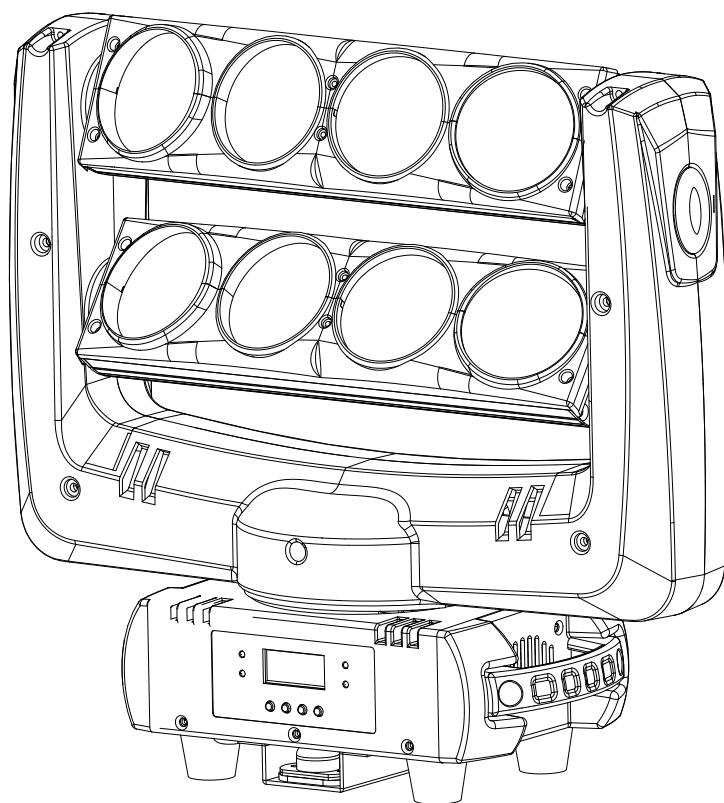




Dragonfly

Quad



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.

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 it is fire hazard.
- Use safety cable when installing this unit. DO NOT handle the unit by taking its head only, but always by taking its base.
- Maximum ambient temperature is T_a : 40 degrees C. DO NOT operate it where the temperature is higher than this.
- Unit surface temperature may reach up to 75 degrees C. DO NOT touch the housing with bare-hands during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.
- 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 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.
- The housing and lenses must be replaced if they are visibly damaged.

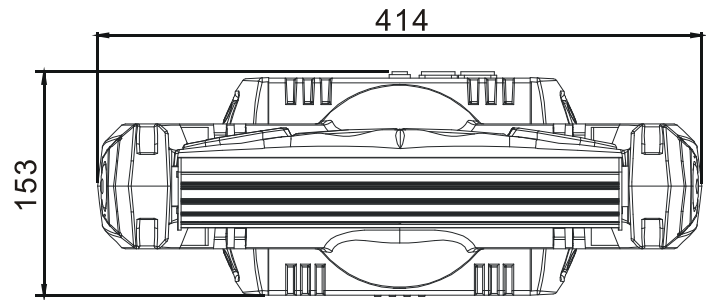
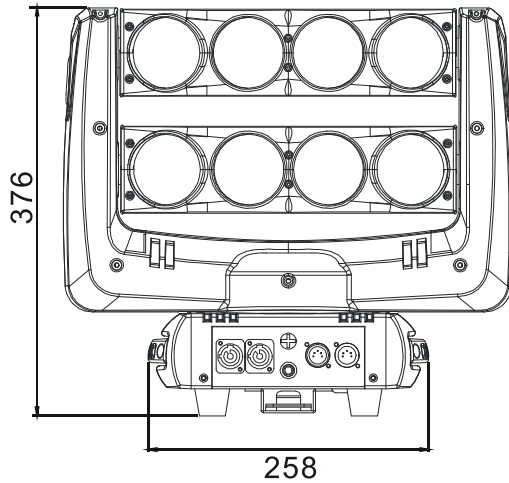
Installation:

The fixture should be mounted via its Omega Quick Release Clamp bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating and make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the fixtures weight. Always use a safety cable that can hold 12 times of the weight of the fixture when installing.

