Equinox Fusion Beam QUAD
Order code: EQLED011
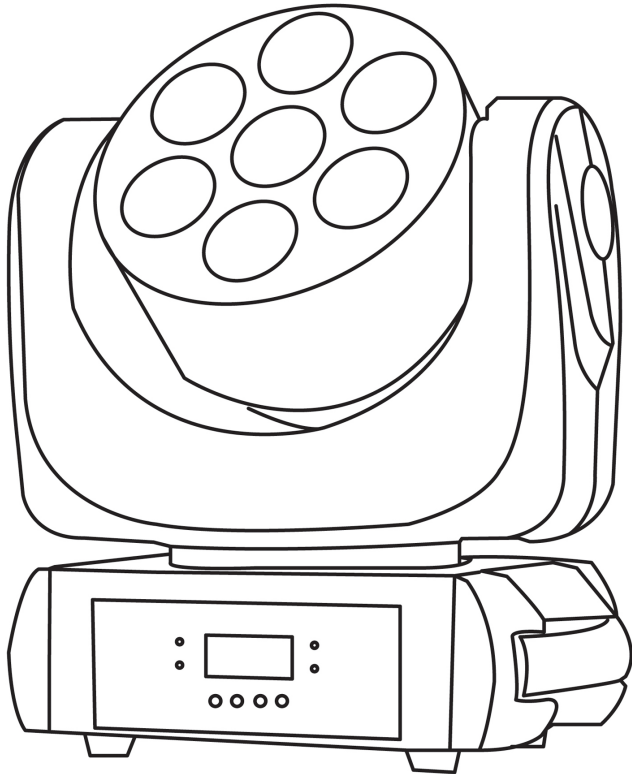
Contents

User Manual

⚠

WARNING

> Please read carefully the instructions, which include important information about the installation, usage and maintenance.

- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.

- Unpack and check carefully there is no transportation damage before using the unit.

- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.

- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

- The unit is for indoor use only. Use only in a dry location.

- 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.

- Disconnect main power before replacement or servicing.

- Make sure there are no flammable materials close to the unit while operating as they may cause a fire hazard.

- Use safety cables when installing this unit. Do not handle the unit by its head only, but always carry with its base.

- Maximum ambient temperature is ta: 40℃. Do not operate it where the temperature is higher than this.

- In the event of serious operating problem, stop using the unit immediately. Never try to repair the unit 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.

- Do not touch any power cables during operation as high voltage may cause electric shock.

Warning

To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.

Do not open the unit within five minutes after switching off.

The housing and the lenses must be replaced if they are visibly damaged.

Installation

The unit should be mounted via its screw holes onto the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times 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 installed by professionals and it must be installed in a place where is out of the reach of people and no one can pass by or under it.

## 2. Features & Specifications

2.1. Features:

- 7pcs of 10W RGBW quad colour LEDs

- Operation modes: DMX, sound active, auto and master/slave

- 0-100% dimming and variable strobe

2.2 Specifications:

Voltage:	100V~240V, 50/60Hz
Fuse:	T 6.3A
Power consumption:	150W
Light source:	7 x 10W RGBW Quad colour LEDs
Dimension:	304 x 267 x 167 mm
Weight:	5.8 kg
Pan/Tilt:	540°/240°
Power sockets	IEC IN/OUT
XLR sockets	3-pin XLR IN/OUT
DMX Channels:	1 DMX Channel Mode, 4 DMX Channel Mode, 8 DMX Channel Mode, 16 DMX Channel Mode

3. How To Set The Unit

3.1 Control panel
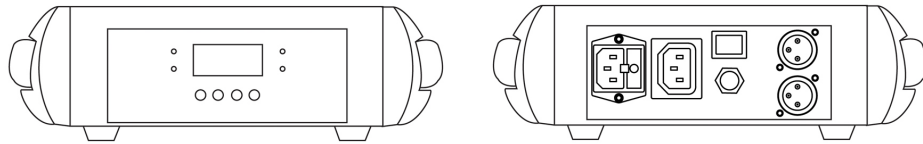
Display
Show the various menus and the selected functions

LED

DMX	On	DMX input present
MASTER	On	Master Mode
SLAVE	On	Slave Mode
SOUND	Flashing	Sound activation

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

Mains input
Connect to power supply.

Mains output
Connect to supply power to the next unit.

DMX input/output
For DMX 512 linking, use 3-pin XLR cables to link the units together.

Only for Remote control
Connection of optional the remote control.

