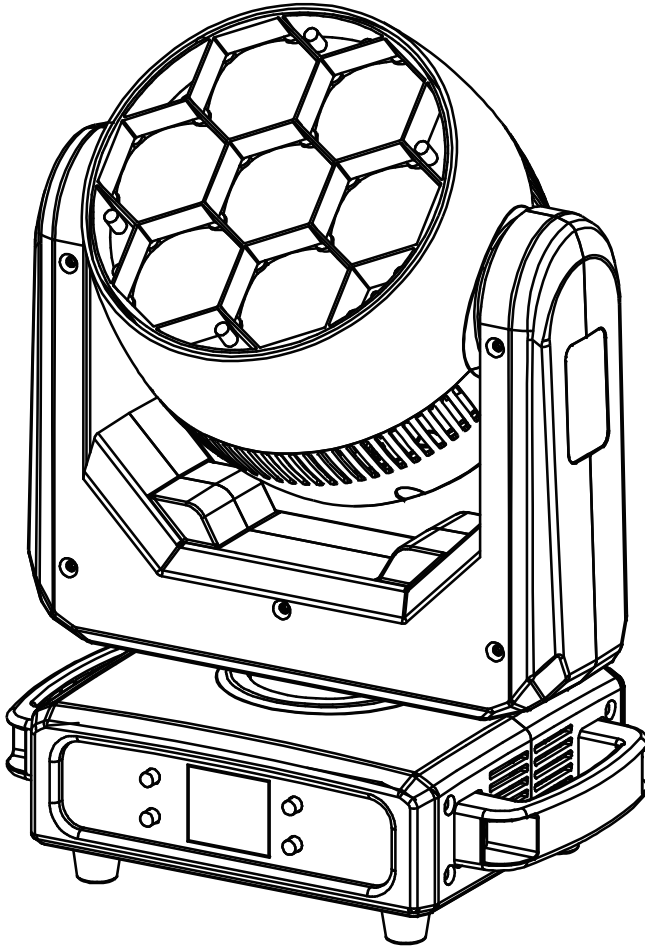


# Vulcan

vulcanlighting.co.za

## Eclipse<sup>FX</sup>



# USER MANUAL

Please read the instructions carefully before use

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# 1. Safety guidance



Please read this manual carefully, it includes important information such as installation, use, and maintenance.

## Warnings

Please keep this manual as a basis for future inquiries, and if you sell this product to other users, please make sure they also get this manual.

### Note:

When the equipment leaves the factory, it is packaged in good condition, please operate in accordance with the user manual, and the machine failure caused by human reasons is not guaranteed. Scope of repair.

- . Before using the product, please open it and inspect it carefully to ensure that the lamp is not damaged by transportation.
- . The device is only suitable for use in a dry room indoors.
- . The installation and operation of the lamps and lanterns should be carried out by professionals.
- . Do not allow small children to operate the machine.
- . Use a secure rope to secure the fixture, and hold up the bottom while moving the fixture.
- . The device must be installed in a well-ventilated place, at least 50 cm away from the adjacent plane.
- . Make sure the ventilation holes are clear to avoid overheating while the fixture is running.
- . Ensure that the supply voltage matches the supply voltage required by the equipment before operation.
- . Please ground the conductor to prevent electric shock.
- . Do not operate the lamp below 0°C or above 40°C.
- . It is forbidden to connect the luminaire directly to the dimming device.
- . A small amount of smoke or odor may occur when the new fixture is operating, which will disappear after 15 minutes of operation.
- . Do not place combustible materials next to the lamp when it is running, for fire risk.
- . Before turning on the lamp, please carefully check whether the power cord is broken, and replace it immediately if it is damaged.
- . The luminaire can operate at a surface temperature of up to 75°C, do not touch it with bare hands.

- . Avoid flammable liquids, water or metal and other electrical conductors from entering the inside of the lamp to avoid electric shock or fire, if there is any foreign object entering the lamp, please cut off the power immediately.
- . Avoid operating the lamps in dirty and dusty environments, and clean and maintain the lamps regularly.
- . It is forbidden to touch the wires when the lamp is running to prevent electric shock.
- . Avoid entanglement of the power cord with other wires.
- . The Distance Between The Luminaire and The Illuminated Surface Should BE Greater Than 0.5M
- . Before replacing the fuse or bulb, disconnect the power supply.
- . Use the same model when replacing a fuse or bulb.
- . Do not turn the light on repeatedly.
- . If there is obvious damage to the lamp housing, lens or UV filter, please replace it in time.
- . There are no usable parts inside the lamp, so please do not open the lamp housing without permission.
- . If the machine fails, please stop using it immediately, and check it by power-off; Non-professional technicians, please do not repair by yourself; For assistance, please contact the nearest authorized sales/technical center.
- . When the lamp is not used for a long time or is repaired, please cut off the power supply.
- . When you need to transport it again, please use the original packaging materials.
- . There is a risk of explosion of high-temperature bulbs, do not turn on the light fixture within 15 minutes of power off.
- . Replace the bulb in time if it is damaged, deformed by heat, or has exceeded its service life.
- . Please do not look directly at the lamp when it is running.
- . The bulb will be hot when the fixture is running, do not touch the bulb with your bare hands.
- . Do not operate the lamp if it does not have a protective cover or if the housing is damaged.

**note:**

There are no parts inside the luminaire that can be used by the user. Don't just open the case, and don't repair it yourself.

In the unlikely event that your fixture needs to be repaired, please contact your nearest dealer.

**Installation:**

The luminaire should be screwed to the quick-lock hook and be sure to be securely installed to prevent it from fluttering and slipping off during operation. Also make sure that the structure of the connected luminaire is able to support 10 times the weight of the luminaire. It should be used at the same time as the installation of the luminaire A safety rope capable of supporting up to 12 times the weight of the luminaire.

