LED PAR 54x3in1 RGB

LD611-54031

User Manual

CE RoHS COMPLIANT

1 Understanding of Product

1.1 Security Warning

- When unpacking and before disposing of the carton, check if there is any transportation damage before using the product. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.
- This product is suitable for indoor and outdoor, its protection grade is IP65.
- Do not install the product or project the beam onto inflammable surfaces. Minimum distance is 5 M ⏵ 5M ⎸.
- The product is only intended for installation, operation and maintenance by qualified personnel. And read the user manual and labels on the lighting carefully before use.
- Product should install in a cool place. Keep away from the wall 50cm.
- Do not look directly at the lamp light (especially for epilepsy), so as not to cause damage to the eyes.
- Keep the optical system clean. Do not touch the LED lens with bare hands. Do not use any alcohol liquid or any other liquid to clean the optical system. Use medicinal absorbent cotton to clean it.
- Please do not attempt to dismantle and/or modify the product inner structure. Otherwise, would not provide 1 year of free warranty.
- Electrical connection must only be carried out by qualified personnel.
- Before installation, ensure that the voltage and frequency of power supply match the power requirement of the product.
- It is essential that each product is correctly earthed and that electrical installation conforms to all relevant standards.
- Do not connect this device to any other types of dimmer apparatus.
- Make sure that the power-cord is never crimped or damaged by sharp edges.Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug.Never pull out the plug by tugging the power-cord.
- There is no user serviceable parts inside the product, do not open the housing and never operate the product with the cover removed.
- Place the unit where kids can't reach.

If you have any questions,don't hesitate to consult our dealer or manufacturer.

Important: Before any installation, maintenance and cleaning, please ensure that the power cut off!
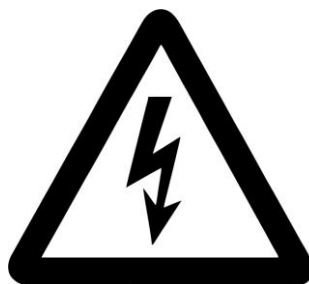
1.2 Main Technical Parameters

Power supply

➤ Rated Voltage: AC90~240V

➤ Rated Frequency: 50~60Hz   ± 10%

➤ Rated Power: 200W

LED

➤ LED Type: 54pcs ✕ 3in1 RGB Chips

➤ Drive Current: 2700mA x 3

➤ Colors: 256^3 (0~100% Dimming)

➤ Life: About 50,000 hours

Control

➤ Control Protocol: standard DMX-512 signal

➤ Channel Mode: 3CHS/4CHS/5CHS/6CHS/9CHS

➤ Control Mode: DMX-512, auto mode, master-slave mode, static mode

➤ Auto Effect: 5 kinds of auto effects

Optical System

➤ Dimming mode: Dimmer 0:   Normal dimming. Dimmer [X]: fading speed.

➤ Dimmer: 0~100% linear dimming.

➤ Strobe rate: 1~20Hz
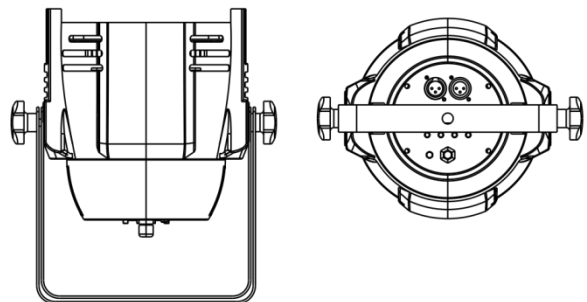
➤ Beam angle: 25°

Physical

➤ Dimensions: 294 x 220 x 324mm

➤ Net Weight: 2.5kgs

➤ Surface Treatment: Aluminum die casting, powder coating

➤ Housing color: Black

➤ Connection: DMX cable IN/OUT, Power cable IN/OUT
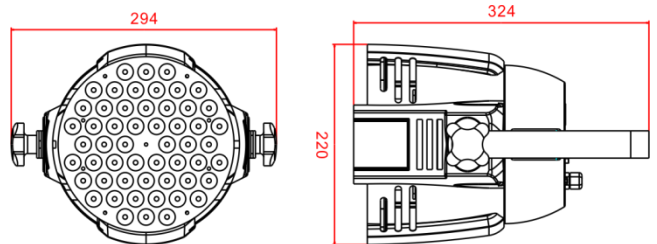
Security

