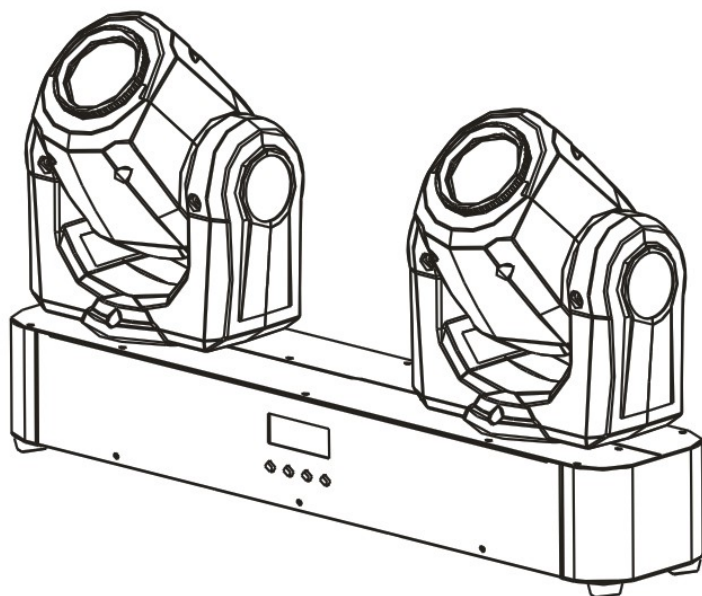


# **EQUINOX FUSION SPOT DUO**



**User Manual**  
**Order code: EQLED009**

## **Contents**

1. Safety Instructions
2. Features & Specifications
3. How To Set The Unit
4. Troubleshooting
5. Fixture Cleaning

## 1. Safety Instruction



### WARNING

Please read the instructions carefully as they include important information about 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.

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

- Before operating, ensure that the voltage and frequency of the 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 the mains 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.
- Always use a safety cable when installing this unit. Do not carry the unit with its heads only, always carry it using the base.
- The maximum ambient temperature is: 40°C. Don't operate it where the temperature is higher than this.
- In the event of a 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 the high voltage may cause an 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 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 to is secure and is able to support a weight of 10 times of the unit's weight. 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.

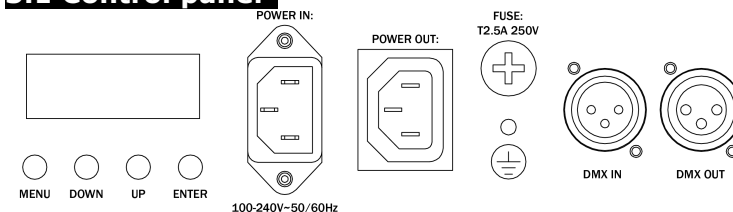
## 2. Features & Technical Specifications

- Control: Sound active, Auto, Master/slave and DMX-512 modes
- DMX Channels: 1CH/15CH/19CH
- Gobos: 7 Gobos + open per head
- Colors: 7 Colors + Open per head
- Electronic dimming: 0-100%
- Compact size and light-weight

<b>Voltage:</b>	100V~240V, 50/60Hz
<b>Fuse:</b>	T 2.5A
<b>Power consumption:</b>	85W
<b>Light source:</b>	2 x 12W white LED
<b>Dimension:</b>	500 x 106 x 278mm
<b>Weight:</b>	6.0 kg
<b>Pan/Tilt:</b>	540°/270°
<b>Power sockets:</b>	IEC IN/OUT
<b>XLR sockets:</b>	3-Pin XLR IN/OUT

## 3. How To Set The Unit

### 3.1 Control panel



## Display

Shows the various menus and selected functions

## Button

MENU	Selects the programming functions
DOWN	To go backward in the selected functions
UP	To go forward in the selected functions
ENTER	Confirms the selected functions

## Mains input

Connection to the power supply.

