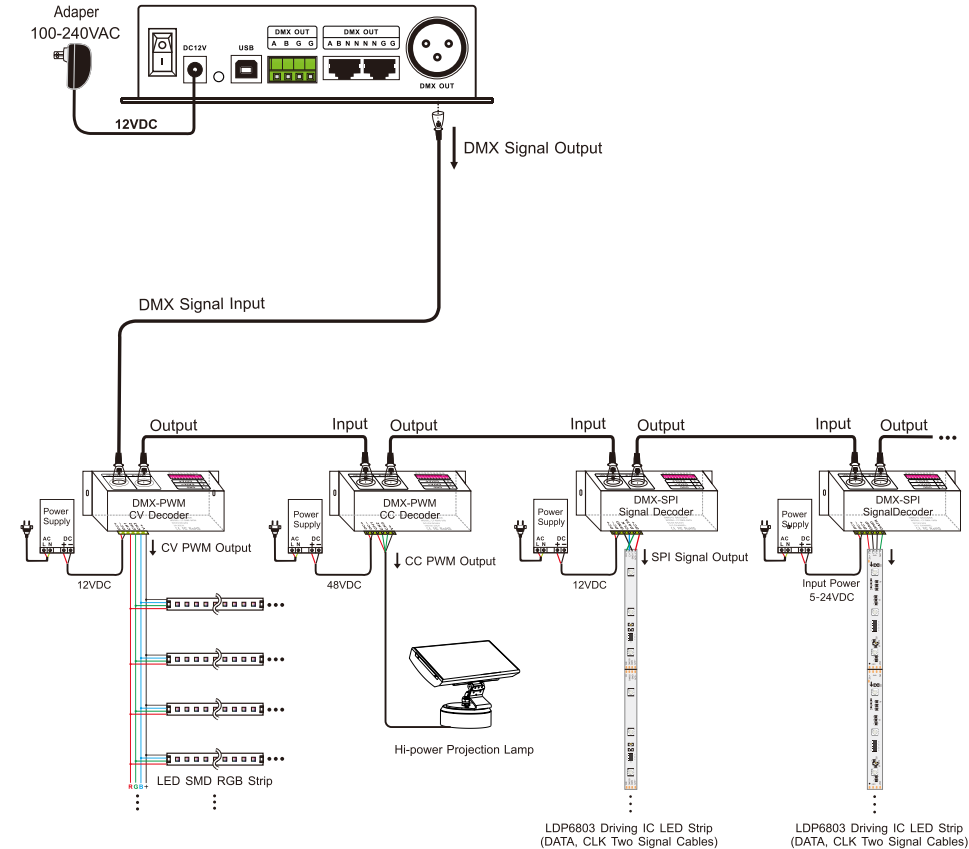
6. Wiring Diagram:

6.1 Connect to the LED lamps with DMX chip inside:



【Attn】 Please confirm the LED lamp can receive standard DMX512 signal, otherwise it can't work properly.

6.2 Connect to the DMX driver:

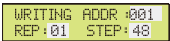
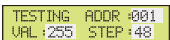


7. Additional Feature: DMX Address Writer:

Note: DMX address writing applies only to our DMX lighting, if you use our LT-800 to control the DMX lights from other companies, please use their coordinated address writer.

Instructions: Long press FUN button for 3 seconds, the controller automatically enter the DMX address writing mode, displaying as following:

No.	Submenu Function (Press MODE+/- to Change Menu Below)	LCD Display	Setting Methods
1	DMX Address Reading Function	READING ADDR: 000 REP: 00	Enter the menu, the controller automatically reads and displays the first address and actual pixel for current connected DMX lighting. REP display as 01, 02, 04, 08, 16, means the distribution of pixels of the lamps is 16,8,4,2,1 pixels respectively. For example, the lamps assigned to 8 pixels, the REP reads 02.

No.	Submenu Function (Press MODE+/- to Change Menu Below)	LCD Display	Setting Methods
2	DMX Address Writing Function (to support the address writing for single lamp) (to support the address writing for multiple lamps) (to support the same of the first address of each lamp)		<p>Press SPEED +/- to switch 3 parameters, press BRT +/- to change the value.</p> <p><b>WRITING ADDR:</b> Write the first address of the DMX lighting, the default is 001.</p> <p><b>REP:</b> Write the actual pixels, the default is 01, means the lamps assigned to 16 pixels.</p> <p><b>STEP:</b> Fill in the plus &amp; minus step when set the "WRITING ADDR", the default is 48, meaning each plus &amp; minus step is 48 for the first address.</p> <p>1. When writing address for each lamp individually, use the "step" can quickly modify the first address of each lamp.</p> <p>2. When multiple lamps in series connection and set the "REP" as 01,02,04,08,16, each lamp is assigned 16,8,4,2,1 pixels individually, the first address of each lamp will increase progressively. For instance, set the "WRITING ADDR" as 001," REP as 02, then the first address of each lamp is 001, 025,049 in sequence, each lamp is assigned 8 pixels.</p> <p>3. When multiple lamps in series connection and set the "REP" as 01S,02S,04S,08S,16S, each lamp is assigned 16,8, 4,2,1 pixels individually, set the same first address for all lamps. For instance, set the "WRITING ADDR" as 001, "REP" as 02, then the first address of all lamps together is 001, each lamp is assigned 8 pixels.</p>
3	The DMX address testing verification		<p><b>TESTING ADDR:</b> fill in the test address value.</p> <p><b>VAL:</b> fill in DMX value from 0 to 255 in the testing address, default is 255. for the other DMX address, the date sent is 0.</p> <p><b>STEP:</b> fill in the plus &amp; minus step when set the "WRITING ADDR", the default is 48, meaning each plus &amp; minus step is 48 for the testing address.</p>

## 8. Attention:

- 8.1 The product shall be installed and serviced by the qualified person.
- 8.2 This product is non-waterproof. Please avoid the sun and rain. When installed outdoors please ensure it is mounted in a water proof enclosure.
- 8.3 Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
- 8.4 Please check if the output voltage of the LED power supply used comply with the working voltage of the product.
- 8.5 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.
- 8.6 Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
- 8.7 If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.

## 9. Warranty Agreement:

9.1 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.

9.2 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.

9.3 Repair or replacement as provided under this warranty is the exclusive remedy to the customer. We shall not be liable for any incidental or consequential damages for breach of any stipulation in this warranty.

9.4 Any amendment or adjustment to this warranty must be approved in writing by our company only.

★This manual only applies to this model. We reserve the right to make changes without prior notice.