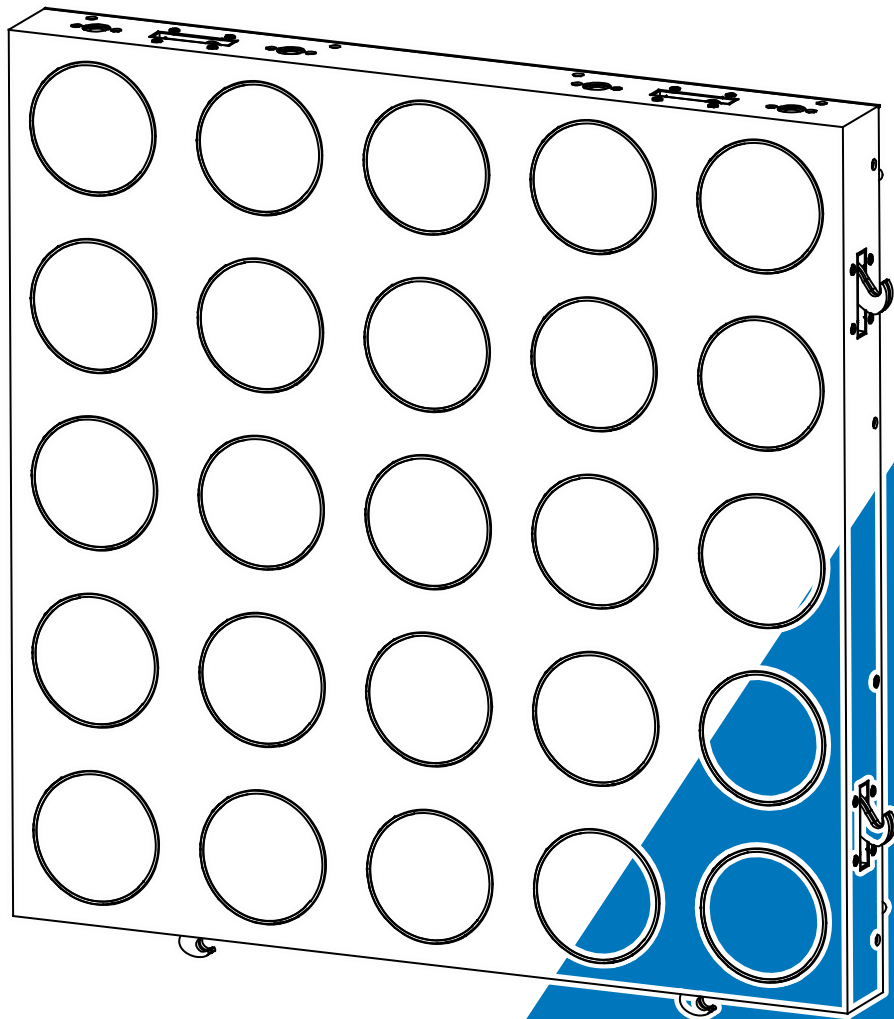




## LED STAGE PANEL 25

LED-MTX25B IP



## User Manual

Please read the instruction carefully before use

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# 1. Safety Instructions



**WARNING**

Please read the instructions carefully which includes important information about the installation, operation and maintenance.



- **WARNING!** Please keep this User Manual for future consultation. If you sell the fixture to another user, be sure that they also receive this instruction booklet.
- Please unpack and check carefully there is no transportation damage before using the fixture.
- Please disconnect main power before servicing and maintenance.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- The maximum ambient temperature is  $T_a$ : 40°C. DO NOT operate it where the temperature is higher than this.
- DO NOT connect the device to any dimmer pack.
- The housing must be replaced if they are visibly damaged.
- Unit surface temperature may reach up to 85°C. Don't touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.
- There are no user serviceable parts inside the fixture. Do not open the housing or attempt any repairs by yourself. In the unlikely event your fixture may require service, please contact your nearest dealer.
- In the event of serious operating problem, stop using the fixture immediately. Never try to repair the fixture by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.



- **DANGER!** It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- **DO NOT** touch any wire during operation and there might be a hazard of electric shock.



- **WARNING!** **DO NOT** expose the fixture to rain or moisture, in order too prevent or reduce the risk of electrical shock or fire.