## DMX input/output

For DMX 512 linking. Use a 3-pin XLR cable to link to the controller or to other units.

## 3.2 Main Functions

To select any of the given functions, press the **MENU** button up to where the required function 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	ADDR	001-512
	CHND	1CH/15CH/19CH
	SLMD	MAST
		SL1
		SL2
	SHND	SH1
		SH2
		SH3
		SH4
	SOUN	ON
		OFF

	SENS	000-100
	LED	ON
		OFF
	DISP□INVERT	
	PAN INVERT1	YES
		NO
	TILT INVERT1	YES
		NO
	PAN INVERT2	YES
		NO
	TILT INVERT2	YES
		NO
	TEST	Self-Test
	VER	Software Version
	RSET	RSET

## Addr DMX Address Setting

Press the **MENU** button to select **Addr**. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to choose the address, 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.

## Chnd Channel Mode

Press the **MENU** button to select **Chnd**. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to select the **1CH** (1 Channel) mode, **15CH** (15 Channel) mode or **19CH** (19 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.

## Slnd Master Mode or Slnd Slave Mode

Press the **MENU** button to select **Slnd**. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to select the **SL1** (Slave 1), **SL2** (Slave 2) or **MAST** (Master) 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.

### **[Shnd] Show Mode**

Press the **MENU** button to select **[Shnd]**. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to select the **[Sh 1]** (show 1) or **[Sh 2]** (show 2) or **[Sh 3]** (show 3) or **[Sh 4]** (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.

### **[Soun] Sound Mode**

Press the **MENU** button to select **[Soun]**. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to select the **[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.

### **[Sens] Sound Sensitivity**

Press the **MENU** and use the **UP** and **DOWN** buttons to select **[Sens]** and select the sound sensitivity between value 0 and 100. Press the **ENTER** button for confirmation after the value selection. To go back to the functions without any changes press the **MENU** button again.

### **[Led] Led Display**

Press the **MENU** button to select **[Led]**. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to select the **[on]** (Led display on) or **[off]** (Led display 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.

### **[dISP] Display Inversion**

Press the **MENU** button to select **[dISP]**. Press the **ENTER** button to change the mode **[dISP]** (display normal), it will be automatically saved after 8 seconds. Press the **ENTER** button again to select the mode **[dSIP]** (display inversion). To go back to the functions press the **MENU** button. Press and hold the **MENU** button for one second or wait for one minute to go back to the main menu.

**[dISP]** Display normal mode is for floor standing the unit.

**[dSIP]** Display inversion mode is for hanging the unit upside down.

### **[PAn1] Pan 1 Inversion**

Press the **MENU** button to select **[PAn1]**. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to select the **[no]** (normal) or **[YES]** (pan inversion) 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.

### **[Tilt1] Tilt 1 Inversion**

Press the **MENU** button to select **[Tilt1]**. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to select the **[no]** (normal) or **[YES]** (tilt inversion) 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.

### **[PAn2] Pan 2 Inversion**

Press the **MENU** button to select **[PAn2]**. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to select the **[no]** (normal) or **[YES]** (pan inversion) 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.

### **TILT2 Tilt 2 Inversion**

Press the **MENU** button to select **TILT2**. Press the **ENTER** button and the display will blink. Use the **DOWN** and **UP** buttons to select the **no** (normal) or **YES** (tilt inversion) mode. Once the mode 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.

### **TEST Auto-Test**

Press the **MENU** button to select **TEST**. Press the **ENTER** button and the unit will run a self-test with its built-in programs. 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.

### **VER Software version**

Press the **MENU** button up to where **VER** is showing on the display. Pressing **ENTER** button and the display will show the version of software of the unit. To go back to the functions press the **MENU** button.

### **RESET Reset**

Press the **MENU** button to select **RESET**. Press the **ENTER** button and all channels of the unit will return to their standard position.