➤ Cooling System: Convection

➤ Operating Environment: Indoor

➤ Working Temperature:-20°C～40°C

1.3 Product Features

Using latest LED control technique, newest intelligent LED Par light can realize intelligent operation and control through its special menu at the backside. It's more convenient and easy to operate.This product is designed for building large area spread light,large concerts, outdoor landscape lighting, wedding scene, small performances, slow club KTV and various performance occasion. Its main features include:

1) Static color Settings (STATIC).
2) The static power consumption of the control panel is 0.3W, and its efficiency will reach up to 97%
3) 4K refresh rate, get rid of the dark fringe or waves during taking the videos .
4) Linear dimming and nonlinear dimming (DIMMER).
5) Overheating protection function
6) LED display screen.
7) 5 kinds DMX working mode.
9) Master-slave control, multi-units for synchronous control.

2 Product Installation

2.1 Power Connection Method

Please connect power as following ：

L（live wire）=brown wire　　E（earth wire）=yellow/green double color wire　　N（null line）=blue wire

When connecting power, ensure that the voltage and frequency of power supply match the power requirement of the product.

This equipment belong to class 1 protection equipment, therefore, the yellow-green double colors wire must be earthed correctly by qualified personnel. Before installation, ensure that the voltage and frequency of power supply match the power requirements of product. In power supply and voltage fluctuation large areas, we suggest you to use 110V or 230V or use voltage regulator to supply power. After electrical connection, this product will have a few seconds self-check action, self-check finished can be used.

Input / output power cable diameter 2.5mm^2 (13AWG).

AC220V: can be connected **15 units** in series.

AC110V: can be connected **7 units** in series.

Important: It is essential that Yellow/green double color wire is correctly earthed and that electrical installation conforms to all relevant standards.

2.2 DMX Connection Method

2.2--1   When you set the DMX512 address code,, as below:

DMX Addr.1   DMX Addr.9   DMX Addr.17

DMX-512 Contorller
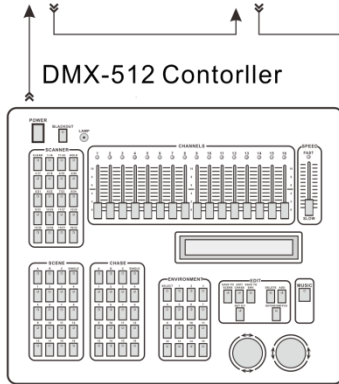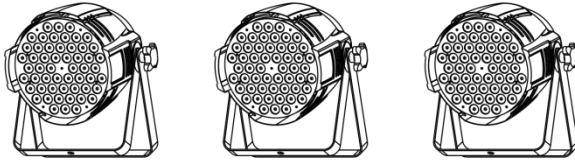
❖   The DMX interface of lamp needs be connected to the DMX   controller

❖   DMX address from 001 to 512.

Note: 1. As this fixture's DMX signal cable connection is Parallel connection, please don't more than 15 units.

2. If the signal cable is over 60m between the DMX512 controller And fixture or between two fixtures, then a DMX signal amplifier is needed.

3 Operation Method

3.1 Control panel functions introduction
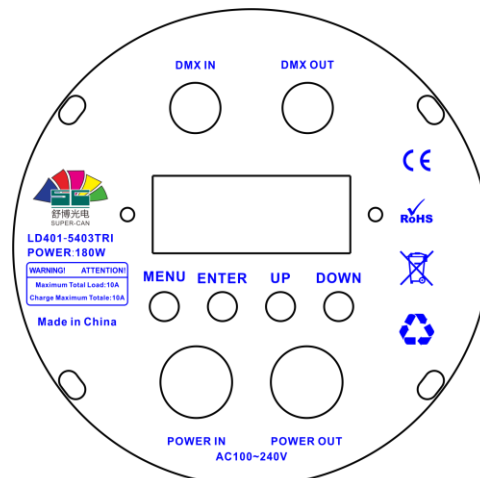
❖   MENU：Menu button/return button, enter the menu selection interface or previous menu.