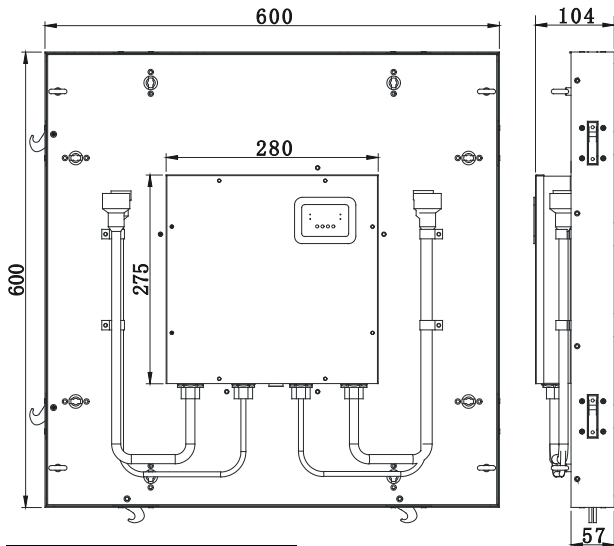
- **Warning!** Do not look directly at the LED light beam while the fixture is on.

For AC 230V 50Hz power supply, the maximum fixtures that can be connected on one power cable is 12;

For AC 120V 60Hz power supply, the maximum fixtures that can be connected on one power cable is 6.

## 2. Technical Specifications

- DMX 1/4/9/25/29 channels switchable.
- Smooth 0~100% dimming and variable strobe speeds.
- Two operation modes: DMX, Master/Slave mode.
- Ideal for discotheques, clubs, bars, parties, Mobile DJs, ect.
- **Input Voltage:** AC 100V~240V 50/60Hz
- **Power consumption:** 69W
- **Fuse:** T15A
- **LED:** 25 x 3W WW LED
- **Dimension:** 600 x 600 x 104 mm
- **Weight:** 12.5Kgs



### 3. Installation

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

#### 3.1 Fixture Jointing

Firstly, plug L type Hexagon wrench into the hole back of the fixture to fasten and locate two fixtures so that movement won't happen and jointing become more conveniently, please see figure 1 showed below:

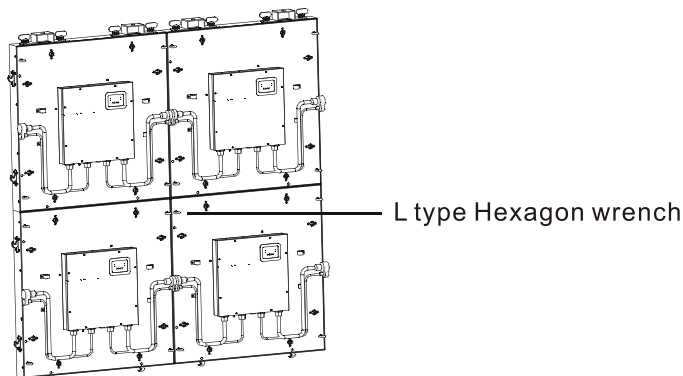
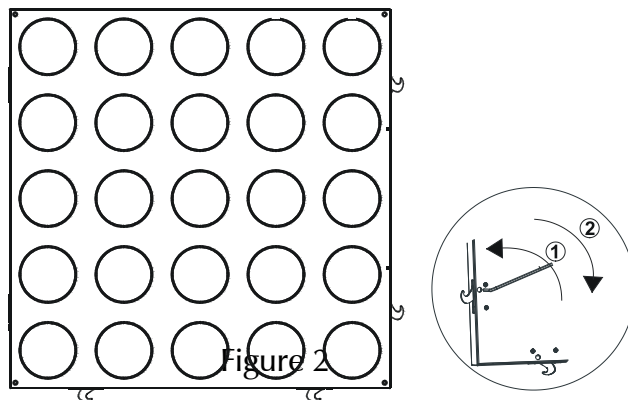


Figure 1

Secondly, use L type Hexagon wrench to counter-clockwise rotate connection lock to the end until lock tongue returns back, for direction please see arrow ① showed in figure 2 ,and the

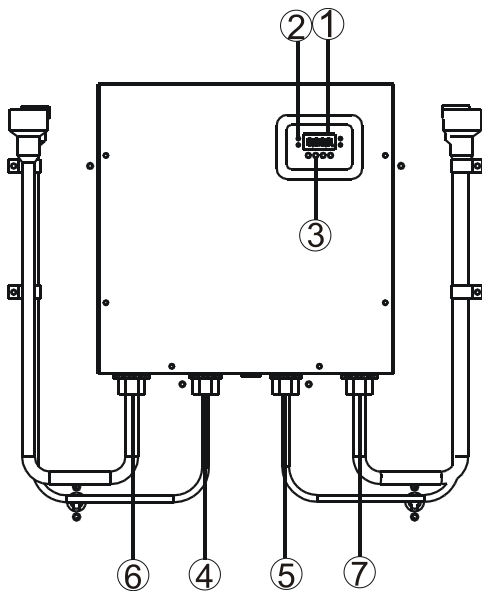
next step, use Hexagon wrench clockwise rotate connection lock to the end, see arrow ②.



The maximum fixtures that can be jointed together is 10.

