

LED101

Multi-color LED Lamp

USER MANUAL

Function Introduction

1. System Structure: Composed by the multi-function controller LED101KT and the LED lamp LED101-1
2. Available using place: DISCO hall, bar shop, CalaOK, Stage hall, outside building line and etc.

LED101-1 LED lamp

I、 General Technical Data:

1. Size: 1000 × 50 × 75mm
2. Voltage: AC86V~240V, 60Hz
3. Power Waste: P 12W
4. Protection grade: IP66
5. Withstand Voltage: 3750V
6. Life: about 50,000~ 100,000 hours
7. Weight: 1.8kg

II. Main Structure

Composed by the high capability R.G.B. three basic colors of LED lamp, the hard alnico bracket, the switch power and the wire controlling board.

LED101KT controller

I. General Technical Data

1. Size: 180 × 125 × 49mm
2. Voltage: AC220~240V, 50/60Hz
3. Power Waste: P 1.5W

II. General Function:

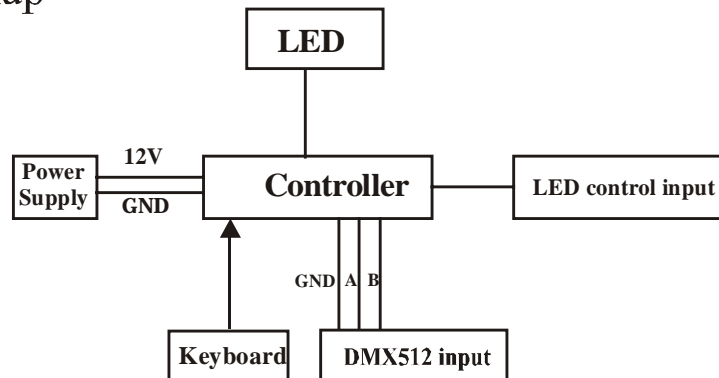
1. With DMX512 input function
2. With 38 kinds of Auto moving mode
3. With 38 kinds of single adjustable moving mode
4. Can one time control 4000PCS(max.) of LED TUBE.
5. Auto safe mode data function.
6. The initialize data setting mode .
7. RGB dimmer by DMX console.

III. Install steps of first time:

1. LED tube quantity test: Connect to power directly (Don't connect with console). The LED tube is OK if it will be full white.
2. Test the connection between console and all LED tubes: Switch on console, press MODE button, select TEST MODE, and press SET UP button, the screen will show **connection OK if tubes are red?** All LED tube will be full red if the connection is OK.

3. LED tube setting: Press MODE, select ADDRESS MODE and press SETUP button, the screen will show **Initializing addr Waiting** about 2-3 seconds. The screen will show **OK! Address is done** once finishing setting.
4. Select working mode: Press MODE to select working mode. (Attention: Please do as above three steps if you connect LED tubes first time or reconnect them otherwise LED tubes can not work correct.)

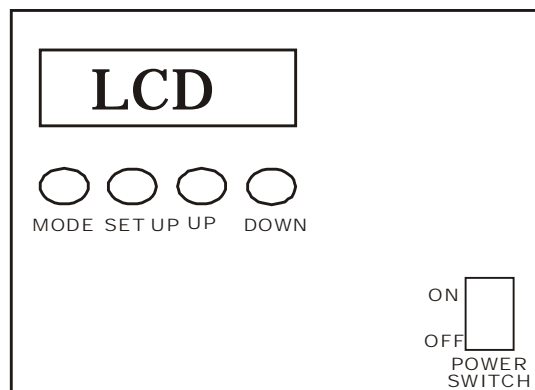
IV、 Structure Map



V、 Data Signal Line:

Data Line	Function
1	GND
2	B Femail Signal
3	A Mail Signal

VI、 Using Illustration:



There are four function buttons on the controller: MODE, SET UP, UP and DOWN.

1 .To adjust according to the MODE button:

Number	Function
1	BLACKOUT
2	STATIC RED
3	STATIC GREEN
4	STATIC YELLOW
5	STATIC BLUE
6	STATIC PURPLE
7	STATIC CYAN
8	STATIC WHITE
9	FAST CHANGE
10	SLOW FLOW1
11	FAST FLOW1
12	FAST FLOW2
13	BLACK RUN1
14	ROLL CHASE
15	ROLL COLOR
16	COLOR 1/4
17	COLOR1 /4
18	COLOR 1/2
19	COLOR FLASH
20	B & W FLOW
21	R & G FLOW
22	G & B FLOW
23	R & B FLOW
24	R & G CHASE1
25	R & G CHASE2
26	R & B CHASE1
27	R & B CHASE2
28	R & W CHASE1
29	R & W CHASE2
30	B & G CHASE1
31	B & G CHASE2
32	W & G CHASE1
33	W & G CHASE2
34	RAINBOW CHASE1
35	RAINBOW CHASE2
36	RAINBOW CHASE3
37	RAINBOW CHASE4
38	RAINBOW CHASE8
39	AUTO MODE
40	TEST MODE
41	ADDRESS MODE
42	Factory settings load
43	GRAPH MODE
44	DMX512 MODE