❖   ENTER：Confirmation button, used to confirm the selected function.

❖   UP/DOWN：Upward/downward select function or Parameter increment / decrement.

3.2 Menu Overview

```
Menu ─┬─ STAT ─┬─ Red ──── 0-255
      │        ├─ Green ── 0-255
      │        ├─ Blue ─── 0-255
      │        └─ Strobe ─ 0-255
      ├─ Auto ─── At.01-05
      ├─ Dmx ──── 0-512
      ├─ Pers ─┬─ 3CHs
      │        ├─ 4CHs
      │        ├─ 5CHs
      │        ├─ 6CHs
      │        └─ 9CHs
      └─ Set ──┬─ Reset
               └─ Dim ─┬─ Off
                       └─ 0-9
```

3.3 Static Color Setting (STATIC)

```
Menu ─┬─ STAT ─┬─ Red ──── 0-255
      │        ├─ Green ── 0-255
      │        ├─ Blue ─── 0-255
      │        └─ Strobe ─ 0-255
      ├─ Auto ─── At.01-05
      ├─ Dmx ──── 0-512
      ├─ Pers ─┬─ 3CHs
      │        ├─ 4CHs
      │        ├─ 5CHs
      │        ├─ 6CHs
      │        └─ 9CHs
      └─ Set ──┬─ Reset
               └─ Dim ─┬─ Off
                       └─ 0-9
```
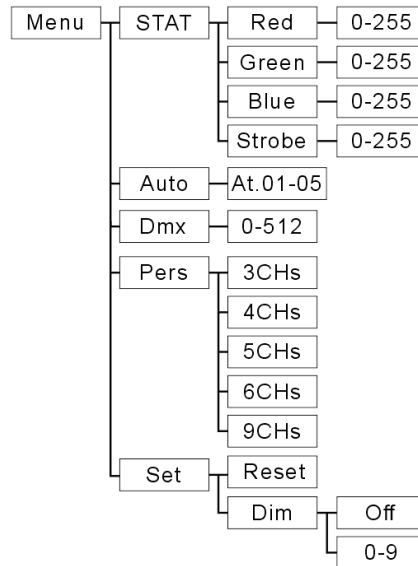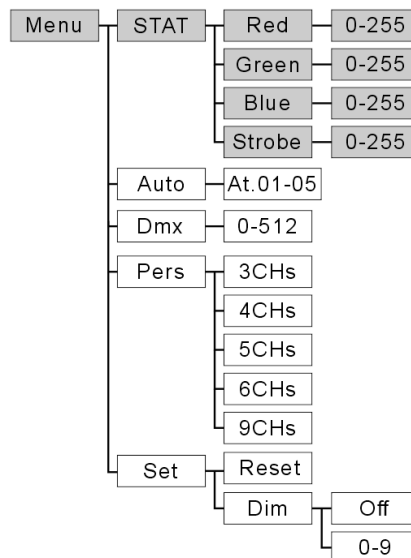
- Find【STATIC】menu and press【ENTER】 to enter color static setting.
- Press【ENTER】button to select【RED】,【GREEN】,【BLUE】, or【STROBE】.
- Press【UP/DOWN】button to adjust parameters.
- Press【MENU】button to return to the menu, the selected parameters will be automatically saved.
- After setting lighting fixture's static color, restart the lighting fixture's power supply. The setting was preserved. Exit menu, static color setting will be removed.

Note: When entered this submenu, the light fixture will automatically set to the data status sent by the master, other light fixtures should be set as the slave. Then,any other master lighting fixtures must be disconnected, as well as the DMX signal cables. Otherwise it will cause disordering.