The installation of the equipment should be carried out by professionals, and it should also be installed in a place that people cannot touch or pass by.

## 2. Technical Specifications

**Input voltage range:**

110-240V~ 50/60Hz

**Power consumption:**

280W

**Light Source:**

7x40W 4 in 1 RGBW LED

Color Temperature Output:

7000K

**Beam Angle:**

6°-60°

**Movement:**

Pan movement: 540°

Tilt movement: 270°

Moving-head operated with either 16-bit resolution

Automatic Pan/Tilt position correction

Dimming/Strobe:

0%~100% variable dimming, multi-speed strobe effect

**Movement:**

Control channels: 16,44

Protocols: DMX512, Master slave, Sound Active, RDM

Software upgrade: Upgrade the firmware via DMX link

**structure:**

Display: Color Display + 4 Key Buttons

Data In/Out: 3-pin or 5-pin XLR

Power In/Out: Power Connector in/out

Ingress protection: IP20

**Key features:**

3 operation modes:wash,beam,FX(Kaleido effects)Bi-directional Rotating Front

Lens Digital Wash-Beam Framing effect Beam edge softening control(in wash mode)

Pixel Patterning Macros with enhanced control 0-100% linear electronic dimmer

Adjustable speed stop/strobe effect,with instantaneous blackout Dedicated channel for color temperature setting

White CT Emulation 2500-8000K

Maximum number of connections: 230V, 50Hz: 11 units; 120V, 60Hz: 5 units

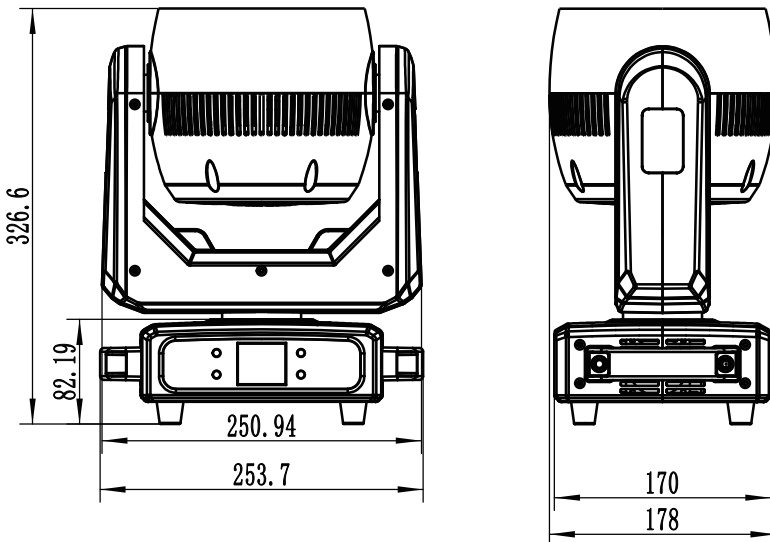
Suitable for stages, theatres, TV studios and dance halls

**Dimensions/Weight:**

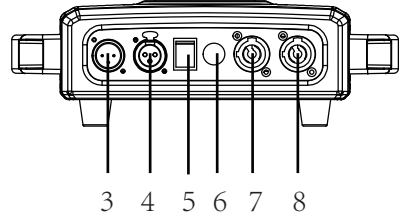
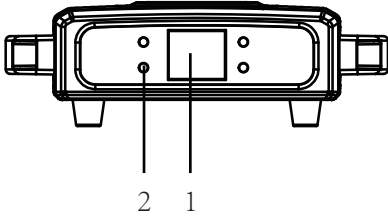
Product Size: 254x178x326mm

Package Size: 315x235x420mm, 6.6kg

Flycase 4 in 1:680x450x590mm, 43kg



### 3. control panel



**1. Display:** Displays various function menus

**2. Buttons:**

MENU	Go to the menu to select the function
▲ UP	to the previous option
▼ DOWN	to the latter option
ENTER	Confirm the selected feature

**3. 3-pin DMX input:**

For DMX512 connection, use a 3-pin XLR signal cable to connect the luminaire to the DMX console and input the DMX signal

**4. 3-pin DMX output:**

For DMX512 connection, use a 3-pin XLR cable to connect to the next luminaire and output a DMX signal

**5. Power Switch:** Turn on/off the power

**6. Fuse (T 10A):** Protect the lamp from damage caused by excessive current or short circuit

**7. Power input (POWERCON 1-in, 1-out version):** Connect to the power supply

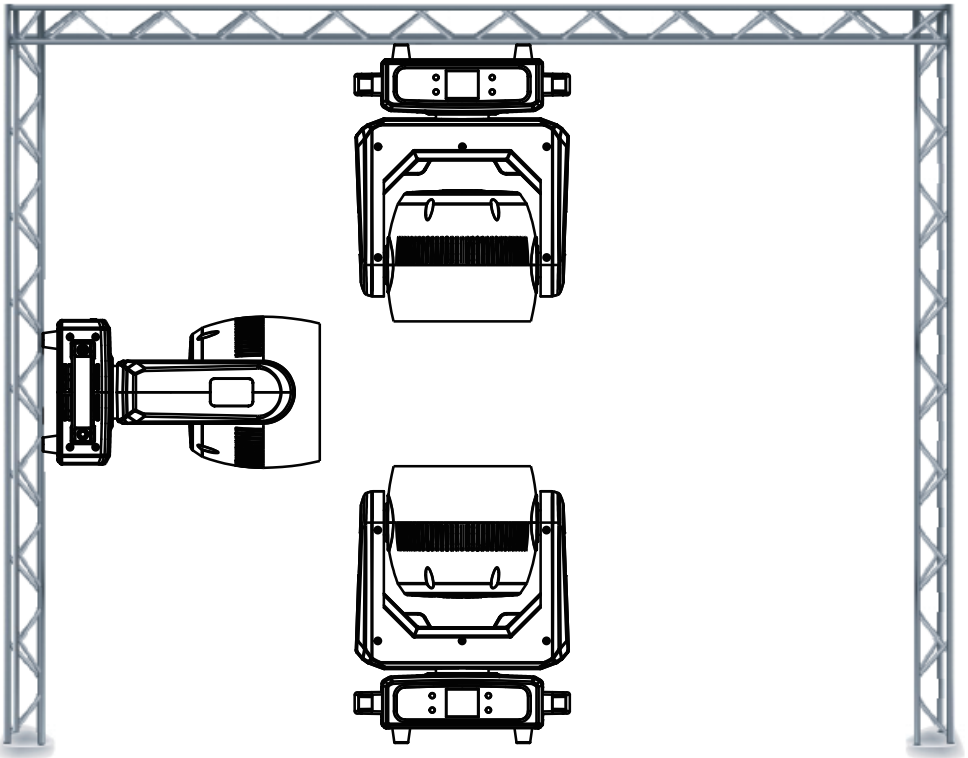
**8. Power output (POWERCON 1-in, 1-out version):** connect the next lamp