## **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 new DMX address setting will take effect at once. Every time you turn the unit on, it will show "1510" on the display and move all the motors to their 'home' position and you may hear some noises for about 20 seconds. After that the unit will be ready to receive a DMX signal or run the built in programs.

### **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 other units must be set to either **Slave 1** (normal) or **Slave 2** (2 light show) mode. A DMX cable between the units for daisy chaining is needed.

### **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 the second unit to get contrast movement to each other, even if you have two units only.

## **4.2 DMX Controller**

By using a universal DMX controller to control the units, you will need to set a DMX address from 1 to 512 so that the units can receive a DMX signal. Press the **MENU** button until **Addr** 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 one second or wait for one minute to go back to the main menu.

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

Channel mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
1 channel	1	2	3	4
15 channel	1	16	31	46
19 channel	1	20	39	58

## **4.3 DMX 512 Configuration**

### **1 CHANNEL MODE**

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

## 15 CHANNEL MODE

CH	Function	Value	Percent / Setting
1	Pan1	000-255	0~100%
2	Tilt1	000-255	0~100%
3	Pan1/Tilt1 Speed	000-255	Fast -> Slow
4	LED1 Dimmer	000-255	0~100%
5	Shutter 1	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	Close Open Strobe Slow->Fast Open Fast Close Slow Open Open Fast Open Slow Close Open Random Strobe Open
6	Colour1	000-007 008-014 015-021 022-028 029-035 036-042 043-049 050-056 057-127 128-189 190-193 194-255	White Light Blue Pink Orange Green Blue Yellow Red Split colors Colour Scroll Fast to Slow Stop Colour Scroll Slow to Fast

7	Gobo 1	000-007 008-015 016-023 024-031 032-039 040-047 048-055 056-063 064-071 072-079 080-087 088-095 096-103 104-111 112-119 120-127 128-189 190-193 194-255	Gobo 1 (Open) Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 1 Shake Gobo 2 Shake Gobo 3 Shake Gobo 4 Shake Gobo 5 Shake Gobo 6 Shake Gobo 7 Shake Gobo 8 Shake Gobo Scroll, Fast to Slow Stop Gobo Scroll , Slow to Fast
8	Pan2	000-255	0~100%
9	Tilt2	000-255	0~100%
10	Pan2/Tilt2 Speed	000-255	Fast -> Slow
11	LED2 Dimmer	000-255	0~100%
12	Shutter 2	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	Close Open Strobe Slow->Fast Open Fast Close Slow Open Open Fast Open Slow Close Open Random Strobe Open

13	Colour2	000-007	White
		008-014	Light Blue
		015-021	Pink
		022-028	Orange
		029-035	Green
		036-042	Blue
		043-049	Yellow
		050-056	Red
		057-127	Split colors
		128-189	Colour Scroll Fast to Slow
		190-193	Stop
		194-255	Colour Scroll Slow to Fast
14	Gobo 1	000-007	Gobo 1 (Open)
		008-015	Gobo 2
		016-023	Gobo 3
		024-031	Gobo 4
		032-039	Gobo 5
		040-047	Gobo 6
		048-055	Gobo 7
		056-063	Gobo 8
		064-071	Gobo 1 Shake
		072-079	Gobo 2 Shake
		080-087	Gobo 3 Shake
		088-095	Gobo 4 Shake
		096-103	Gobo 5 Shake
		104-111	Gobo 6 Shake
		112-119	Gobo 7 Shake
		120-127	Gobo 8 Shake
		128-189	Gobo Scroll, Fast to Slow
		190-193	Stop
		194-255	Gobo Scroll , Slow to Fast

15	Function	000-069	Null
		070-079	Blackout while Pan/Tilt Move
		080-089	Null
		090-099	Blackout when Color changes
		100-109	Null
		110-119	Blackout when Gobo changes
		120-199	Null
		200-209	Reset All
		210-249	Null
		250-255	Sound Active