3.4 Automatic Programming Setting (AUTO)

```
Menu ─┬─ STAT ─┬─ Red ──── 0-255
      │        ├─ Green ── 0-255
      │        ├─ Blue ─── 0-255
      │        └─ Strobe ─ 0-255
      │
      ├─ Auto ── At.01-05
      │
      ├─ Dmx ─── 0-512
      │
      ├─ Pers ─┬─ 3CHs
      │        ├─ 4CHs
      │        ├─ 5CHs
      │        ├─ 6CHs
      │        └─ 9CHs
      │
      └─ Set ──┬─ Reset
               └─ Dim ─┬─ Off
                       └─ 0-9
```
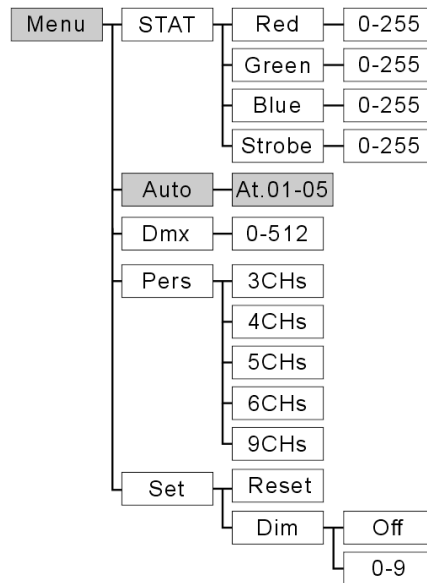
- Find【AUTO】menu and press【ENTER】to enter automatic programming setting.
- Press【UP/DOWN】button to select【AT.01~05】5 kinds of auto-program.【PT.01~10】10 kinds of programmable. Press【ENTER】to confirm your setting.
- After setting lighting fixture's automatic operation,restart the lighting fixture's power supply.The setting was preserved.Exit menu,automatic operation setting will be removed.

Note: When entered this submenu, the light fixture will automatically set to the data status sent by the master, other light fixtures should be set as the slave. Then,any other master lighting fixtures must be disconnected, as well as the DMX signal cables. Otherwise it will cause disordering.
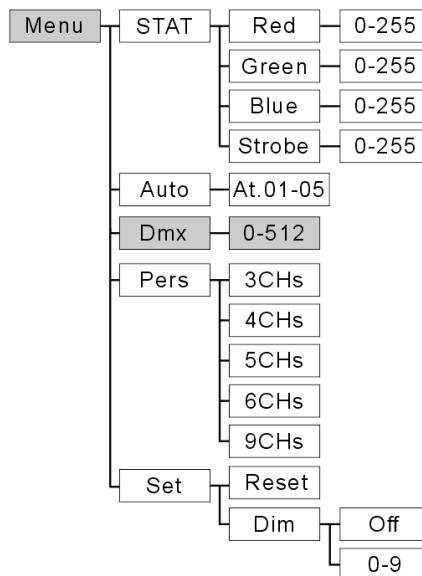
3.5 DMX code setting (DMX)

```
Menu ─┬─ STAT ─┬─ Red ──── 0-255
      │        ├─ Green ── 0-255
      │        ├─ Blue ─── 0-255
      │        └─ Strobe ─ 0-255
      │
      ├─ Auto ── At.01-05
      │
      ├─ Dmx ─── 0-512
      │
      ├─ Pers ─┬─ 3CHs
      │        ├─ 4CHs
      │        ├─ 5CHs
      │        ├─ 6CHs
      │        └─ 9CHs
      │
      └─ Set ──┬─ Reset
               └─ Dim ─┬─ Off
                       └─ 0-9
```

- Find【DMX】menu and press【ENTER】to enter address code setting.
- Press【UP/DOWN】button to select DMX address code.
- Press【ENTER】to confirm or【MENU】to exit, the selected address code will be automatically saved.

