



USER MANUAL

LED903 (LED BAR 90*3W RGBAW)



Catalogue

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Please read over this manual before operating the light

1. Summarize

➤ Summarize

Thank you for purchasing our LED wall washer **LED903-RGBAW**. Please read these instructions carefully before begin and operate the fixtures according to these instructions to avoid any possible damages and accidents causes by misusage.

➤ Products introduction

This LED wall washer is covered by tensile aluminum, designed in a fashion of hydrodynamic form. It uses high power R, G, B, A, W 5 kinds LED. Each kind of LED can be independently dimmer. It uses power switch, performs low weight and consumption, stable capability and long life. The built-in program includes dimmer, strobe, water, gradual change, fading and so on. International standard DMX 512 signal is requested.

➤ Packing list(2 lights in one package)

- **LED903-RGBAW** light 2pc
- bracket 2 pc
- Quick Release-Lock 4pc
- DMX cable 2 pc
- Power cable 2pc
- The use manual 1pc
- Warranty Card 1pc

2.Safety Information

➤ Safety Notes

! Enquire the skilled people before any repair;

! Always make sure disconnect from the power source before setting up, serving and moving;.

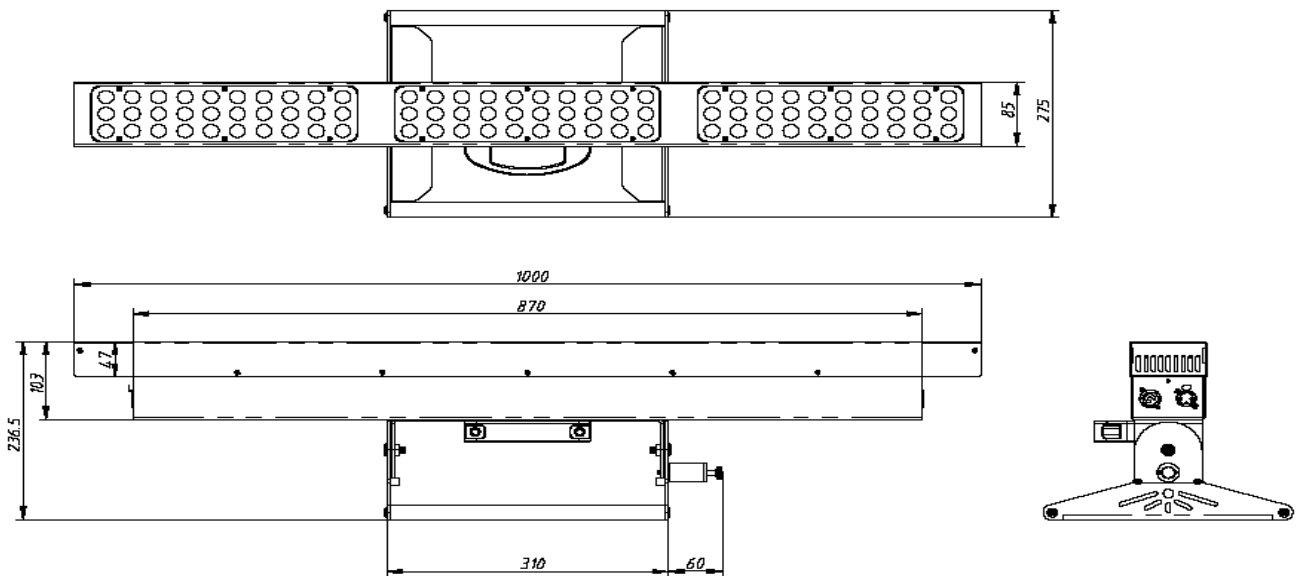
! Avoid direct eye exposure to the fixture when it is on;