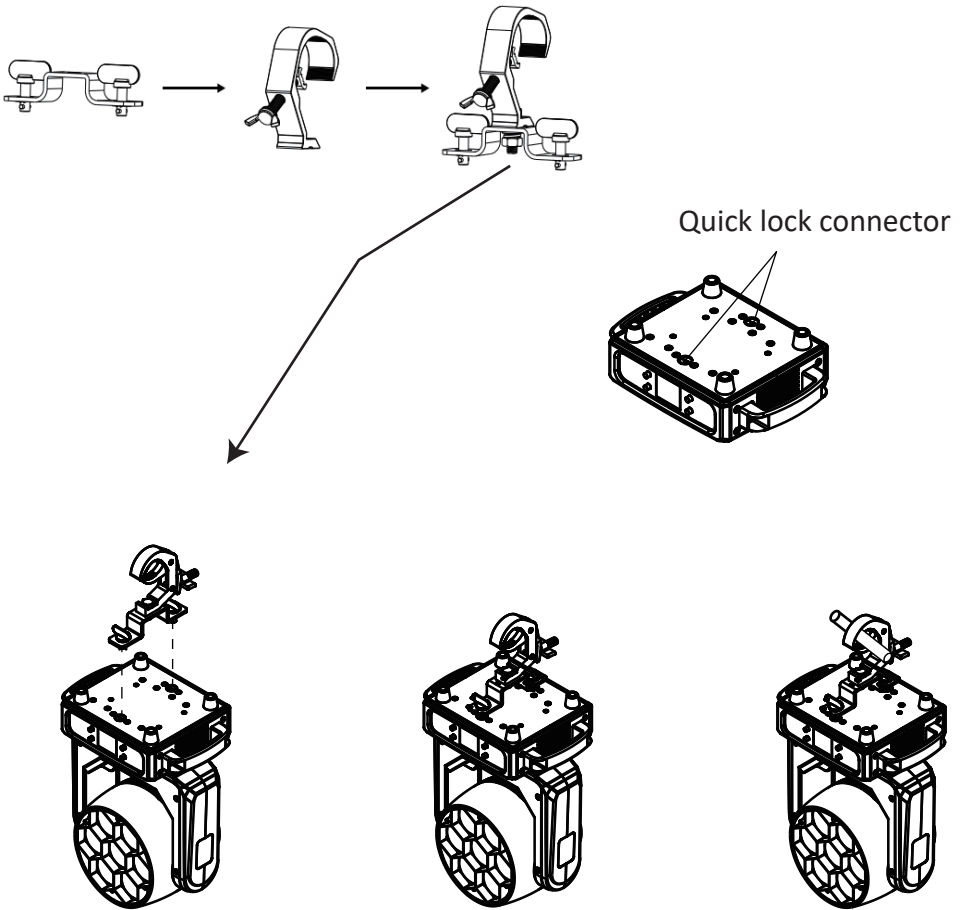
## 4. Lighting installation

The installation of the equipment should be carried out by a professional and should also be installed in an area other than a walking path, seating area, or away from an area where the luminaire may be touched by unauthorized persons. When assembling, disassembling or repairing a luminaire, never stand directly underneath the luminaire.

When installing the fixture, make sure that the fixture is installed securely to prevent it from shaking and slipping off while running. It is also important to ensure that the structure of the fixture is able to support 10 times the weight of the luminaire without deformation. Install the fixture with a safety rope that can support 12 times the weight of the fixture to ensure that the fixture does not fall if the fixture fails.

The luminaire is fully operable in 3 different mounting positions: suspended upside down, mounted transversely on a truss, or placed on a flat horizontal surface. Always use and install the included safety rope as a safety measure to prevent accidental damage or death to the fixture in the event of a clamp failure.





## 5. Fixture settings

### 5.1 Key features

Turn on the machine, press the MENU button to enter the menu mode, use the UP/DOWN button to find the menu, when the preset menu is displayed on the display screen, press the ENTER button to confirm, use the UP/DOWN button to select a submenu, press the ENTER button to save the settings or automatically return to the previous menu. Press the MENU button to return, or wait 30 seconds before automatically exiting menu mode. The main functions are shown below:

MAIN MENU	SUBMENU	OPTIONS		
<b>DMX Functions</b>	DMX Address	001		
		512		
	DMX Channel	Mode1 (16)		
		Mode2 (44)		
	DMX State	M/S		
		Hold		
		BlackOut		
	View Dmx Value	Pan	000-255	
		Tilt	000-255	
		P/T Speed	000-255	
		Zoom	000-255	
		Rotation	000-255	
		Shutter	000-255	
		Dimmer	000-255	
		Red	000-255	
		Green	000-255	
		Blue	000-255	
		White	000-255	
		Color Macro	000-255	
		Color Macro Run	000-255	
Running back to the case		000-255		
Color running speed	000-255			
Special Function	000-255			
<b>Show Settings</b>	Show Chase	show1		
		show2		
		show3		
		show4		
	Slave Mode	Slave1		
		Slave2		
	Sound Trigger	Off		
		On		
Sound Sense	000-100			
Pan Inverse	No			
	Yes			
	Tilt Inverse	No		
		Yes		

Fixture Settings	P/T Feedback	No		
		Yes		
	White Balance	Red	125-255	
		Green	125-255	
		Blue	125-255	
	Dimmer Curve	Liner		
		Square		
		Inv SQ		
S Curve				
Dimmer Speed	Fast			
	Smooth			
Display Settings	Display Inverse	No		
		Yes		
	Backlight Switch	Off		
		On		
	Backlight Intensity	1-10		
	Temperature Unit	°F		
		°C		
	Language	English		
Chinese				
Fixture Test	Auto Test			
	Manual Test			
Fixture Information	Fixture use time			
	Firmware Version			
Reset	Pan/Tilt	No		
		Yes		
	Zoom/Rotation	No		
		Yes		
	All	No		
		Yes		
Special Function	Factory Setting			
	Password			

### DMX Functions

Enter the **MENU** mode, select the **DMX Function**, press the **ENTER** button to confirm, and use the **UP/DOWN** button to select: **DMX Address**, **DMX Channel**, **DMX State** or **View Dmx Value**.

### **DMX Address**

Select the **DMX address**, press the **ENTER** button to confirm, and the current **DMX address** will be displayed on the display. Use the **UP/DOWN** button to select the **1-512** address and press the **ENTER** button to save. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

### **DMX Channel**

Select the **DMX Channel**, press the **ENTER** button to confirm, the current channel mode will be displayed on the display, use **UP/DOWN** button to select: **Mode 1 (16)** or **Mode 2 (44)**, press the **ENTER** button to save. Press **MENU** press button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

### **DMX State**

Select the **DMX status**, press the **ENTER** button to confirm, the current mode will be displayed on the display, and use the **UP/DOWN** button to select: **Hold**(the DMX signal stops and the machine will remain in the last state) or **BlackOut**(The DMX signal stops the machine and will go into standby mode), press the **ENTER** button to save. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

### **View DMX Value**

Select the **View DMX Value**, press the **ENTER** button to confirm, the current channel and its value will be displayed on the screen. Use the **UP/DOWN** button to view additional channel values. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode

### **Show Settings**

Enter the **MENU** mode, select **Show Settings**, press the **ENTER** button to confirm, and use the **UP/DOWN** buttons to select: **Show Chase, Show Focus, Slave Mode, Sound Trigger or Sound Sense**.

### **Show Chase**

Select the **Show Chase**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to select: **show1, show2, show3 or show4**, press the **ENTER** button to save. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

## Slave Mode

Select the **Slave Mode**, press the **ENTER** button to confirm, the current mode will be displayed on the display light, select through the **UP/DOWN** button: **Slave1** or **Slave2**, press the **ENTER** button to save, press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

## Sound Trigger

Select **Sound Trigger**, press the **ENTER** button to confirm, the current mode will be displayed on the display light, select via the **UP/DOWN** button: **Off** or **On**, press the **ENTER** button to save, press the **MENU** button to go back Previous menu or wait 1 minute to automatically exit menu mode.

## Sound Sense

Select **Sound Sense**, press the **ENTER** button to confirm, the current mode will be displayed on the display light, select **000** or **100** via the **UP/DOWN** button, press the **ENTER** button to save, press the **MENU** button to go back Go to the previous menu or wait 1 minute to automatically exit the menu mode.

## Fixture Settings

Enter **MENU** mode, select **Fixture Settings**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select: **Pan Inverse**, **Tilt Inverse**, **P/T Feedback**, **White Balance**, **Dimmer Curve**, **Dimmer Speed**.

### Pan Inverse

Select **Pan Inverse**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to select: **No** (normal operation) or **Yes** (horizontal negation), press the **ENTER** button to save. Press the **MENU** button to return to the previous menu or wait 1 minute to automatically exit menu mode.

### Tilt Inverse

Select **Tilt Inverse**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to select: **No** (normal operation) or **Yes** (vertical negation), press the **ENTER** button to save. Press the **MENU** button to return to the previous menu or wait 1 minute to automatically exit menu mode.

### P/T Feedback

Select **P/T Feedback**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to select: **No** (X/Y will remain out of step when it is out of step) or **Yes** (X/Y will be out of step when it will be self PRESS **ENTER TO SAVE**). Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

## White Balance

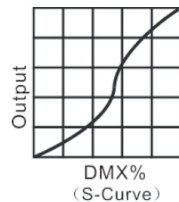
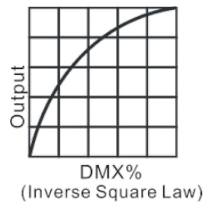
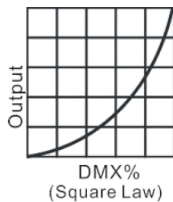
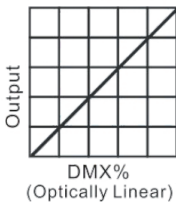
Select **White Balance**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to select: **Red**, **Green** or **Blue**, once selected, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust the color brightness between **125-255**, and press the **ENTER** button to save. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

## Dimmer Curve

Select **Dimming Curve**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to select: **Optically Linear**, **Square Law**, **Inverse Square Law** or **S-Curve**, press the **ENTER** button to hold Exist. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

Please refer to the following figure for the details of the curve:

Dimmer Modes:



## Dimmer Speed

Select the **Dimmer speed**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to select: **Fast** or **Smooth**, press the **ENTER** button to save. Press the **MENU** button to go back Go to the previous menu or wait for 1 minute to automatically exit the menu mode.