## 4. How to set the unit

### 4.1 Rear Panel



① **Display:** Show the various menus and the selected functions

② **LED:**

DMX	On	DMX input present
MASTER	On	Master Mode
SLAVE	On	Slave Mode

③ **Button:**

MENU	To select the programming functions
DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	To confirm the selected functions

④ **DMX input:** For DMX512 link, use 3/5-pin XLR plug cable to input DMX signal.

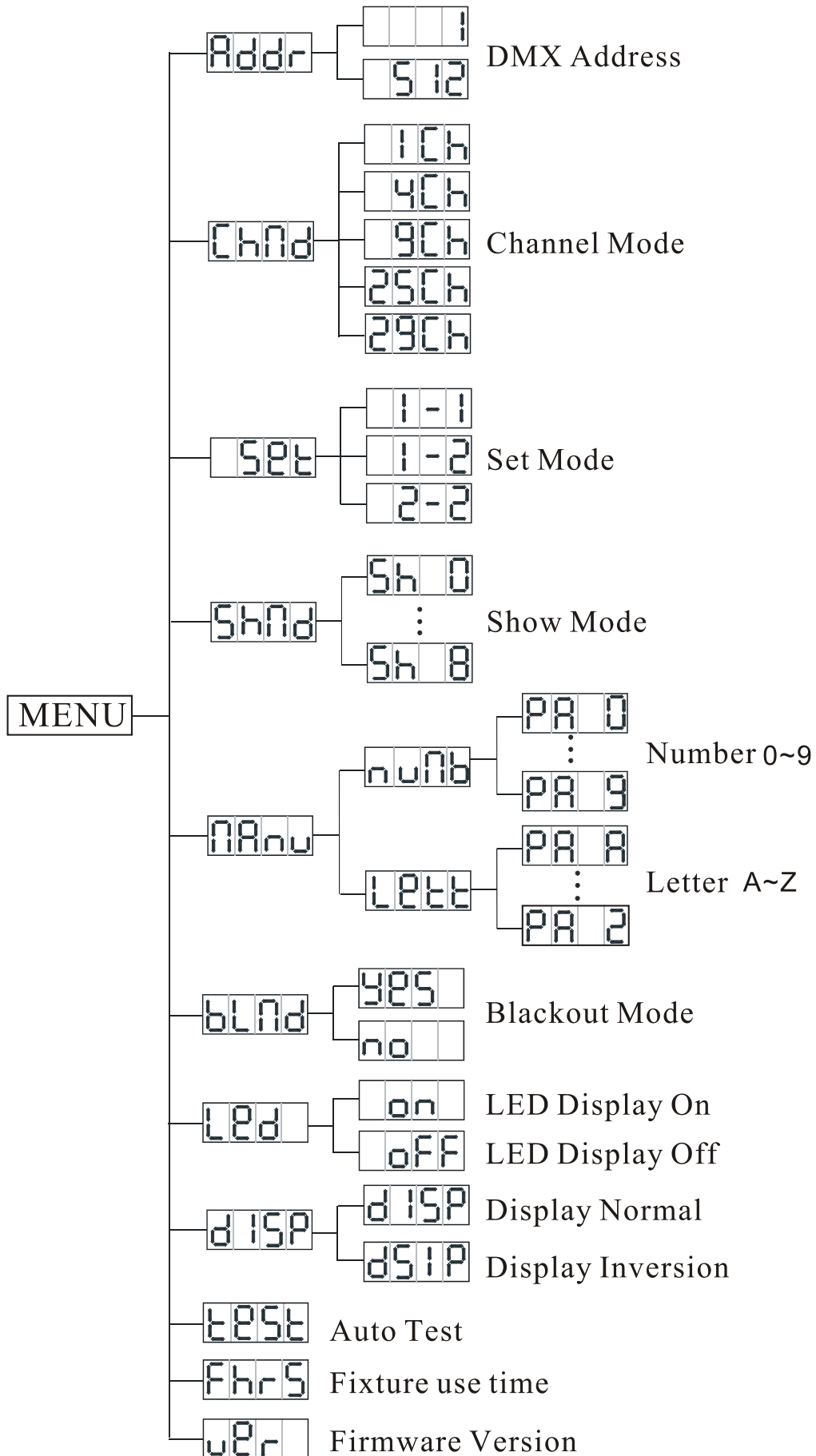
⑤ **DMX output:** For DMX512 link, use 3/5-pin XLR plug cable to link the next unit.

⑥ **Mains input:** Connect to supply mains power.

⑦ **Mains output:** Connect to supply mains power for the next unit.

## 4.2 Main Function

To select any functions, press **MENU** button until the required one is shown on the display. Select the function by **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the mode. Once the required mode has been selected, press **ENTER** button to setup or it will automatically return to the main functions without any change after idling 30 seconds. Back to the functions without any change press **MENU** button. The main functions are shown below:





## **Addr** DMX 512 Address

Select the **Addr**, press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to change the DMX 512 address. Once the address has been selected, press the **ENTER** button to setup or automatically exit menu mode without any change after 60 seconds. Back to the previous functions without any change press the **MENU** button.