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.

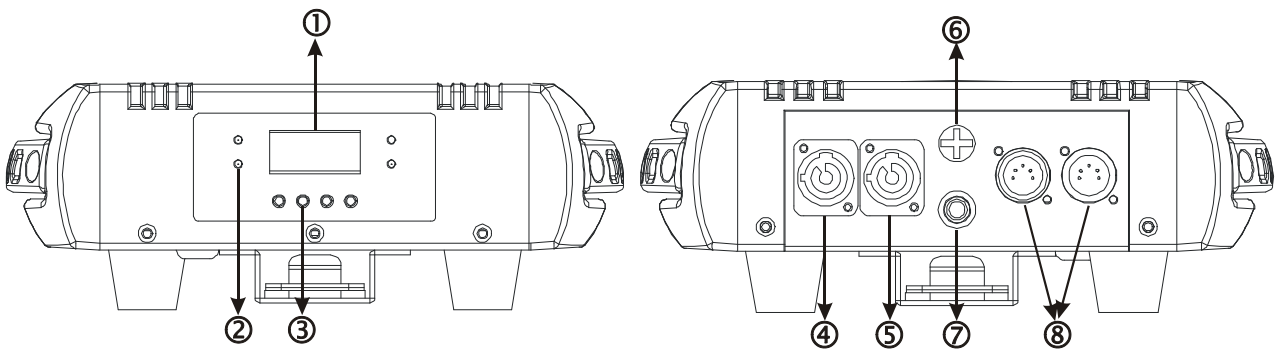
2. Technical Specifications

- Moving pan with 2 movable LED bars, each with 4 pixel controlled 8W LEDs
- 3 Operation Modes: DMX, Master/Slave mode, Sound Activation.
- DMX Channel modes: 1,7,13 and 37 channels
- Built-in programs in master/slave operation triggered by music.
- Optional easy controller CA-8 for instant lighting show.
- Smooth dimming and various strobe effects.
- **Power Voltage:** AC 100~240V, 50/60Hz
- **Power Consumption:** 81W
- **Power Cable Daisy Chains:** 8 Fixtures Max. (230V, 50Hz)
5 Fixtures Max. (120V, 60Hz)
- **LED Sources:** 8 x 8W Quad-color(4 in 1) LEDs
- **Weight:** 7.8kgs
- **Dimension:** 414 x 153 x 376mm



3. How To Set The Unit

3.1 Control Panel



1. Function Display: Used to show the various menus and the selected functions.

2. LED:

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

3. Button:

MENU	To select the programming functions
▼ DOWN	To go backward in the selected functions
▲ UP	To go forward in the selected functions