## Display Settings

Enter the **MENU** mode, select the **Display settings**, press the **ENTER** button to confirm, use the **UP/DOWN** buttons to select the **Display Inverse**, **Backlight Switch**, **Backlight**, **Intensity**, **Temperature Unit** or **Language**.

## Display Inverse

Select **Display Inverse**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to select: **No** (Normal), **Yes** (Show Reverse), or **Auto**, press the **ENTER** button to save. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

### **Backlight Switch**

Select **Backlight Switch**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to adjust the backlight **OFF** or **ON**, press the **ENTER** button to save. Press the **ENTER** button to save. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

### **Backlight Intensity**

Select **Backlight Intensity**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to adjust the backlight brightness from **001** (black) to **010** (bright), press the **ENTER** button to save. Press the **ENTER** button to save. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

### **Temperature Unit**

Select the **Temperature unit**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to select: **°C** or **°F**, press the **ENTER** button to save. Press the **MENU** button to go back on Level 1 menu or wait 1 minute to automatically exit menu mode.

### **Language**

Select the **Language**, press the **ENTER** button to confirm, the current mode will be displayed on the display, use the **UP/DOWN** button to select: **English** or **Chinese**, press the **ENTER** button to save. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode.

### **Fixture Test**

Enter the **MENU** mode, select **Fixture Test**, press the **ENTER** button to confirm, and use the **UP/DOWN** button to select: **Auto Test** or **Manual Test**.

### **Auto Test**

Select **Auto Test**, press the **ENTER** button to confirm, and the luminaire will run the built-in program to test horizontal, vertical, color wheel, dimming, strobe, zoom, focus, fogging, etc. Press the **MENU** button to go back to the previous menu or return to menu mode when the test is over.

## Manual Test

Select **Manual Test**, press the **ENTER** button to confirm, and the current channel will be displayed on the display. Use the **UP/DOWN** button to select the channel, press the **ENTER** button to confirm, and then use the **UP/DOWN** button to adjust its Full channel value, press the **ENTER** button to save, and the fixture will run according to the channel value. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode. (When you exit the manual test menu, all channel values will become zero).

## Fixture Information

Enter the **MENU** mode, select Fixture Information, press the **ENTER** button to confirm, and use the **UP/DOWN** button to select: **Fixture use time** or **Firmware Version**.

### Fixture use time

Select the **Fixture use time**, press the **ENTER** button to confirm, the time of the lamp will be displayed on the display, press the **MENU** button to exit.

### Firmware Version

Select the **Firmware Version**, press the **ENTER** button to confirm, the CPU version of the device will be displayed on the display, press the **MENU** button to exit.

## Reset

Enter the **MENU** mode, select **Reset**, press the **ENTER** button to confirm, and use the **UP/DOWN** button to select: **Pan/Tilt**, **Zoom/Rotation** or **All**.

### Pan/Tilt

Select **Pan/Tilt**, press the **ENTER** button to confirm, and use the **UP/DOWN** button to select: **No** or **Yes** (the machine will run the built-in program to restore the initial position both horizontally and vertically). Press the **ENTER** button to save. Press the **MENU** button to exit or wait 1 minute to exit menu mode.

### Zoom/Rotation

Select **Zoom/Rotation**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select: **No** or **Yes** (the machine runs and will run the built-in program to restore the initial focus rotation position). Press the **ENTER** button to save. Press **MENU** button to exit or wait 1 minute to exit menu mode.

## All

Select **All** , press the **ENTER** button to confirm, Use the **UP/DOWN** buttons to select: **No** or **Yes** (machine operation will run the built-in program to restore all motor initial positions). Press the **ENTER** button to save. press **MENU** button to exit.

## Special Function

Enter the **MENU** mode, select Special Functions, press the **ENTER** button to confirm, and select: **Factory Setting** or **Password**.

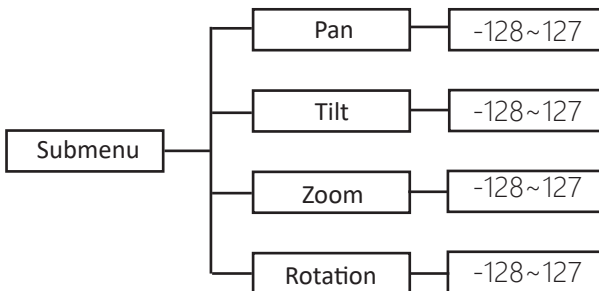
## Factory Setting

Select **Factory Setting**, press the **ENTER** button to confirm, use the **UP/DOWN** buttons to select: **No** (keep current settings) or **Yes** (restore factory settings), and once selected, press **ENTER** to save. Press the **MENU** button Quit.

## Password

Select **Password**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select: **000** or **999**, and once selected, press the **ENTER** button to save. Press the **MENU** button to exit.