## **Chan** Channel Mode

Select the **Chan**, press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **1CH** (1 channel) or **4CH** (4 channels) or **9CH** (9 Channels) or **25CH** (25 channels) or **29CH** (29 Channels) mode. Once selected, press the **ENTER** button to setup or automatically exit menu mode without any change after 60 seconds. To go back to the functions without any change press the **MENU** button

## **Set** Set Mode

Select the **Set**, press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **1-1**, **1-2** or **2-2** mode. Once selected, press the **ENTER** button to setup or automatically exit menu mode without any change after 60 seconds. To go back to the functions without any change press the **MENU** button.

## **Show** Show Mode

Select the **Show**, press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **Sh 0** (Random show) or **Sh 1** (show 1) or **Sh 2** (Show 2) or ... or **Sh 8** (show 8). Once selected, press the **ENTER** button to store or automatically exit menu mode without any change after 60 seconds. To go back to the functions without any change press the **MENU** button

## **MANU** Manual Mode

Select the **MANU**, press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **NUMB** (number) or **LETT** (letter). When the **NUMB** is selected, press the **ENTER** button, then use the **DOWN** and **UP** button to select the **PAR0** or...or **PAR9**, and press the **ENTER** button to store. If you select the **LETT**, press the **ENTER** button, use the **DOWN** and **UP** button to select the **PARA** or...or **PARZ**, and press the **ENTER** button to setup or automatically exit menu mode without any change after 60 seconds. To go back to the functions without any change press the **MENU** button

## **BLND** Blackout Mode

Select the **BLND**, press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select the **925** (blackout) or **NO** (normal). Once selected, press the **ENTER** button to setup or automatically exit menu mode without any change after 60 seconds. To go back to the functions without any change press the **MENU** button.

## **LED** LED display

Select the **LED**, press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to select **ON** (LED display on) or **OFF**(LED display off). Once selected, press the **ENTER** button to setup or exit menu mode without any change after 60 seconds. Back to the functions without any change press the **MENU** button again.

## **DISP** Display Inverse

Select the **DISP**, press the **ENTER** button and the display will blink. Press the **ENTER** button to change the display mode between **DISP** (Display normal) and **DISP** (Display inverse). Back to the functions without any change press the **MENU** button.

## **EESE** Auto Test

Select the **EESE**, press the **ENTER** button and the unit will run the built-in programmer for Auto test. To go back to the functions press the **MENU** button.

## **Fhrs** Fixture use time

Select the **Fhrs**, press the **ENTER** button and the display will show the number of working hours of the unit. To go back to the functions press the **MENU** button.

## **VER** Firmware version

Select the **VER**, press **ENTER** button and the display will show the version of software of the unit. To go back to the functions press the **MENU** button.

## **5. How To Control The Unit**

You can operate the unit in two ways:

1. By master/slave built-in preprogram function
2. By DMX controller

No need to turn the unit off when you change the DMX address, as new DMX address setting will be affected at once. Each time you turn the unit on, it will show “**0025**” on the display. After that the unit will be ready to receive DMX signal or run the built in programs.

### **5.1 Master/Slave Built In Preprogrammed Function**

By linking the units in master/slave connection, the first unit will control the other units to give an automatic, sound activated, synchronized light show. This function is good when you want an instant show. You have to set the first unit in master mode and select **SH0**(random show), **SH1** (show 1) or ...or **SH8** (show 8). Its DMX input jack will have nothing plugged into it, and Its master LED will be constantly on and sound LED will flash to the music.

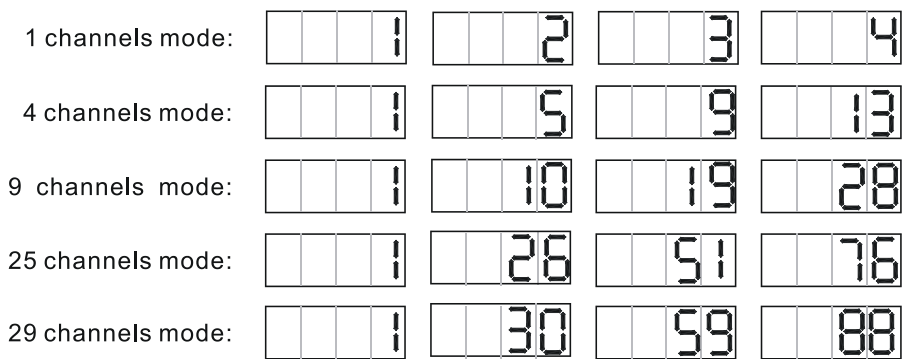
### **5.2 DMX Controller**

Using universal DMX controller to control the units, you have to set DMX address from 1 to

512 channel so that the units can receive DMX signal.