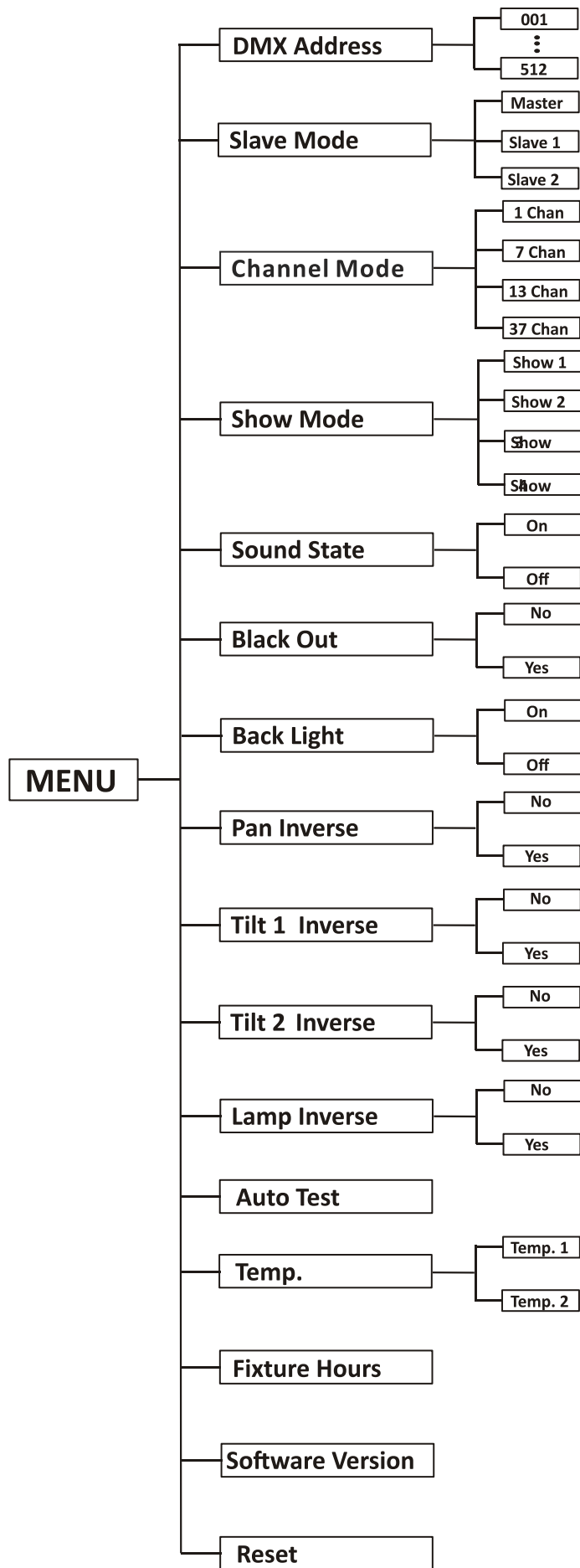
ENTER	To confirm the selected functions
--------------	-----------------------------------

4. **POWER IN:** Connect to power supply;
5. **POWER OUT:** Connect to supply power to the next fixture;
6. **Fuse (T 3.15A):** Protects the unit from short circuit or over current;
7. **Only for remote control:** Connect to the optional CA-8 to control the unit for Stand by, Function and Mode function;
8. **DMX IN/OUT:** For DMX512 linking, use 3-pin XLR plug cables to link the unit together;

3.2 Main Function

To select any functions, press the **MENU** button until 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 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 about one minute to exit the menu mode.

The main functions are shown below:



DMX Address

To select the **DMX Address**, press the **ENTER** button to show **DMX ADDRESS** on the display. Use the **DOWN/UP** buttons to adjust the address from **001** to **512**. Once the address 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 about one minute to exit the menu mode.

Slave Mode

To select the **Slave Mode**, press the **ENTER** button to show **SLAVE MODE** on the display. Use the **DOWN/UP** button to select the **Master, Slave 1, or Slave 2** modes. 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 about one minute to exit the menu mode.

Channel Mode

To select the **Channel Mode**, press the **ENTER** button to show the **CHANNEL MODE** on the display. Use the **DOWN/UP** buttons to select the **1, 7, 13, 37** channel modes. 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 about one minute to exit the menu mode.

Show Mode

To select the **Show Mode**, press the **ENTER** button to show the **SHOW MODE** on the display. Use the **DOWN/UP** buttons to select the **Show 1, Show 2, Show 3** or **Show 4** Mode. 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 about one minute to exit the menu mode.

Sound State

To select the **Sound State**, press the **ENTER** button to show **SOUND STATE** on the display. Use the **DOWN/UP** buttons to select the **On** (sound on) or **Off** (sound off) mode. 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 about one minute to exit the menu mode.

Black Out

To select the **Black Out**, press the **ENTER** button to show **BLACKOUT** on the display. Use the **DOWN/UP** buttons to select the **Yes** (blackout) or **No** (normal) mode. 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 about one minute to exit the menu mode.