3.2 Main Function

To select any of the functions press the **MENU** button up to where the required one is showing on the display. Select the function by pressing the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to change the mode. Once the required mode has been selected press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

The main functions are as below:

Menu			
	DMX Address setting	001-512	
	Channel mode	1CH	
		4CH	
		5CH	
		8CH	
		16CH	
	Show mode	Show 1	
		Show 2	
		Show 3	
		Show 4	
	Dimmer curve	Mode 1	
		Mode 2	
		Mode 3	
		Mode 4	
	Slave mode	Slave1	
		Slave2	
	Black out	Yes - No	
	Sound State	ON - OFF	
	Sound Sense	0-100	
	Pan inverse	Yes - No	
	Tilt inverse	Yes - No	
	Back Light	ON - OFF	
	White Balance	Red	
		Green	
		Blue	
	Manual Test	Pan	
		Tilt	
		Red	
		Green	
		Blue	
		White	
		Dimmer	
		Shutter	
	Auto-Test	Auto-Test	
	Temp:	0 -XXX°C	
	Firmware version	Ver XXX	
	Defaults	Yes - No	
	Reset		

DMX Address
Select **DMX Address**, press the **ENTER** button and the current mode will blink on the display. Use the **UP** and **DOWN** buttons to adjust the address from **1** to **512**. Once the address has been selected press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Channel Mode
Select **Channel Mode**, press the **ENTER** button to confirm and the current mode will blink on the display. Use the **DOWN** and **UP** buttons to select the **1**, **4**, **8** or **16** channel mode. Once the mode has been selected press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Show Mode
Select **Show Mode**, press the **ENTER** button and the current mode will blink on the display. Use the **DOWN** and **UP** buttons to select **Show 1** or **Show 2** or **Show 3** or **Show 4** mode. Once the mode has been selected press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Dimmer Curve
To select **Dimmer Curve**, press the **ENTER** button to show **DIMMER CURVE** on the display. Use the **DOWN/UP** buttons to select **Mode 1** or **Mode 2** or **Mode 3** or **Mode 4**. Once the mode has been selected press the **ENTER** button to setup. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to exit the menu mode.
Mode 1(Optically Linear): The increase in light intensity appears to be linear as the DMX value is increased.
Mode 2(Square Law): Light intensity control is finer at low levels and coarser at high levels.
Mode 3(Inverse Square Law): Light intensity control is coarser at low levels and finer at high levels.
Mode 4(S-curve): Light intensity control is finer at low levels and high levels and coarser at medium levels.

Slave Mode

Select **Slave Mode**, press the **ENTER** button and the current mode will blink on the display. Use the **DOWN** and **UP** buttons to select **Slave 1** (normal) or **Slave 2** (2 light show) mode. Once the mode has been selected press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Black Out

Select **Blackout Mode**, press the **ENTER** button and the current mode will blink on the display. Use the **DOWN** and **UP** buttons to select **Yes** (yes blackout) or **No** (no blackout) mode. Once the mode has been selected press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Sound State

Select **Sound State**, press the **ENTER** button and the current mode will blink on the display. Use the **DOWN** and **UP** buttons to select **ON** (Sound on) or **OFF** (Sound Off) mode. Once the mode has been selected press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Sound Sense

Select **Sound Sense**, press the **ENTER** button to confirm and the current mode will blink on the display. Use the **DOWN** and **UP** buttons to adjust the sensitivity from **0...100** and press the **ENTER** button to confirm. . To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Pan Inverse

Select **Pan Inverse**, press the **ENTER** button and the current mode will blink on the display. Use the **DOWN** and **UP** buttons to select **Yes** (pan inversion) or **No** (normal) mode and press the **ENTER** button to confirm. . To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Tilt Inverse

Select **Pan Inverse**, press the **ENTER** button and the current mode will blink on the display. Use the **DOWN** and **UP** buttons to select **Yes** (tilt inversion) or **No** (normal) mode and press the **ENTER** button to confirm. . To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Back Light

Select **Back Light**, press the **ENTER** button and the current mode will blink on the display. Use the **DOWN** and **UP** buttons to select **ON** (Led display menu on) or **OFF** (Led display menu off) mode. Press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

White Balance

Select White Balance, press the **ENTER** button and the current mode will blink on the display. Use the **DOWN** and **UP** buttons to select **Red/Green/Blue**. Once the mode has been selected press the **ENTER** button to setup, use the **DOWN** and **UP** buttons to change the value (125~255) and press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Auto-Test