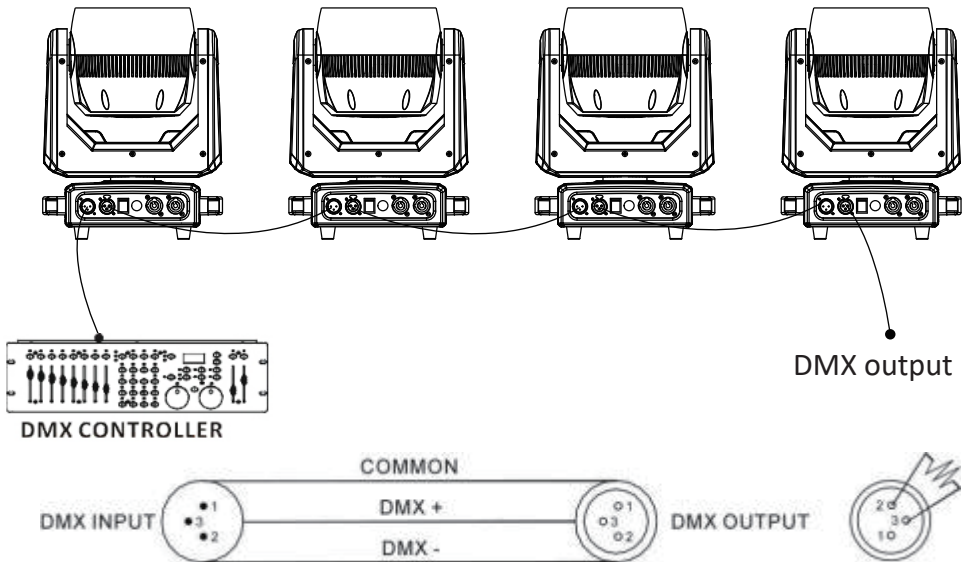
## 5.2 nitial position adjustment



In the main function menu, press and hold the **ENTER** button for at least 3 seconds to enter the fine tuning menu, use the **UP/DOWN** button to select Pan, Tilt, Zoom or Rotation, and press the **ENTER** button to confirm. Use the **UP/DOWN** buttons to adjust the initial position of the Pan, Tilt, Zoom or Rotation. Once confirmed, press the **ENTER** button to save. Press the **MENU** button to exit.

## 6. Universal DMX controller control

### 6.1 DMX512 connection



1. If you want to use a controller with a 5-pin DMX connector, you must use a 3-pin to 5-pin adapter signal socket.
2. On the last light, the DMX signal cable needs to be fitted with a terminator. Solder a 120ohm/4W resistor between pin2 and pin3, fit it into the 3-pin XLR plug and plug it into the DMX output of the last lamp.
3. Use an XLR signal cable to link the luminaire to the output port of the luminaire at one end and the input port of the next luminaire at the other end. XLR signal cables can only be used in series, not in parallel. The DMX512 has a fast signal transmission speed. Damaged signal lines, poor welding, poor contact, etc., will affect signal transmission and cause the system to shut down.
4. When the power supply of a unit is disconnected, the DMX output and input links are bypassed, so that the DMX line can continue to be connected.
5. Each lamp has an address code that can receive information from the console in the range of 0-512 (usually 0&1 and 1 are equal).
6. The terminals of the system need to be equipped with a terminator to reduce signal transmission errors.
7. 3-pin XLR connector connectors are a bit more common than 5-pin XLR.  
3-pin XLR: PIN 1: GND, PIN 2: Negative, PIN 3: Positive.  
5-core XLR: PIN 1: GND, PIN 2: Negative, PIN 3: Positive, PIN4/PIN5: Unused.

## 6.2 Address code settings

When using a universal DMX controller to control a fixture, you need to set the starting address (1-512) for the fixture so that the fixture can receive the signal. Press the **MENU** button to enter the menu mode, select the DMX function, press the **ENTER** button to confirm, select the DMX address, press the **ENTER** button to confirm, the current address will be displayed on the display, then use the **UP/DOWN** button to select the address code (1-512), press the **ENTER** button to save. Press the **MENU** button to return to the previous menu or wait for 1 minute to automatically exit the menu mode. Please refer to the chart below to set the address code of the first 4 fixtures:

Channel mode	Lamps1 Address code	Lamps2 Address code	Lamps3 Address code	Lamps4 Address code
16 passage	1	17	33	49
44 passage	1	45	89	133

## 6.3 DMX512 channel

Please refer to the channel diagram below to control the fixture

Note:

1. If the DMX signal is cut off, the fixture will remain in the state it was in before the signal was disconnected until it is set up again.
2. In the "Function" channel, hold the channel value for about 3 seconds and the fixture will run the corresponding function.

- ★ It will only have an effect if you turn on the zoom rotation.
- ★ The light will only light up if both the strobe and dimming are turned on and the color beads are added.

16 Channel Mode :

CHANNEL	DMX Value	Function
1	000-255	Pan
2	000-255	Tilt
3	000-255	<b>Pan/Tilt speed</b> Fast to slow
4	000-255	Zoom
5	000-127 128-190 191-192 193-255	<b>Rotation</b> Rotate manually Automatically rotates counterclockwise fast to slow Stop spinning Clockwise auto-rotation slows to fast
6	000-019 020-024 025-084 085-089 090-104 105-109 110-124 125-129 130-144 145-149 150-164 165-169 170-184 185-189 190-204 205-209 210-224 225-229 230-244 245-255	<b>Strobe</b> Darkfield switch Strobe 1: Fast to slow The strobe stops Strobe 2: Fast to slow The strobe stops Strobe 3: Fast to slow The strobe stops Strobe 4: Fast to slow The strobe stops Strobe 5: Fast to slow The strobe stops Strobe 6: Fast to slow The strobe stops Strobe 7: Fast to slow The strobe stops Strobe 8: Fast to slow The strobe stops Strobe 9: Fast to slow The strobe stops
7	000-255	<b>Dimming</b> Dark to light
8	000-255	<b>Red</b> Linear dimming (0%-100%)

9	000-255	<b>green</b> Linear dimming (0%-100%)
10	000-255	<b>blue</b> Linear dimming (0%-100%)
11	000-255	<b>white</b> Linear dimming (0%-100%)
12	000-009 010-014 015-019 020-024 025-029 030-034 035-039 040-044 045-049 050-054 055-059 060-064 065-069 070-074 075-079 080-084 085-089 090-094 095-099 100-104 105-109 110-114 115-119 120-124 125-129 130-134 135-139 140-144 145-149 150-154 155-159 160-164 165-169 170-174 175-179 180-204 205-207 208-229 230-234 235-249 250-255	<b>Color macros</b> Darkfield Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Color 8 Color 8 Color 9 Color 10 Color 11 Color 12 Color 13 Color 14 Color 15 Color 16 Color 17 Color 18 Color 19 Color 20 Color 21 Color 22 Color 23 Color 24 Color 25 Color 26 Color 27 Color 28 Color 29 Color 30 Color 31 Color 32 Darkfield The color changes clockwise Stop changing The color changes counterclockwise Darkfield Color change Darkfield