Press the **MENU** button up to when the **Raddr** is showing on the display. Pressing the **ENTER** button and the display will blink. Use the **DOWN** and **UP** button to change the DMX512 address. Once the address has been selected, press and hold the **ENTER** button until the display stops blinking or storing automatically 8 seconds later. To go back to the functions without any change press the **MENU** button again.

If you use please refer to the following diagram to address your DMX512 channel for the first 4/2 units.



### 5.3 DMX512 Configuration

1/4 channel mode:

DMX 512 Configuration					
1-CH mode	4-CH mode				
Shows	Ch1	Ch2		Ch3	Ch4
	Mode	2-1(Line effect)	2-2(Number)	2-3(Letter)	Dimmer
<b>248-255 Stand alone</b>	255 Auto	248-255 Random line effect	236-255 To count forwards 9 down to 0 from slow to fast	247-255 Letter-Z	255 Open
<b>218-247 Show 8</b>	248-255 Auto	240-247 effect30 slow to fast	216-235 To count forwards 0 up to 9 from slow to fast	238-246 Letter-Y	248-255 Open
<b>188-217 Show 7</b>	188-247 Letter A to Z (see channel 2-3)	232-239 effect 29 slow to fast	196-215 Number-9	229-237 Letter-X	240-247 Auto
<b>158-187 Show 6</b>	128-187 Number 1 to 9 (see channel 2-2)	224-231 effect 28 slow to fast	176-195 Number-8	220-228 Letter-W	232-239 Open
<b>128-157 Show 5</b>	68-127 Effect (see Channel 2-1)	216-223 effect 27 slow to fast	156-175 Number-7	211-219 Letter-V	190-231 Fast open slow close
<b>098-127 Show 4</b>	8-67 Full On	208-215 effect 26 slow to fast	136-155 Number-6	202-210 Letter-U	182-189 Open
<b>068-097 Show 3</b>	0-7 Blackout	200-207 effect25 slow to fast	116-135 Number-5	193-201 Letter-T	140-181 Slow open fast close
<b>038-067 Show 2</b>		192-199 effect24 slow to fast	096-115 Number-4	184-192 Letter-S	132-139 Open
<b>008-037 Show 1</b>		184-191 effect23 slow to fast	076-095 Number-3	175-183 Letter-R	8-131 Strobe slow to fast
<b>000-007 Blackout</b>		176-183 effect22 slow to fast	056-075 Number-2	166-174 Letter-Q	0-7 Open
		168-175 effect21 slow to fast	036-055 Number-1	157-165 Letter-P	
		160-167 effect20 slow to fast	016-035 Number-0	148-156 Letter-O	
		152-159 effect19 slow to fast	000-015 No function	139-147 Letter-N	
		144-151 effect18 slow to fast		130-138 Letter-M	
		136-143 effect17 slow to fast		121-129 Letter-L	
		128-135 effect16 slow to fast		112-120 Letter-K	
		120-127 effect15 slow to fast		103-111 Letter-J	
		112-119 effect14 slow to fast		094-102 Letter-I	
		104-111 effect13 slow to fast		085-093 Letter-H	
		096-103 effect12 slow to fast		076-084 Letter-G	
		088-095 effect11 slow to fast		067-075 Letter-F	
		080-087 effect10 slow to fast		058-066 Letter-E	
		072-079 effect09 slow to fast		049-057 Letter-D	
		064-071 effect08 slow to fast		040-048 Letter-C	
		056-063 effect07 slow to fast		031-039 Letter-B	
		048-055 effect06 slow to fast		022-030 Letter-A	
		040-047 effect05 slow to fast		000-021 No function	
		032-039 effect04 slow to fast			
		024-031 effect03 slow to fast			
		016-023 effect02 slow to fast			
		008-015 effect01 slow to fast			
		000-007 no function			

9 channel mode:

9-CH mode					
Ch1	Ch2	Ch3	Ch4	Ch5	
Dimmer (LED1-5)	Dimmer (LED6-10)	Dimmer (LED11-15)	Dimmer (LED16-20)	Dimmer (LED21-25)	
Ch6	Ch7			Ch8	Ch9
Mode	2-1(Line effect)	2-2(Number)	2-3(Letter)	Dimmer (All)	Strobe
248-255 Auto 188-247 Letter A to Z (see channel 2-3) 128-187 Number 1 to 9 (see channel 2-2) 068-127 Effect (see Channel 2-1) 045-067 Dimmer All Dimmer Ch1 Control LED1.6, 11.16.21 Ch2 Control LED2.7, 12.17.22 022-044 Ch3 Control LED3.8, 13.18.23 Ch4 Control LED4.9, 14.19.24 Ch5 Control LED5.10, 15.20.25 000-021 Dimmer Ch1 Control LED1-5 Ch2 Control LED6-10 Ch3 Control LED11-15 Ch4 Control LED16-20 Ch5 Control LED21-25	248-255 Random line effect 240-247 effect30 slow to fast 232-239 effect 29 slow to fast 224-231 effect 28 slow to fast 216-223 effect 27 slow to fast 208-215 effect 26 slow to fast 200-207 effect25 slow to fast 192-199 effect24 slow to fast 184-191 effect23 slow to fast 176-183 effect22 slow to fast 168-175 effect21 slow to fast 160-167 effect20 slow to fast 152-159 effect19 slow to fast 144-151 effect18 slow to fast 136-143 effect17 slow to fast 128-135 effect16 slow to fast 120-127 effect15 slow to fast 112-119 effect14 slow to fast 104-111 effect13 slow to fast 096-103 effect12 slow to fast 088-095 effect11 slow to fast 080-087 effect10 slow to fast 072-079 effect09 slow to fast 064-071 effect08 slow to fast 056-063 effect07 slow to fast 048-055 effect06 slow to fast 040-047 effect05 slow to fast 032-039 effect04 slow to fast 024-031 effect03 slow to fast 016-023 effect02 slow to fast 008-015 effect01 slow to fast 000-007 no function	236-255 To count forwards 9 down to 0 from slow to fast 216-235 To count forwards 0 up to 9 from slow to fast 196-215 Number-9 176-195 Number-8 156-175 Number-7 136-155 Number-6 116-135 Number-5 096-115 Number-4 076-095 Number-3 056-075 Number-2 036-055 Number-1 016-035 Number-0 000-015 No function	247-255 Letter-Z 238-246 Letter-Y 229-237 Letter-X 220-228 Letter-W 211-219 Letter-V 202-210 Letter-U 193-201 Letter-T 184-192 Letter-S 175-183 Letter-R 166-174 Letter-Q 157-165 Letter-P 148-156 Letter-O 139-147 Letter-N 130-138 Letter-M 121-129 Letter-L 112-120 Letter-K 103-111 Letter-J 094-102 Letter-I 085-093 Letter-H 076-084 Letter-G 067-075 Letter-F 058-066 Letter-E 049-057 Letter-D 040-048 Letter-C 031-039 Letter-B 022-030 Letter-A 000-021 No function		248-255 Open 240-247 Auto 232-239 Open 190-231 Fast open slow close 182-189 Open 140-181 Slow open fast close 132-139 Open 008-131 000-007 Open

25 channel mode:

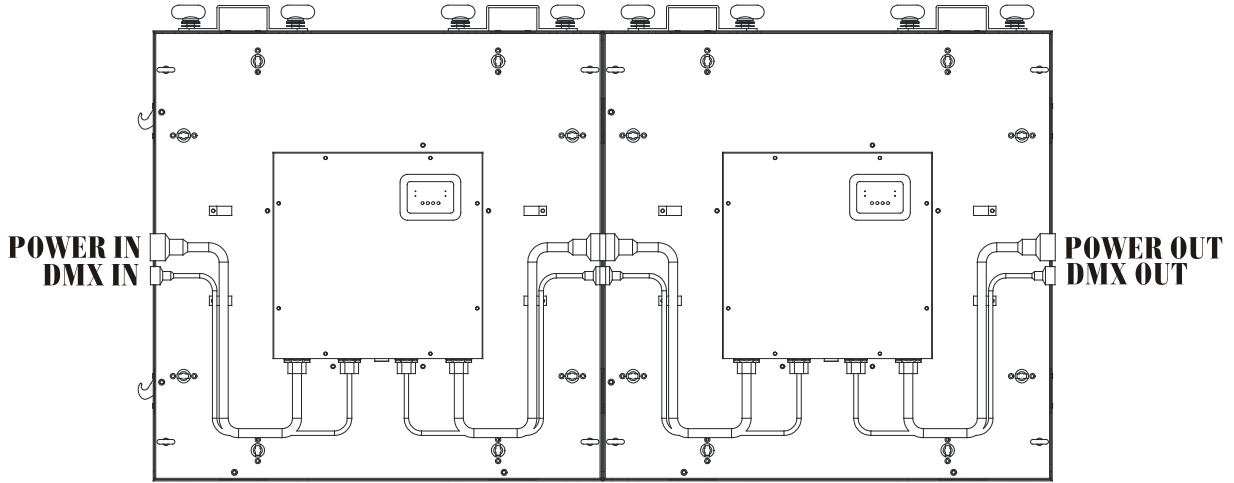
25-CH mode								
Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7	Ch8	
Dimmer1	Dimmer2	Dimmer3	Dimmer4	Dimmer5	Dimmer6	Dimmer7	Dimmer8	
Ch9	Ch10	Ch11	Ch12	Ch13	Ch14	Ch15	Ch16	
Dimmer9	Dimmer10	Dimmer11	Dimmer12	Dimmer13	Dimmer14	Dimmer15	Dimmer16	
Ch17	Ch18	Ch19	Ch20	Ch21	Ch22	Ch23	Ch24	Ch25
Dimmer17	Dimmer18	Dimmer19	Dimmer20	Dimmer21	Dimmer22	Dimmer23	Dimmer24	Dimmer25