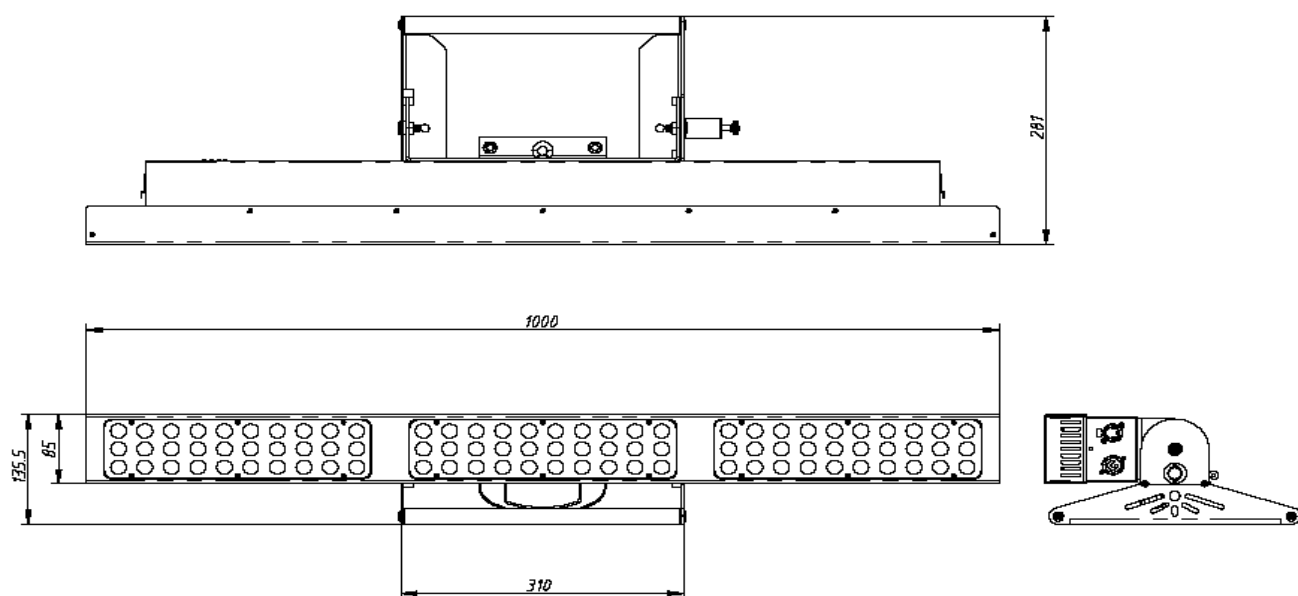


➤ Safety instruction

- Make sure the power supply voltage are consistent with this lights, Ensure the use of voltage is in the range of the request technical parameter.
- before the installation, please check the light's fasteners and mechanical structure have been received in good condition and appear no damage.
- This light is designed for indoor, working temperature should be lower than 50 degree.
- The fixtures should be mounted in any position provided there is adequate room for ventilation. Make sure there are no inflammable and explosive items (ornaments) in 0.5 meters away.
- Yellow / green cabling earthling safety; no flicker when the fixture is working on.

3. Outside Size Picture





4. Main Function

- protection rating: IP20, for indoor use
- DMX512 signal, 4-button DMX Address setting LED display panel with ON/OFF function.
- Master/slave, interconnected multi-machine control
- 15°、25°、45° lenses for options
- using switching power supply to protect the LED to work well
- each color of LED with independent dimming. RGBAW can make perfect color mixing effect.
- Strobe、gradual change、jumping change
- DMX512 channels: optional

5. DMX Control Function

3CH

Channel	DMX Value	Control Function	Remark
1CH	0-255	R dimming 0-100%	
2CH	0-255	G dimming 0-100%	
3CH	0-255	B dimming 0-100%	

4CH

Channel	DMX Value	Control Function	Remark
1CH	0-255	R,G,B mixing dimming 0-100%	
2CH	0-255	A dimming 0-100%	
3CH	0-255	W dimming 0-100%	
4CH	0-255	General dimming 0-100%	

5CH

Channel	DMX Value	Control Function	Remark
1CH	0-255	R dimming 0-100%	

2CH	0-255	G dimming 0-100%	
3CH	0-255	B dimming 0-100%	
4CH	0-255	A dimming 0-100%	
5CH	0—255	W dimming 0-100%	

9CH

Channel	DMX Value	Control Function	Remark
1CH	0-255	General dimming	1
2CH	0-255	Red Dimming 0—100%	1
3CH	0-255	Green Diming0—100%	1
4CH	0-255	Blue Dimming 0—100%	1
5CH	0-255	Amber Dimming 0—100%	1
6CH	0-255	White Dimming 0—100%	1
7CH	0-14	Dimming	3
	15-255	Strobe Speed	
8CH	0-3	Invalid	3
	4-31	Mode 1(4 is the slowest,31 is the fastest)	
	32-59	Mode 2	
	60-87	Mode 3	
	88-115	Mode 4	
	116-143	Mode 5	
	144-171	Mode 6	
	172-199	Mode 7	
	200-227	Mode8	
	228-255	Mode1~8	
9CH	0-14	Invalid	2
	15-255	Color changing,255 is the fastest	