<p>13</p>	<p>000-007 008-023 024-039 040-055 056-071 072-087 088-103 104-119 120-135 136-151 152-167 168-183 184-199 200-215 216-231 232-247 248-255</p>	<p><b>Color Macro Run</b> switch Color Running Method 1 Color Running Method 2 Color Running Method 3 Color Running Method 4 Color Running Method 5 Color Running Method 6 Color Running Method 7 Color Running Method 8 Color Running Method 9 Color Running Method 10 Color Running Method 11 Color Running Method 12 Color Running Method 13 Color Running Method 14 Color Running Method 15 Color Running Method 16</p>
<p>14</p>	<p>000-017 018-024 025-032 033-039 040-047 048-054 055-061 062-069 070-076 077-084 085-092 093-106 107-113 114-121 122-128 129-136 137-143 144-151 152-158 159-165 166-173 174-181 182-188 189-195 196-203</p>	<p><b>Running back to the case</b> Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Color 8 Color 9 Color 10 Color 11 Color 12 Color 13 Color 14 Color 15 Color 16 Color 17 Color 18 Color 19 Color 20 Color 21 Color 22 Color 23 Color 24 Color 25</p>

	204-210 211-217 218-225 226-233 234-240 241-247 248-255	Color 26 Color 27 Color 28 Color 29 Color 30 Color 31 Color 32
15	000-255	<b>Color running speed</b> Slow to fast
16	000-255	Special Function

#### 44 Channel Mode :

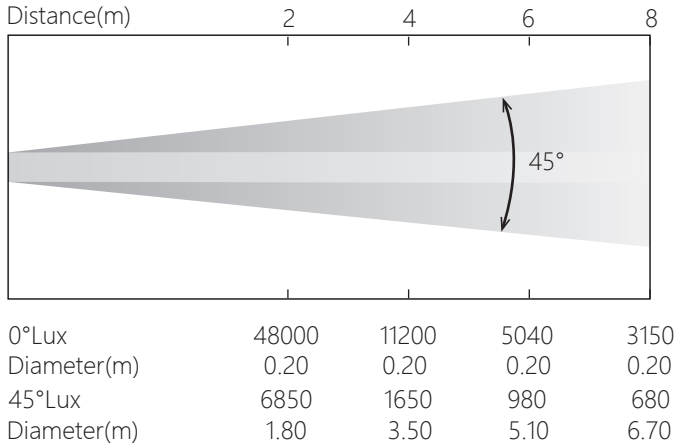
CHANNEL	DMX Value	Function
1	000-255	Pan
2	000-255	Pan Fing
3	000-255	Tilt
4	000-255	Tilt Fing
5	000-255	<b>Pan/Tilt speed</b> Fast to slow
6	000-255	Zoom
7	000-255	Zoom Fing
8	000-127 128-190 191-192 193-255	<b>Rotation</b> Rotate manually Automatically rotates counterclockwise fast to slow Stop spinning Clockwise auto-rotation slows to fast
	000-019 020-024 025-084 085-089 090-104	<b>Rotation</b> Darkfield switch Strobe 1: Fast to slow The strobe stops Strobe 2: Fast to slow

9	105-109 110-124 125-129 130-144 145-149 150-164 165-169 170-184 185-189 190-204 205-209 210-224 225-229 230-244 245-255	The strobe stops Strobe 3: Fast to slow The strobe stops Strobe 4: Fast to slow The strobe stops Strobe 5: Fast to slow The strobe stops Strobe 6: Fast to slow The strobe stops Strobe 7: Fast to slow The strobe stops Strobe 8: Fast to slow The strobe stops Strobe 9: Fast to slow The strobe stops
10	000-255	<b>Dimming</b> Dark to light
11	000-255	Dimmer Fine
12	000-255	<b>Red 1</b> Linear dimming (0%-100%)
13	000-255	<b>green 1</b> Linear dimming (0%-100%)
14	000-255	<b>blue 1</b> Linear dimming (0%-100%)
15	000-255	<b>white 1</b> Linear dimming (0%-100%)
.....	.....	.....
36	000-255	<b>Red 7</b> Linear dimming (0%-100%)
37	000-255	<b>green 7</b> Linear dimming (0%-100%)
38	000-255	<b>blue 7</b> Linear dimming (0%-100%)
39	000-255	<b>white 7</b> Linear dimming (0%-100%)
40	000-009 010-014 015-019 020-024	<b>Color macros</b> Darkfield Color 1 Color 2 Color 3

	025-029 030-034 035-039 040-044 045-049 050-054 055-059 060-064 065-069 070-074 075-079 080-084 085-089 090-094 095-099 100-104 105-109 110-114 115-119 120-124 125-129 130-134 135-139 140-144 145-149 150-154 155-159 160-164 165-169 170-174 175-179 180-204 205-207 208-229 230-234 235-249 250-255	Color 4 Color 5 Color 6 Color 7 Color 8 Color 8 Color 9 Color 10 Color 11 Color 12 Color 13 Color 14 Color 15 Color 16 Color 17 Color 18 Color 19 Color 20 Color 21 Color 22 Color 23 Color 24 Color 25 Color 26 Color 27 Color 28 Color 29 Color 30 Color 31 Color 32 Darkfield The color changes clockwise Stop changing The color changes counterclockwise Darkfield Color change Darkfield
41	000-007 008-023 024-039 040-055 056-071 072-087 088-103 104-119	<b>Color Macro Run</b> switch Color Running Method 1 Color Running Method 2 Color Running Method 3 Color Running Method 4 Color Running Method 5 Color Running Method 6 Color Running Method 7