29 channel mode:

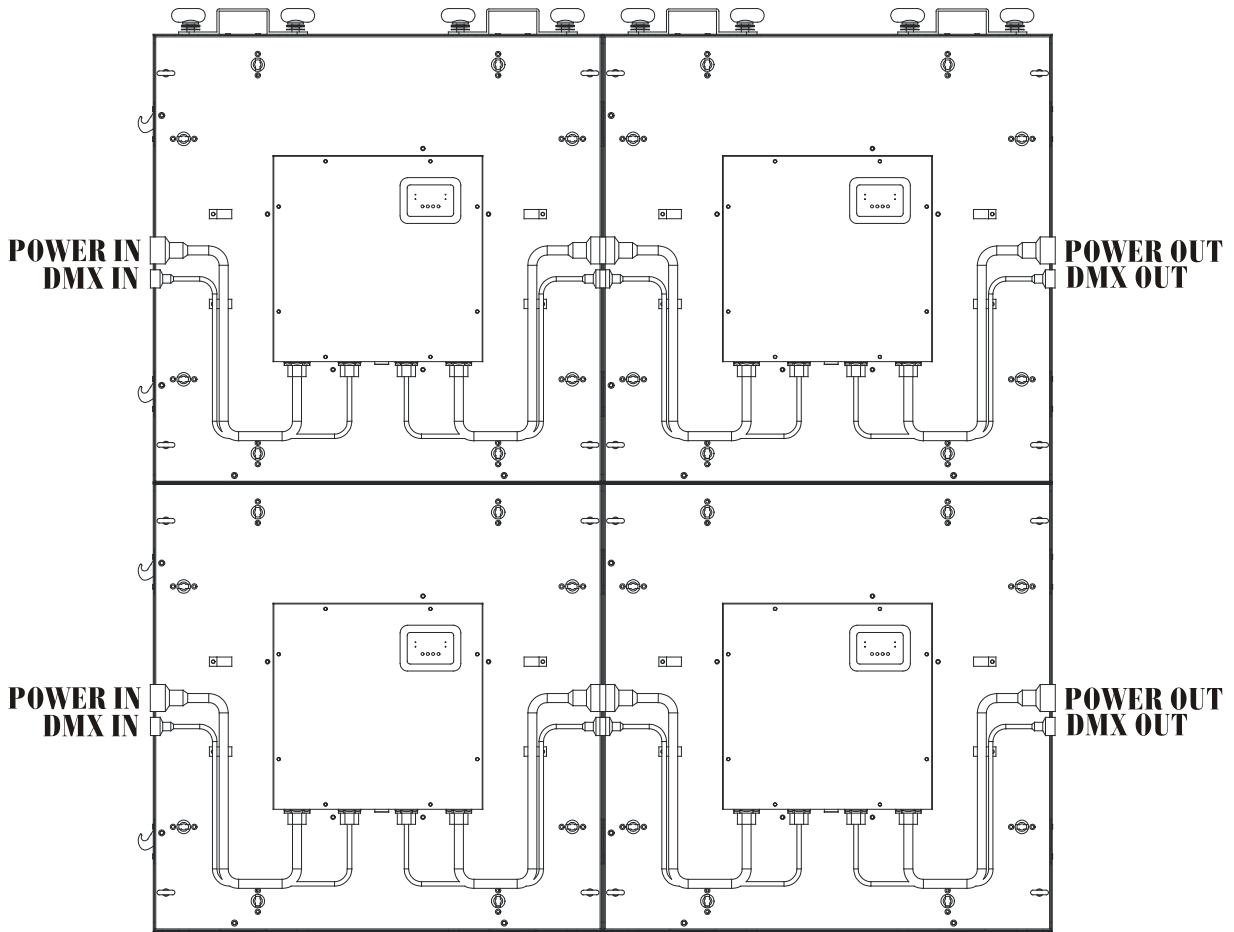
DMX 512 Configuration												
29-CH mode												
Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7	Ch8	Ch9	Ch10	Ch11	Ch12	Ch13
Dimmer1	Dimmer2	Dimmer3	Dimmer4	Dimmer5	Dimmer6	Dimmer7	Dimmer8	Dimmer9	Dimmer10	Dimmer11	Dimmer12	Dimmer13
Ch14	Ch15	Ch16	Ch17	Ch18	Ch19	Ch20	Ch21	Ch22	Ch23	Ch24	Ch25	
Dimmer14	Dimmer15	Dimmer16	Dimmer17	Dimmer18	Dimmer19	Dimmer20	Dimmer21	Dimmer22	Dimmer23	Dimmer24	Dimmer25	
Ch26	Ch27			Ch28	Ch29							
Mode	2-1(Line effect)	2-2(Number)	2-3(Letter)	Dimmer	Strobe							
255 248~255 Auto 188~247 Letter A to Z (see channel 2-3) 128~187 Number 1 to 9 (see channel 2-2) 68~127 Effect (see channel 2-1) 8~67 Full On 0~7 Blackout 0	248-255 Random line effect 240-247 effect30 slow to fast 232-239 effect29 slow to fast 224-231 effect28 slow to fast 216-223 effect27 slow to fast 208-215 effect26 slow to fast 200-207 effect25 slow to fast 192-199 effect24 slow to fast 184-191 effect23 slow to fast 176-183 effect22 slow to fast 168-175 effect21 slow to fast 160-167 effect20 slow to fast 152-159 effect19 slow to fast 144-151 effect18 slow to fast 136-143 effect17 slow to fast 128-135 effect16 slow to fast 120-127 effect15 slow to fast 112-119 effect14 slow to fast 104-111 effect13 slow to fast 096-103 effect12 slow to fast 088-095 effect11 slow to fast 080-087 effect10 slow to fast 072-079 effect09 slow to fast 064-071 effect08 slow to fast 056-063 effect07 slow to fast 048-055 effect06 slow to fast 040-047 effect05 slow to fast 032-039 effect04 slow to fast 024-031 effect03 slow to fast 016-023 effect02 slow to fast 008-015 effect01 slow to fast 000-007 no function	236-255 To count forwards 9 down to 0 from slow to fast 216-235 To count forwards 0 up to 9 from slow to fast 196-215 Number-9 176-195 Number-8 156-175 Number-7 136-155 Number-6 116-135 Number-5 096-115 Number-4 076-095 Number-3 056-075 Number-2 036-055 Number-1 016-035 Number-0 000-015 No function	247-255 Letter-Z 238-246 Letter-Y 229-237 Letter-X 220-228 Letter-W 211-219 Letter-V 202-210 Letter-U 193-201 Letter-T 184-192 Letter-S 175-183 Letter-R 166-174 Letter-Q 157-165 Letter-P 148-156 Letter-O 139-147 Letter-N 130-138 Letter-M 121-129 Letter-L 112-120 Letter-K 103-111 Letter-J 094-102 Letter-I 085-093 Letter-H 076-084 Letter-G 067-075 Letter-F 058-066 Letter-E 049-057 Letter-D 040-048 Letter-C 031-039 Letter-B 022-030 Letter-A 000-021 No function	255 248~255 Open 240~247 Auto 232~239 Open 190~231 Fast open slow close 182~189 Open 140~181 Slow open fast close 132~139 Open 8~131 Strobe slow to fast 0~7 Open 0								