15 CH

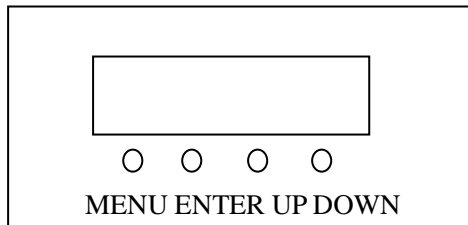
Channel	DMX Value	Control Function	Remark
1CH	0-255	R1 0—100%	
2CH	0-255	G1 0—100%	
3CH	0-255	B1 0—100%	
4CH	0-255	A1 0—100%	
5CH	0-255	W1 0—100%	
6CH	0-255	R2 0—100%	
7CH	0-255	G2 0—100%	

8CH	0-255	B2	0——100%	
9CH	0-255	A2	0——100%	
10CH	0-255	W2	0——100%	
11CH	0-255	R3	0——100%	
12CH	0-255	G3	0——100%	
12CH	0-255	B3	0——100%	
12CH	0-255	A3	0——100%	
12CH	0-255	W3	0——100%	

19 CH

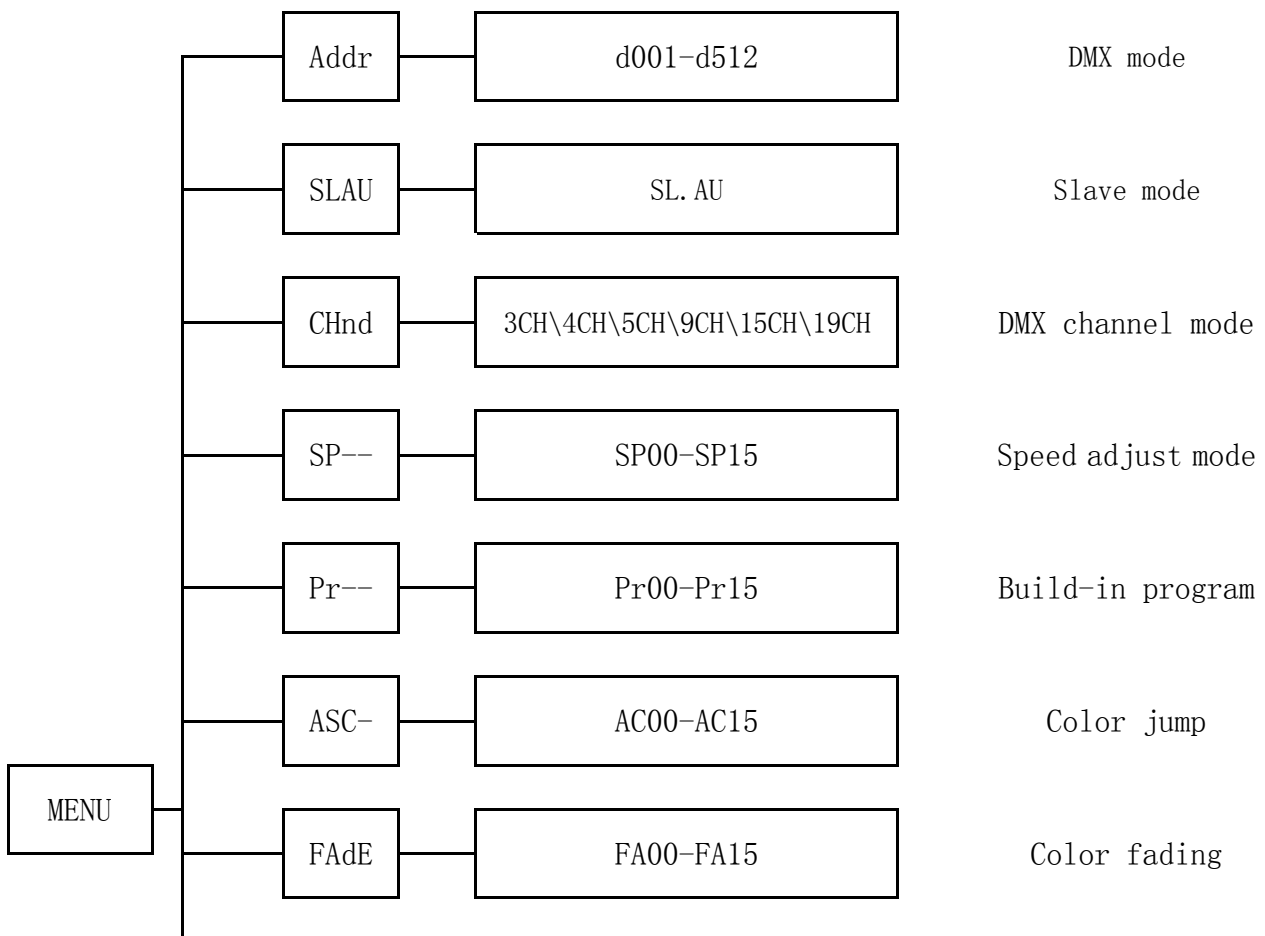
Channel	DMX Value	Control Function	Remark
1CH	0-255	General dimming 0——100%	1
2CH	0-255	R1 0——100%	1
3CH	0-255	G1 0——100%	1
4CH	0-255	B1 0——100%	1
5CH	0-255	A1 0——100%	1
6CH	0-255	W1 0——100%	1
7CH	0-255	R2 0——100%	1
8CH	0-255	G2 0——100%	1
9CH	0-255	B2 0——100%	1
10CH	0-255	A2 0——100%	1
11CH	0-255	W2 0——100%	1
12CH	0-255	R3 0——100%	1
13CH	0-255	G3 0——100%	1
14CH	0-255	B3 0——100%	1
15CH	0-255	A3 0——100%	1
16CH	0-255	W3 0——100%	1
17CH	0-14	dimming	3
	15-255	Strobe speed	
18CH	0-3	invalid	3
	4-31	Mode 1(4 is the slowest,31 is the fastest)	
	32-59	Mode 2	
	60-87	Mode 3	
	88-115	Mode 4	
	116-143	Mode 5	
	144-171	Mode 6	
	172-199	Mode 7	
	200-227	Mode8	
	228-255	Mode1~8	
19CH	0-14	Invalid	2
	15-255	Gradual change, 255 is the fastest	