### 19 CHANNEL MODE

CH	Function	Value	Percent / Setting
1	Pan1	000-255	0~100%
2	Pan1 fine	000-255	Pan1 fine
3	Tilt1	000-255	0~100%
4	Tilt1 fine	000-255	Tilt2 fine
5	Pan1/Tilt1 Speed	000-255	Fast -> Slow
6	LED1 Dimmer	000-255	0~100%
7	Shutter 1	000-007	Close
		008-015	Open
		016-131	Strobe Slow->Fast
		132-139	Open
		140-181	Fast Close Slow Open
		182-189	Open
		190-231	Fast Open Slow Close
		232-239	Open
		240-247	Random Strobe
		248-255	Open

8	Colour1	000-007	White
		008-014	Light Blue
		015-021	Pink
		022-028	Orange
		029-035	Green
		036-042	Blue
		043-049	Yellow
		050-056	Red
		057-127	Split colours
		128-189	Colour Scroll Fast to Slow
9	Gobo 1	190-193	Stop
		194-255	Colour Scroll Slow to Fast
		000-007	Gobo 1 (Open)
		008-015	Gobo 2
		016-023	Gobo 3
		024-031	Gobo 4
		032-039	Gobo 5
		040-047	Gobo 6
		048-055	Gobo 7
		056-063	Gobo 8
		064-071	Gobo 1 Shake
		072-079	Gobo 2 Shake
		080-087	Gobo 3 Shake
		088-095	Gobo 4 Shake
		096-103	Gobo 5 Shake
		104-111	Gobo 6 Shake
		112-119	Gobo 7 Shake
		120-127	Gobo 8 Shake
		128-189	Gobo Scroll, Fast to Slow
		190-193	Stop
		194-255	Gobo Scroll , Slow to Fast
10	Pan2	000-255	0~100%
11	Pan2 fine	000-255	Pan2 fine
12	Tilt2	000-255	0~100%
13	Tilt2 fine	000-255	Tilt2 fine
14	Pan2/Tilt2 Speed	000-255	Fast -> Slow

15	LED2 Dimmer	000-255	0~100%
16	Shutter 2	000-007	Close
		008-015	Open
		016-131	Strobe Slow->Fast
		132-139	Open
		140-181	Fast Close Slow Open
		182-189	Open
		190-231	Fast Open Slow Close
		232-239	Open
		240-247	Random Strobe
		248-255	Open
17	Colour2	000-007	White
		008-014	Light Blue
		015-021	Pink
		022-028	Orange
		029-035	Green
		036-042	Blue
		043-049	Yellow
		050-056	Red
		057-127	Split colors
		128-189	Colour Scroll Fast to Slow
18	Gobo 2	190-193	Stop
		194-255	Colour Scroll Slow to Fast
		000-007	Gobo 1 (Open)
		008-015	Gobo 2
		016-023	Gobo 3
		024-031	Gobo 4
		032-039	Gobo 5
		040-047	Gobo 6
		048-055	Gobo 7
		056-063	Gobo 8
		064-071	Gobo 1 Shake
		072-079	Gobo 2 Shake
		080-087	Gobo 3 Shake
		088-095	Gobo 4 Shake
		096-103	Gobo 5 Shake
		104-111	Gobo 6 Shake
		112-119	Gobo 7 Shake
		120-127	Gobo 8 Shake
		128-189	Gobo Scroll, Fast to Slow



		190-193 194-255	Stop Gobo Scroll , Slow to Fast
19	Function	000-069 070-079 080-089 090-099 100-109 110-119 120-199 200-209 210-249 250-255	Null Blackout while Pan/Tilt Move Null Blackout when Color changes Null Blackout when Gobo changes Null Reset All Null Sound Active

#### 4. Troubleshooting

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 the power and the main fuse.

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

1. If the DMX address is showing but no response to the controller, check the address settings and DMX polarity.
2. 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 good by tapping it. The microphone is located on the bottom plate of the unit.

#### 5. Fixture Cleaning

The cleaning of 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 a 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.