3.6 DMX Channel Mode setting (PERS)

```
Menu ─┬─ STAT ─┬─ Red ─── 0-255
      │        ├─ Green ── 0-255
      │        ├─ Blue ─── 0-255
      │        └─ Strobe ─ 0-255
      │
      ├─ Auto ── At.01-05
      ├─ Dmx ─── 0-512
      ├─ Pers ─┬─ 3CHs
      │        ├─ 4CHs
      │        ├─ 5CHs
      │        ├─ 6CHs
      │        └─ 9CHs
      └─ Set ─┬─ Reset
              └─ Dim ─┬─ Off
                      └─ 0-9
```
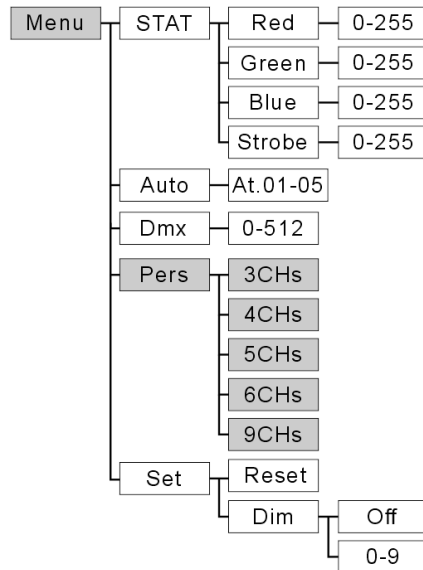
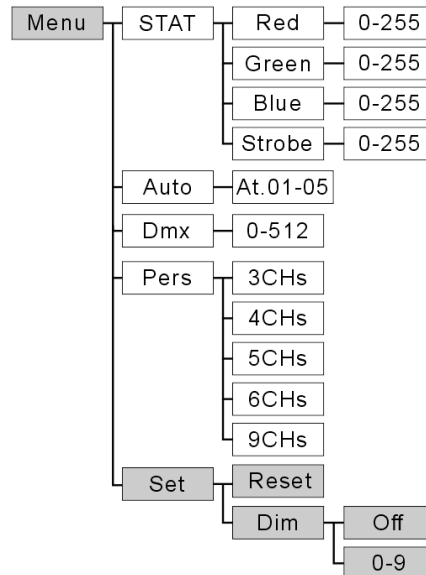- Find【PERS】menu and press【ENTER】to enter DMX channel mode setting.
- Press【UP/DOWN】button to select【8CH, ARC.1……】5 kinds DMX channel modes.
- Press【ENTER】to confirm or【MENU】to exit.The setting will be automatically saved.

3.7 Function Settings (SET)

```
Menu ─┬─ STAT ─┬─ Red ─── 0-255
      │        ├─ Green ── 0-255
      │        ├─ Blue ─── 0-255
      │        └─ Strobe ─ 0-255
      │
      ├─ Auto ── At.01-05
      ├─ Dmx ─── 0-512
      ├─ Pers ─┬─ 3CHs
      │        ├─ 4CHs
      │        ├─ 5CHs
      │        ├─ 6CHs
      │        └─ 9CHs
      └─ Set ─┬─ Reset
              └─ Dim ─┬─ Off
                      └─ 0-9
```

- Find【SET】menu and press【ENTER】to enter function setting.
- Press【UP/DOWN】button to select 【REST】restore factory settings,【ID】ID function setting, 【DIM】dimming mode setting.
- 【REST】restore factory settings, function settings and parameters will restore the factory settings.
- 【DIM】dimming mode setting,【OFF】means non-linear dimming closed,【DIM1~9】means 9 kinds of non-dimming speed optional.
- Press【ENTER】to confirm or【MENU】to exit and save the setting.

3.8 Temperature control protection State

When the temperature of the LED bead plate more than 65℃, the driver current begin slow down,to

protect the LED Chips bead is not damaged by high temperature heat aging.