6. Display Operation



- MENU : access the menu or return to a previous menu option
- ENTER: select the current menu option
- UP: menu selection or parameter increments
- DOWN: menu selection or parameters decrease

7. Menu Instruction



FLAS	FL00-FL15	White strobe
rL--	r. 000-r. 255	Red dimming
GL--	G. 000-G. 255	Green dimming
bL--	b. 000-b. 255	Bule dimming
AL--	A. 000-A. 255	Amber dimming
UL--	U. 000-U. 255	White dimming
SouA	So. uA	Sound active
LED	on/Off	Display panel ON/Off

1. Operating instruction:

MENU (UP/DOWN) +ENTER+UP/DOWN) +ENTER

For example, choose DMX mode, operate as follows:

- Press MENU, go back to the initial setting
- Press UP / DOWN until Addr
- Press ENTER to choose, the display will glinting at this moment
- Press UP / DOWN to change the address code to select d001
- Press ENTER to select and store the current menu options. DMX mode will be stored automatically and the screen will stop glinting.

- ✓ DMX channel choosing Operation: CHNd mode
- Press Menu, go back to the initial setting

-
- Press UP/DOWN, until shows “CHNd”
 - Press ENTER to access the menu items to select, the screen will now be glinting
 - Press UP/DOWN to change the DMX Channel: 3CH、4CH、 5CH
- At last, press ENTER to confirm, if it delay for 3 second, DMX channel choosing will be saved, and go back to DMX receive mode(d001); If your press ENTER for short time or not press, delaying for 8 seconds, the DMX channel will select to be saved automatically, and then go back to DMX receive mode(d001)
- ✓ Turn off the display panel:
 - Press Menu, go back to the initial setting
 - Press UP/DOWN, until shows “LED”
 - Press ENTER to access the menu items to select, the screen will now be glinting
 - Press UP/DOWN to choose “Off”
 - At last, press ENTER to confirmed and choose the working mode.The panel will auto colsed if no operation for 15 secondds. Press any button to active it.