	120-135 136-151 152-167 168-183 184-199 200-215 216-231 232-247 248-255	Color Running Method 8 Color Running Method 9 Color Running Method 10 Color Running Method 11 Color Running Method 12 Color Running Method 13 Color Running Method 14 Color Running Method 15 Color Running Method 16
42	000-017 018-024 025-032 033-039 040-047 048-054 055-061 062-069 070-076 077-084 085-092 093-106 107-113 114-121 122-128 129-136 137-143 144-151 152-158 159-165 166-173 174-181 182-188 189-195 196-203 204-210 211-217 218-225 226-233 234-240 241-247 248-255	<b>Running back to the case</b> Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Color 8 Color 9 Color 10 Color 11 Color 12 Color 13 Color 14 Color 15 Color 16 Color 17 Color 18 Color 19 Color 20 Color 21 Color 22 Color 23 Color 24 Color 25 Color 26 Color 27 Color 28 Color 29 Color 30 Color 31 Color 32
43	000-255	<b>Color running speed</b> Slow to fast

## 6.4 Product Lighting Diagram



## 7. error message

**When there is an abnormality in the luminaire, the error warning will continue to be displayed on the display and will not disappear until the fault will be solved.**

### 1. CPU-B/C/D error

Check that the 485(DATA) leads on the PCB board are in place or disconnected

Check that the 485 (DATA) lead is not broken

Check the associated signal circuit 485 (DATA) on the PCB for damage

### 2. Horizontal reset error

Check the position of the horizontally mounted magnet for detachment or damage

Check whether there are any other interfering items within the horizontal operating range

Check the horizontal Hall element for damage

Check the horizontal Hall element to the PCB board leads for poor contact or disconnection

Check the horizontal motor for damage

Check whether the relevant circuits of the horizontal motor drive board are damaged

### **3. Horizontal encoder error**

Check the horizontal encoder for damage

Check the horizontal encoder-to-PCB board leads for poor contact or disconnection

### **4. Vertical reset error**

Check whether the vertically mounted magnet position is detached or damaged

Check the vertical operating range for other interfering items

Inspect the vertical Hall element for damage

Check that the vertical Hall element to the PCB board leads are not in poor contact or disconnected

Check the vertical motor for damage

Check whether the circuits related to the vertical motor drive board are damaged

### **5. Vertical encoder error**

Check if the vertical encoder is damaged

Check that the vertical encoder-to-PCB board leads are not in poor contact or disconnected

### **6. Color correction chip error**

Check the chip for damage

Check whether the chip board is plugged in properly, and whether the IC and other electronic components are soldered

Check the motherboard for failures

Check whether the motherboard's R76 resistors and other components are soldered

### **7. Zoom reset error**

Check the location of the zoom mounting magnet for detachment or damage

Check if there are any other interfering items in the zoom range

Check for damage to the scaled Hall component

Check that the scaled Hall component-to-PCB board leads are not in poor contact or disconnected

Check if the scaling motor is damaged

Check whether the circuits related to the scaling motor driver board are damaged

### **8. Lamp bead fan 1/2/3 error**

Check if the fan is not running or if the fan voltage is measured correctly

Check that the fan leads are installed or disconnected

Check whether the fan circuit on the PCB board is abnormal

### **9. Base fan 1/2 error**

Check if the fan is not running or if the fan voltage is measured correctly

Check that the fan leads are installed or disconnected

Check whether the fan circuit on the PCB board is abnormal

## 10. Head Fan 1/2/3 error

Check if the fan is not running or if the fan voltage is measured correctly

Check that the fan leads are installed or disconnected

Check whether the fan circuit on the PCB board is abnormal

## 11. Head temperature detection error

Check whether the temperature detection plate is normal

Check whether the components of the temperature detection board are damaged

Check that the temperature detection board leads are not disconnected

## 8. Troubleshooting

**Here are some of the problems that often occur when the equipment is in operation, with some suggestions for troubleshooting:**

### **A. The light fixtures are not working, there are no lights, and the fans are not turning**

1. Check the power contact and the fuse is in good condition.
2. Detect voltage.
3. Check the indicator light of the power switch.

### **B. Not controlled by the console**

1. Check that the DMX signal connector and signal cable are connected correctly.
2. Check if the address code is set correctly.
3. If the DMX signal transmission is intermittent, check that the XLR is well connected to the signal cable.
4. Try it with a different controller.
5. Check that the DMX signal line and the high-voltage wire are too close together, which could damage or interfere with the signal circuit.

### **C. A channel is out of order**

1. The stepper motor or motor leads may be damaged.
2. The drive circuit of the motor may be damaged.

### **D. Light bulbs are sometimes good and bad**

1. The bulb does not light properly. See if the voltage is too high or too low.
2. The internal temperature may be too high. If necessary, replace the refrigeration fan.

## 9. Equipment cleaning

Keeping the luminaires clean is absolutely essential in order to maintain optimal performance and ensure the best possible lighting results. It must be cleaned regularly Luminaires, to avoid the accumulation of dust, dirt and smoke residues on the surface or inside the luminaires, cleaning frequency depending on the application Environment. If dust enters the lamp due to the installation and construction environment, please clean it immediately to avoid excessive dust Cause damage to the optical part of the lamp.

- \* It is recommended to use a soft, lint-free cloth and a high-quality glass cleaning solution, and no solvents should be used under any circumstances.
- \* Carefully wipe the parts.
- \* The outside of the lens must be wiped at least every 20 days. Wipe the inside at least every 30 days.