## 6. DMX512 Connections

**1-2** mode connection:



**2-2** mode connection:





1. Connect the fixture together in a “daisy chain” by XLR plug cable from the output of the fixture to the input of the next fixture. The cable cannot be branched or split to a “Y” cable. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system
2. The DMX output and input connectors are pass-through to maintain the DMX circuit when one of the units’ power is disconnected.
3. At last fixture, the DMX cable has to be terminated with a terminator to reduce signal errors. Solder a 120-ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.
4. Each lighting fixture needs to have an address set to receive the data sent by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).
5. 3 pin XLR connectors are more popular than 5 pins XLR.  
3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)  
5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+),  
Pin4/5: not used

## **7. Troubleshooting**

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

### **A. The fixture does not work, no light**

1. Check the connection of power and main fuse.
2. Measure the mains voltage on the main connector.

### **B. Not responding to DMX controller**

1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of

the fixture or the previous one.

4. Try to use another DMX controller.
5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

### **C. One of the channels is not working well**

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

## **8. Fixture Cleaning**

The cleaning of internal must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the fixture's optics.

- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

### **Fresnel lens:**

Clean the lens with neutral soap and water, and then dry it with soft cloth. Be aware that alcohol or other detergent could cause damage to lens. Please note the lens would be burnt yellow or cracked after three-month use of average 8 hours per day, which can reduce the output in some degree. The lens is consumable with a warranty of three months only. Please change with genuinely new lens when necessary.

## **Declaration of Conformity**

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 2004/108/EC.

EN55103-1: 2009 ; EN55103-2: 2009;  
EN61000-3-2: 2006 + A1:2009 + A2:2009; EN61000-3-3: 2008.  
&

## **Harmonized Standard**

EN 60598-1:2008 + All:2009; EN 60598-2-17:1989 + A2:1991;  
EN 62471:2008; EN 62493: 2010  
Safety of household and similar electrical appliances  
Part 1: General requirements

**Innovation, Quality, Performance**