2. Details of built-in programs (Pr- -)

Pr00:Red;	Pr01:Blue;	Pr02:Green;	
Pr03:Amber;	Pr04:White;	Pr05:Red+Blue+Green;	
Pr06:White+Amber;	Pr07: Mode 1	Pr08: Mode 2	
Pr09: Mode 3	Pr10: Mode 4	Pr11: Mode 5	
Pr12: Mode 6	Pr13: Mode 7	Pr14: Mode 8	Pr15: Mode 1-8

Note: Pr07--- Pr15 Can change the content Of SP, modify the speed of jumping change , SP00 is the fastest, SP15 is the slowest

8. Operating Control Instruction

➤ Master/Slave

Master: The master should always work as a master as long as it is not set in a DMX mode whatever other modes it is. And it send out the signal so that the slave synchronous with it. To avoid the host signal and DMX512 signals interfere with each other, should cut off

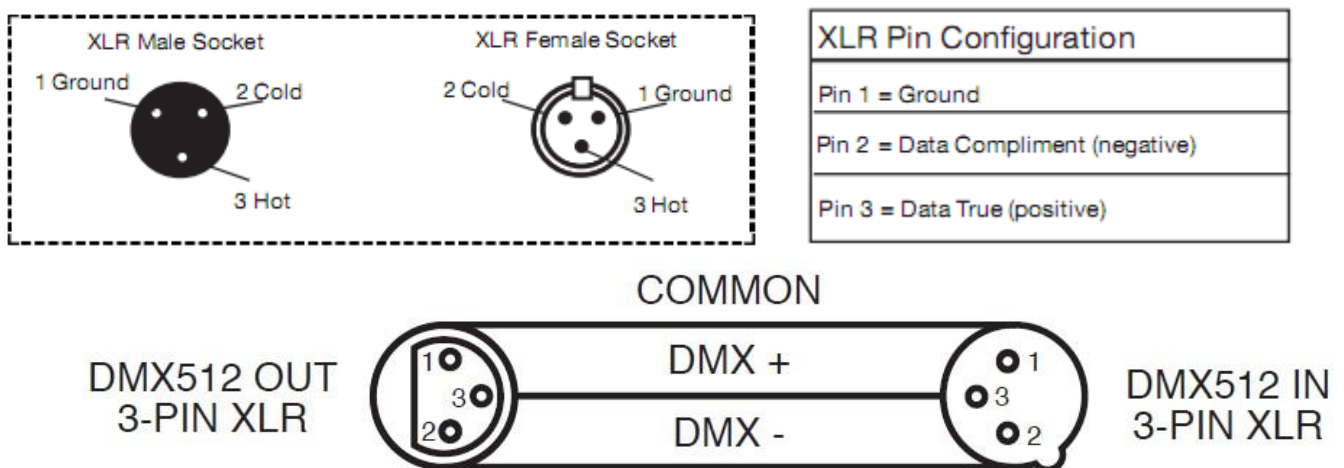
the DMX512 signals. The signal lines are longer than 60 meters(20 lamps) ,should increase a signal amplifier.

Slave: It must be in the SLAV mode and the address code should be A001 to assure receive the master's signals correctly. Only one light can be set as a Master and others are slaves.

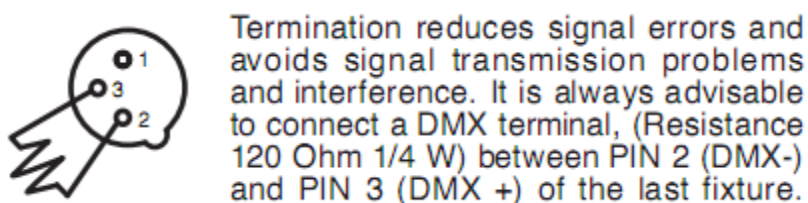
9. XLR cable connecting

➤ XRL cable:

The stand connection way of the XRL is: one end connect to the male plug ,and the other connect to the female.



Noted : In order to avoid failures and interference signal transmission , we connect a resistance 120Ω ($1/4W$) at the end of the DMX connecting as below:



➤ The Conversion between 3pin and 5 pin XLR

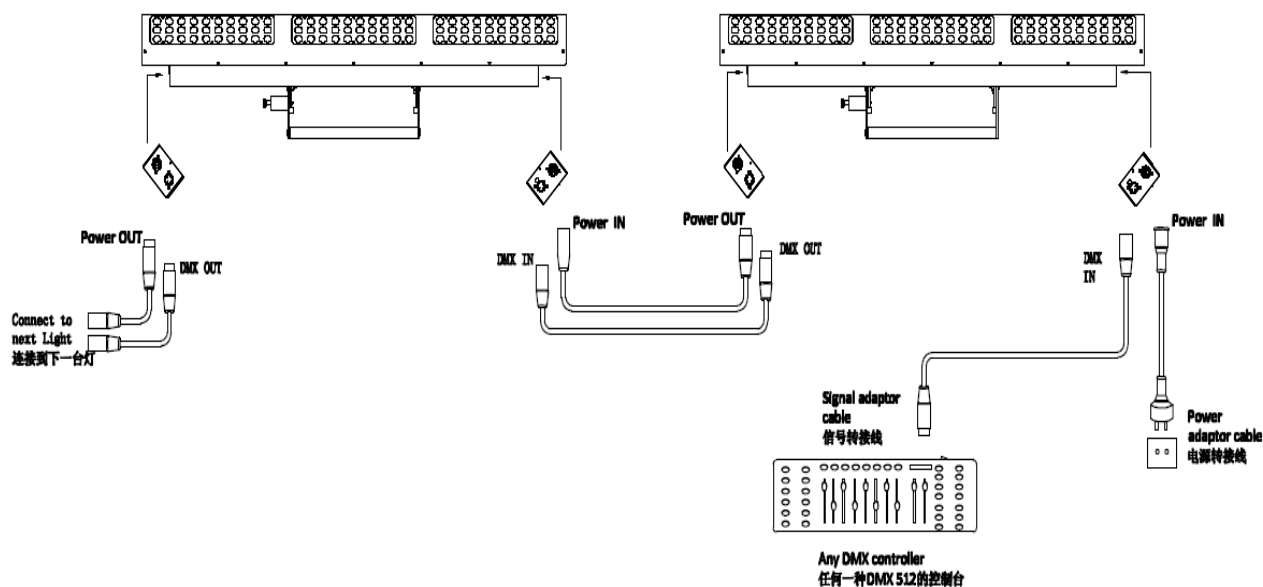
If the output cable of DMX512 controller is the 5PIN, please use 1pc 5PIN to 3PIN

cable

3-Pin XLR to 5-Pin XLR Conversion		
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
Ground/Shield	Pin 1	Pin 1
Data Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Do Not Use
Not Used		Do Not Use

10. Connecting picture

- Light connecting picture :



11. Problem Analysis

Problem	Checking way
Can not turn on the light	<ul style="list-style-type: none"> ◆ Check the power source plug is in normal or not ◆ Check the switch of the lights is off or on ◆ Check the fuse if in normal
DMX can not control it	<ul style="list-style-type: none"> ◆ Check the DMX cable is connect to the lights or not ◆ Check the DMX512 controller work in normal or not ◆ Check the DMX cable is normal or not ◆ Check if the lights is in DMX mode (A001)
Display not bright	<ul style="list-style-type: none"> ◆ When connect to the electricity ,did the led flash one time? If so , the power source is normal; If not ,please check if the switch and the transformer has power out ◆ Check if the power input of the IC board is normal ◆ Check if the cable connect to the display loose ◆ Change the main board to see if it is normal. ◆ Chang the display
LED not light	<ul style="list-style-type: none"> ◆ When connect to the electricity ,did the led flash one time? If so , the power source is normal; If not ,please check if the switch and the transformer has power out ◆ Check if the power input of the IC board is normal ◆ Check if the cable connect to the display loose ◆ Change the main board to see if it is normal. ◆ Chang the display
	<ul style="list-style-type: none"> ◆ LED is connect by leds in series first, then connect parallel, so please check if the leds is loose

Some of the LED not light	<ul style="list-style-type: none"> ◆ Use the multimeter to check if the led is bright or not, of not, please change the led ◆ check whether current limiting resistor is normal or not ◆ Check constant current IC is normal or not (compared with the normal IC)
Single color leds always bright/not bright	<ul style="list-style-type: none"> ◆ Check the switch of this color is normal or not ◆ Change the IC control board

Noted : only professional persons can do as above !

12. Technical Specification

- Using high brightness LED display panel for DMX address setting, easy to operate
- Input voltage: AC 100V-240V/50-60HZ
- Consume: 200W
- Lamp Type: High Power LED(3W)
- Lamp Spec: R (18PCS) , G (18PCS) , B (18PCS) , A (18PCS) , W (18PCS)
- LED span:50000~100000 hours
- LED PWM dimming frequency: >400Hz
- Anti-electricity intension: 1.5KV
- Insulation Resistance: > 2 MΩ
- Control Signal: DMX512
- Control mode: stand alone/ DMX/ master and slaver/sound active
- Channel: 3CH、4CH、5CH、9CH、15CH、19CH
- Beam Angle: 15°, 25°,45°
- Cooling mode: Natural Convection
- Size: 1000*275*236.5mm
- Net Weight: 10KG