Press the **MENU** button until the **Auto-Test** is blinking on the display. Press the **ENTER** button and the unit will run self-test with the built-in programs. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Temperature

Press the **MENU** button until the **Temperature Test** is blinking on the display. The temperature will be shown on the display. Press the **MENU** button again to go back to the functions without any changes. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu
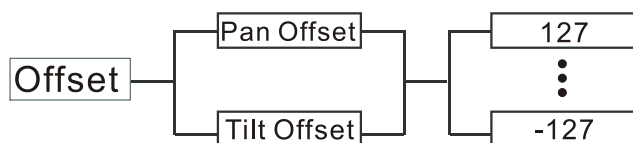
PRO Defaults: For professional users, a detailed explanation follows:

☞	*Slave Mode*	→ **Slave 1**
☞	*Black Out*	→ **Yes**
☞	*Sound State*	→ **Off**
☞	*Pan Inverse*	→ **No**
☞	*Tilt Inverse*	→ **No**
☞	*Back Light*	→ **Off**

Reset
Press the **MENU** button until the **Reset** is blinking on the display. Press the **ENTER** button and all channels of the unit will return to their standard position.

3.3 Home Position Adjust

Hold the **Enter** button for at least 3 seconds to enter offset mode. Use the **DOWN** and **UP** buttons to choose **Pan Offset** or **Tilt Offset** and then press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to adjust the home position of the Pan or Tilt, Once the position has been selected, press the **ENTER** button to confirm. To go back to the functions without any change press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

4. How To Control The Unit

1. Master/slave built-in preprogram function
2. Universal DMX controller

There is no need to turn the unit off when you change the DMX address as the new DMX address setting will be effected at once. Every time you turn the unit on, it will show "LED-7" on the display and move all the motors to their 'home' position.

4.1 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 as master and select **show 1**, **show 2**, **show 3** or **show 4** from the **Show Mode**. The DMX input must be unplugged. The master LED will be constantly on and the sound LED will blink. The other units must be set to either **Slave 1** (normal) or **Slave 2** (2 light show) mode. DMX cables between the units for linking are needed. The LED indicators on the slave units will constantly be on if the setting is correct.

2-light show
In **slave mode**, **Slave 1** means the unit works normally and **Slave 2** means 2-light show. In order to create a great light show, you can set **Slave 2** on for the second unit to get contrast movement to each other, even if you only have two units.

4.2 DMX Controller
By using a universal DMX controller to control the units, you will need to set DMX address from 1 to 512 so that the units can receive DMX signal.
Press the **MENU** button until **DMX Address** is showing on the display. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to change the DMX 512 address. Once the address has been selected, press the **ENTER** button to confirm. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

Please refer to the below diagram to address your DMX512 channel for the first 4 units :

Channel mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
1channel	1	2	3	4
4channels	1	5	9	13
8channels	1	9	17	25
16channels	1	17	33	49

4.3 DMX 512 Configuration

1 channel mode:

Channel	Value	Function
1	248-255	Random shows
	188-247	Show 4
	128-187	Show 3
	068-127	Show 2
	008-067	Show 1
	000-007	Blackout

4 channels mode :

Channel	Value	Function
1	000-255	Pan
2	000-255	Tilt
3	000-255	Dimmer
4	000-007	Open
	008-127	Colour selection
	128-191	Chase
	192-255	Fade

8 channels mode :

Channel	Value	Function
1	000-255	Pan
2	000-255	Tilt
3	248-255	Open
	240-247	Random Strobe
	232-239	Open
	190-231	Slow close Fast Open
	182-189	Open
	140-181	Slow Open Fast close
	132-139	Open
	16-131	Strobe(slow-fast)
	000-15	Open
4	000-255	Red.
5	000-255	Green.
6	000-255	Blue.
7	000-255	White.
8	000-255	Master dimmer

16 channels mode :

Channel	Value	Function
1	000-255	Pan
2	000-255	Pan fine
3	000-255	Tilt
4	000-255	Tilt fine
5	000-255	Pan/tilt speed
6		Pan/tilt macro
	236-255	Macro 12
	216-235	Macro 11
	196-215	Macro 10
	176-195	Macro 9
	156-175	Macro 8
	136-155	Macro 7
	116-135	Macro 6
	097-115	Macro 5
	076-096	Macro 4
	056-075	Macro 3
	036-055	Macro 2
	016-035	Macro 1
	000-015	Stop
7	000-255	Pan/tilt macro speed
8		Shutter/strobe
	248-255	Open
	240-247	Random Strobe
	232-239	Open
	190-234	Slow close-Fast Open
	182-189	Open
	140-181	Slow Open-Fast close
	132-139	Open
	016-131	Strobe(Slow-fast)
	000-015	Open
9	000-255	Red
10	000-255	Green
11	000-255	Blue
12	000-255	White
13		Colour macro