4 Control Channel

4.1----3CH   3CH Mode:

Channel	DMX Data	Control function	Detail description
1	0 ⟺ 255	Red dimmer	Brightness 0~100%
2	0 ⟺ 255	Green dimmer	Brightness 0~100%
3	0 ⟺ 255	Blue dimmer	Brightness 0~100%

4.2----ARC.3   4CH Mode:

Channel	DMX Data	Control function	Detail description
1	0 ⟺ 255	Red dimmer	Brightness 0~100%
2	0 ⟺ 255	Green dimmer	Brightness 0~100%
3	0 ⟺ 255	Blue dimmer	Brightness 0~100%
4	0 ⟺ 09	NO FUNCTION	
	10 ⟺ 34	Linear dimming speed (DIM=OFF)	Fading speed
	35 ⟺ 59	Non-linear dimming speed1 (DIM=1)	Fading speed
	60 ⟺ 84	Non-linear dimming speed2 (DIM=2)	Fading speed
	85 ⟺ 109	Non-linear dimming speed3 (DIM=3)	Fading speed
	110 ⟺ 134	Non-linear dimming speed4 (DIM=4)	Fading speed
	135 ⟺ 159	Non-linear dimming speed5 (DIM=5)	Fading speed
	101 ⟺ 150	Non-linear dimming speed6 (DIM=6)	Fading speed
	151 ⟺ 200	Non-linear dimming speed7 (DIM=7)	Fading speed
	201 ⟺ 255	Non-linear dimming speed8 (DIM=8)	Fading speed

4.3----ARC.3+D   5CH Mode:

Channel	DMX Data	Control function	Detail description
1	0 ⟺ 255	Over dimmer	Brightness 0~100%
2	0 ⟺ 255	Red dimmer	Brightness 0~100%
3	0 ⟺ 255	Green dimmer	Brightness 0~100%
4	0 ⟺ 255	Blue dimmer	Brightness 0~100%
5	0 ⟺ 09	NO FUNCTION	
	10 ⟺ 34	Linear dimming speed (DIM=OFF)	Fading speed
	35 ⟺ 59	Non-linear dimming speed1 (DIM=1)	Fading speed
	60 ⟺ 84	Non-linear dimming speed2 (DIM=2)	Fading speed
	85 ⟺ 109	Non-linear dimming speed3 (DIM=3)	Fading speed
	110 ⟺ 134	Non-linear dimming speed4 (DIM=4)	Fading speed
	135 ⟺ 159	Non-linear dimming speed5 (DIM=5)	Fading speed
	160 ⟺ 184	Non-linear dimming speed6 (DIM=6)	Fading speed
	185 ⟺ 209	Non-linear dimming speed7 (DIM=7)	Fading speed
	210 ⟺ 255	Non-linear dimming speed8 (DIM=8)	Fading speed

4.4----ARC.3+S   6CH Mode:

Channel	DMX Data	Control function	Detail description
1	0 ⟺ 255	Over dimmer	Brightness 0~100%
2	0 ⟺ 255	Red dimmer	Brightness 0~100%
3	0 ⟺ 255	Green dimmer	Brightness 0~100%
4	0 ⟺ 255	Blue dimmer	Brightness 0~100%
5	0 ⟺ 9	NO FUNCTION	Strobe
	10 ⟺ 49	Synchronous slow strobe	
	50 ⟺ 99	Asynchronous slow strobe	
	100 ⟺ 149	Random slow strobe	
	150 ⟺ 199	Asynchronous fast strobe	
	200 ⟺ 255	Synchronous fast strobe	
6	0 ⟺ 50	Linear dimming speed (DIM=OFF)	Fading speed
	51 ⟺ 100	Non-linear dimming speed1 (DIM=1)	Fading speed
	101 ⟺ 150	Non-linear dimming speed2 (DIM=2)	Fading speed
	151 ⟺ 200	Non-linear dimming speed3 (DIM=3)	Fading speed
	201 ⟺ 255	Non-linear dimming speed4 (DIM=4)	Fading speed

4.5----STAG 9CH mode:

CHs	DMX data	Functions	Descriptions
1	0 ⟺ 255	Overall Dimmer	Brightness 0~100%
2	0 ⟺ 255	Red Dimmer	Brightness 0~100%
3	0 ⟺ 255	Green Dimmer	Brightness 0~100%
4	0 ⟺ 255	Blue Dimmer	Brightness 0~100%
5	0 ⟺ 9	NO FUNCTION	COLOR MACRO
	10 ⟺ 29	RED 100％/GREEN UP/BLUE 0％	
	30 ⟺ 49	RED DOWN/GREEN 100％/BLUE 0％	
	50 ⟺ 69	RED 0％/GREEN 100％/BLUE UP	
	70 ⟺ 89	RED 0％/GREEN DOWN/BLUE 100％	
	90 ⟺ 109	RED UP/GREEN 0％/BLUE 100％	
	110 ⟺ 129	RED 100％/GREEN 0％/BLUE DOWN	
	130 ⟺ 149	RED 100％/GREEN UP /BLUE UP	
	150 ⟺ 169	Red DOWN /Green DOWN /Blue 100％	
	170 ⟺ 255	Red 100％/Green 100％/Blue 100％/White 100％	
6	000 ⟺ 015	No function	STROBE
	016 ⟺ 215	Normal strobe	
	216 ⟺ 255	Random slow strobe	
7	0 ⟺ 10	NO FUNCTION	
	11 ⟺ 50	AUTO1	Auto-program effect running
	51 ⟺ 100	AUTO2	Auto-program effect running
	10 ⟺ 150	AUTO3	Auto-program effect running
	151 ⟺ 200	AUTO4	Auto-program effect running
	201 ⟺ 255	AUTO5	Auto-program effect running
8	0 ⟺ 255	AUTO SPEED	
9	0 ⟺ 09	NO FUNCTION	Fading speed
	10 ⟺ 34	Linear dimming speed (dIM=OFF)	
	35 ⟺ 59	Non-linear dimming speed 1(dIM=1)	
	60 ⟺ 84	Non-linear dimming speed 2(dIM=2)	
	85 ⟺ 109	Non-linear dimming speed 3(dIM=3)	
	110 ⟺ 134	Non-linear dimming speed 4(dIM=4)	
	135 ⟺ 159	Non-linear dimming speed 5(dIM=5)	
	160 ⟺ 184	Non-linear dimming speed 6(dIM=6)	
	185 ⟺ 209	Non-linear dimming speed 7(dIM=7)	
	210 ⟺ 255	Non-linear dimming speed 8(dIM=8)	

5 Maintenance

5.1 Product Maintenance

To prolong the life of the product, it is very important to do maintenance work. The environment is hash outdoors, or if the product is idle for a long time, damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on its LED lens cover, fan vents and housing. So it should be cleaned to maintain an optimum light output and at the same time to prevent it from corrupted by acid gas. Cleaning frequency depends on the environment in which the fixture operates. Soft cloth and typical glass cleaning products should be used for cleaning. It is recommended to clean product at least one every 20 days.

Friendly notice: Please do not use any organic solvent, e.g. alcohol to clean housing of the apparatus, lest cause damage.

5.2 Trouble Shooting

Problems	Action
The product doesn't switch on	Power connection is not correct--Re-connect it.
	Power supply is damaged or abnormal. Call a qualified personnel to fix it.
	Control section is damaged. Call a qualified personnel to fix it.
	Connection of internal circuitry is not correct. Call a qualified personnel to fix it.
The product can turn on,but LEDs do not emit light and are out of control	DMX address is wrongly setting up. Resetting it according to instruction book.
	DMX Signal wrongly connected. Connect it correctly according to instruction book.
	Control section is damaged. Call a qualified personnel to fix it.
The beam appears dim	The product is too hot. Take ventilation measures to make it cool.

Remark: This product warranty for one year. We provide pay-needed maintenance service after the warranty. But because of natural and man-made disasters or improper operation caused damage not under warranty range!

SUPER-CAN INDUSTRY GROWING GROUP CO.,LTD.
MADE IN CHINA