2. To adjust according to the SETUP button:

Number	Show Data	Illustration	
		Max	Min
1	FLASH	100	0
2	INTERVAL	100	0
3	RUN SPEED	100	0
4	TUBE QTY	Over 4000	0
5	DMX ADDR	255	1

3. **UP**: adding data button/Reset the data ,press the button SETUP to confirm.

4. **DOWN**: reducing data button/Reset the data ,press the button SETUP to confirm.

5. Set up the DMX address:

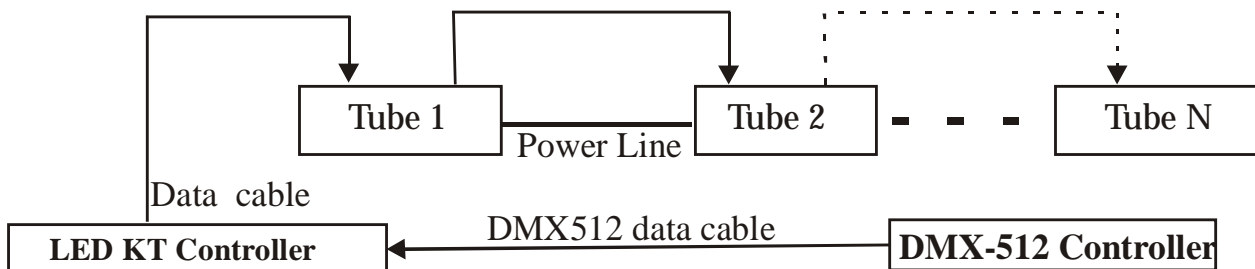
1). Press MODE key and choose the DMX MODE,

2). Press SETUP key to enter.

3). And then press UP or DOWN key choosing the Original DMX channel of moving mode. The sequence of the four channels is MODE, SPEED, INTERVAL, FLASH or 0, RED, GREEN, BLUE .

4). Press SETUP

VII, Installation Map:



VIII. DMX512 control mode:

1, MODE, SPEED, INTERVAL, FLASH

2, 0, RED, GREEN, BLUE:

Mode 1: The value of first channel over 0

Mode 2: The value of first channel is 0.

IX. After into the DMX mode, will totally receive 4 lines signal, to adjust the address by choose UP and DOWN, (1-255), initialize the address as '1'.

1、 First channel DMX signal data: 0-255 control the 38 kinds of state. The following was the data setting and the statement list(The DMX value between 0 to 47 are static program, do not control be channel 2、 3).

Data Value	Statement
0~5	BLACK
6~11	STATIC RED
12~17	STATIC GREEN
18~23	STATIC YELLOW
24~29	STATIC BLUE
30~35	STATIC PURPLE
36~41	STATIC CYAN
42~47	STATIC WHITE
48~53	FAST CHANGE
54~59	SLOW FLOW1
60~65	FAST FLOW1
66~71	FAST FLOW2
72~77	BLACK RUN1
78~83	ROLL CHASE
84~89	ROLL COLOR
90~95	COLOR 1/4
96~101	COLOR1 /4
102~107	COLOR1 1/2
108~113	COLOR FLASH
114~119	B & W FLOW
120~125	R & G FLOW
126~131	G & B FLOW
132~137	R & B FLOW
138~143	R & G CHASE1
144~149	R & G CHASE2
150~155	R & B CHASE1
156~161	R & B CHASE2
162~167	R & W CHASE1
168~173	R & W CHASE2
174~179	B & G CHASE1
180~185	B & G CHASE2
186~191	W & G CHASE1
192~197	W & G CHASE2
198~203	RAINBOW CHASE1
204~209	RAINBOW CHASE2
210~215	RAINBOW CHASE3
216~221	RAINBOW CHASE4
222~255	RAINBOW CHASE8

2、 Second channel control the speed:

Value	Speed
0	0
255	100

3、 Third channel control the time interval:

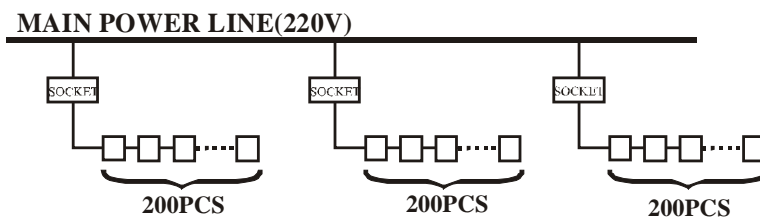
Value	Time Interval
0	0
255	100

4、 Fourth channel control the strobe:

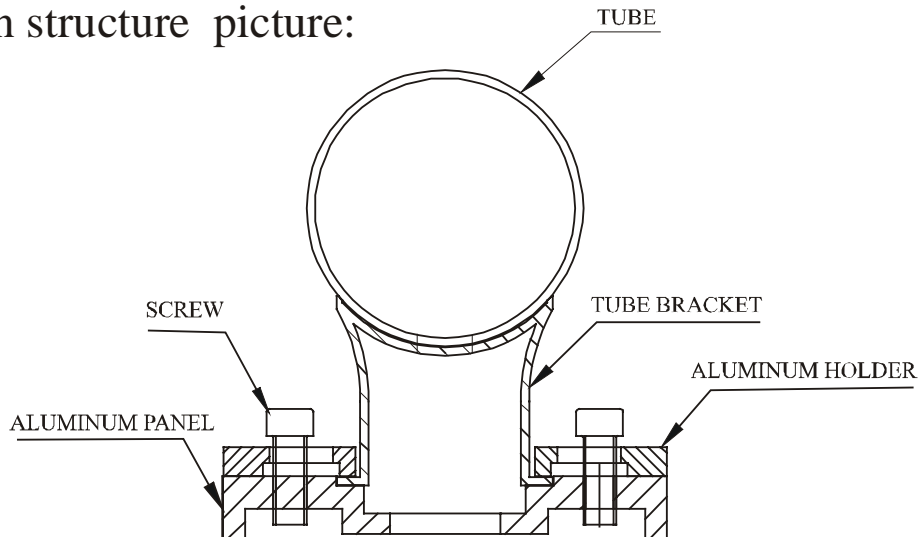
Value	Strobe
0	0
255	100

X.Warning:

1. Try the best to avoid the thunder field and high voltage place with strong magnetic field.
2. The controller should be install indoor. If install in outdoor, it should be make the waterproof work.
- 3.The power Line was 15A max. If the load is over 15A when connect the LED lamp,it should add the additional power socket . If the power voltage is 220V, the power line can connect 280PCS (max.), If the power voltage is 110V,that it is 140PCS(max.).
- 4.Installation sample picture (220V example):



5 .Installation structure picture:



XI、 Problems and Answers:

Problems	Analyse	Answers
All do not at work	1、 Plug no electronic 2、 Consol no signal 3、 The first tube dead	1、 change socket; 2、 change controller ; 3、 change the first tube; 4、 change the controlling mode
The frontal tubes work ,but the back tubes not work	1、 The LED tube quantity Setting wrong on the console 2、 The connecting of signal	1、 change the tube quantity setting on the console ; 2、 check and connect the power line and signal line or change the tube between
At the middle not work, others work	PCB broad dead	Change the not work LED tube
In one tube there is one place not work or the color not equality	PCB LED dead	Please check the thirteenth point to get the reference of how to change LED lamps
Unsteable, do not accept control by the controller	1、 controller dead ; 2、 the place has strong interfere signal ; 3、 the power line over load,	1、 change the controller ; 2、 amend that place's interfere ; 3、 increace the load of the power line and socket or reduce the LED tube quantity, increase the

XII、 DMX address setting method for LED controller:

- 1、 Open the AC power on the controller.
- 2、 Press and choose the DMX512 MODE.
- 3、 Press SETUP button, the screen will shows as DMX addr:***.
- 4、 Press UP and DOWN button, to adjust the right address code.
- 5、 Press SETUP for confirmation.

XIII、 Replace LED lamp:

- 1) Look for the not bright LED lamps. For example, when the LED tube is white, but the color of somewhere is purple, it indicates that the green LED is burned.
- 2) Open cover of both sides of LED tube.
- 3) Disassemble the four cables of both sides of LED PCB by electric iron.
Attention: Please be care of the function of different color cables:
Black GND; Red (small) -- +12V; White A+; Red (big) B-.
- 4) Take out the LED PCB from the tube.
- 5) Use the static-proof electric iron to unsolder the burned LED lamp.
- 6) Install the good LED lamp and solder it with the soldering tin. Please pay more attention to the polarity of LED foot. The anode has been marked as + on PCB. The longer fee should be soldered at + position.
- 7) Cut away the over-long LED foot.
- 8) Reassemble the LED PCB into LED tube.