Channel	Value	Function
	192-255	Colour Fade(Slow-Fast)
	128-191	Colour Chase(Slow-Fast)
	124-127	Colour 31
	120-123	Colour 30
	113-115	Colour 29
	109-112	Colour 28
	105-108	Colour 27
	102-104	Colour 26
	098-101	Colour 25
	094-097	Colour 24
	090-093	Colour 23
	087-089	Colour 22
	083-086	Colour 21
	079-082	Colour 20
	075-078	Colour 19
	072-075	Colour 18
	068-071	Colour 17
	064-067	Colour 16
	061-063	Colour 15
	057-060	Colour 14
	053-056	Colour 13
	049-052	Colour 12
	046-048	Colour 11
	042-045	Colour 10
	038-041	Colour 9
	035-037	Colour 8
	031-034	Colour 7
	027-030	Colour 6
	023-026	Colour 5
	020-022	Colour 4
	016-019	Colour 3
	012-015	Colour 2
	008-011	Colour 1
	000-007	Open
14	000-255	Colour macro speed
15	000-010	Stand alone (Sound mode)
	011-255	Sound sensitivity low - high
16	000-255	Master dimmer.

4.4 DMX512 Connection

DMX Controller
DMX OUTPUT

COMMON

DMX INPUT — DMX + / DMX - — DMX OUTPUT
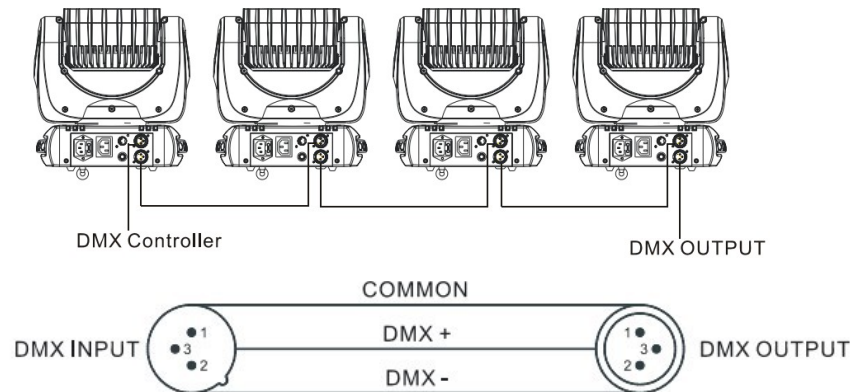
Termination reduces signal errors and to avoid signal transmission problems and interference. It is always advisable to connect a DMX terminal.
(Resistance 120 ohm 1/4W)between pin2(DMX-)and pin3(DMX+) of the last fixture.

1. In the last unit, the DMX cable has to be terminated with a terminator. 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 unit.
2. Connect the units together in a `daisy chain` with XLR cables from the output of the unit to the input of the next unit. The cable cannot branch or split to a `Y` cable.
3. The DMX output and input connectors are a pass-through type to maintain the DMX circuit even when one of the units' power is disconnected.
4. Each unit needs to have an address setup to receive the data sent from the controller. The address number is between 1-512
5. 3 pin wiring configuration:
   3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

5. Trouble shooting

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

A. The unit does not work, no light and the fan does not work
1. Check the connection of power and the main fuse.

B. Not responding to DMX controller
1. DMX LED should be on. If not, check DMX cables to see if linked correctly.
2. If the DMX LED is on and no response to the controller check the address settings and DMX polarity.
3. Try another DMX controller.

C. No response to the sound
1. Make sure the unit is not receiving a DMX signal.
2. Check the microphone to see if it is O.K. by tapping it. The microphone is located on the base of the unit.
3. Check that the unit is not set into "BLACKOUT" mode.

6. Fixture Cleaning
The cleaning of the external optical lenses 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 a greater accumulation of dirt on the unit's optics.

• Clean with soft cloth using normal glass cleaning fluid or mild soapy water.
• Always dry the parts carefully.
• Clean the external optics at least every 20 days.