Back Light

To select the **Back Light**, press the **ENTER** button to show **BACK LIGHT** on the display. Use the **DOWN/UP** buttons to select the **On** (LED on) or **Off** (LED off) mode. 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 about one minute to exit the menu mode.

Pan Inverse

To select the **Pan Inverse**, press the **ENTER** button to show **PAN INVERSE** on the display. Use the **DOWN/UP** buttons to select the **Yes** (pan inversion) or **No** (normal), press the **ENTER** button to setup. To go back to the functions without any changes press **MENU** button.

Tilt 1 Inverse

To select the **Tilt 1 Inverse**, press the **ENTER** button to show **TILT 1 INVERSE** on the display. Use

the **DOWN/UP** buttons to select the **Yes** (tilt 1 inversion) or **No** (normal) mode. 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 about one minute to exit the menu mode.

Tilt 2 Inverse

To select the **Tilt 2 Inverse**, press the **ENTER** button to show **TILT 2 INVERSE** on the display. Use the **DOWN/UP** buttons to select the **Yes** (tilt 2 inversion) or **No** (normal) mode. 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 about one minute to exit the menu mode.

Lamp Inverse

To select the **Lamp Inverse**, press the **ENTER** button to show **LAMP INVERSE** on the display. Use the **DOWN/UP** button to select the **Yes** (the LEDs will light up from right to left) or **No** (normal, the LEDs will light up from left to right). 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 about one minute to exit the menu mode.

Auto Test

To select the **Auto Test**, press the **ENTER** button to show **AUTO TEST** on the display and the unit will run a self-test. 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 about one minute to exit the menu mode.

Temperature

To select the **Temperature**, press the **ENTER** button to show **TEMP.** on the display. Use the **DOWN/UP** buttons to select the **Temp. 1** (the temperature of movable bars 1) or **Temp. 2** (the temperature of movables bar 2), press the **ENTER** button, and the display will show the temperature of the movable bar. 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 about one minute to exit the menu mode.

Fixture Hours

To select the **Fixture Hours**, press the **ENTER** button to show **FIXTURE HOURS** on the display and the display will show the number of working hours of the unit. 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 about one minute to exit the menu mode.

Software Version

To select the **Software Version**, press the **ENTER** button to show **SOFTWARE VERSION** on the display and the display will show the version of software of the unit. 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 about one minute to exit the menu mode.

Reset

To select the **Reset**, press the **ENTER** button to show **RESET** on the display. Press the **ENTER** button and all channels of the unit will return to their standard position.

4. How to Control the Unit

You can operate the unit in three ways:

1. By master/slave built-in preprogram function
2. By CA-8 easy controller
3. By DMX controller

You do not need to turn the unit off when you change the DMX address, the new DMX address setting will take effect immediately. Every time you power the unit on, it will move all the motors to their 'home' position and you may hear some movement noises for about 20 seconds. After that the unit will be ready to receive a DMX signal or run the built in programs.

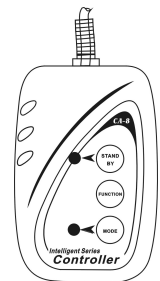
4.1 Master/Slave Built In Preprogrammed Function

By linking the units together in master/slave, the first unit (the master) will control the other units (the slave) to give an automatic, sound activated, synchronized light show. This function is good when you want an instant show.

To set the first unit as a master, press the ENTER button to show the **SHOW MODE** on the display. Now use the **DOWN** and **UP** buttons up to select the **Show 1, Show 2, Show 3** or **Show 4** and the master LED will be constantly lit and the sound LED will flash to the music. To set the unit as a slave, press the ENTER button to show SLAVE MODE on the display. Now use the **DOWN** and **UP** buttons up to select Slave 1 (normal) and Slave 2(2 light show) mode, and the SLAVE LED will be constantly lit.

4.2 Easy Controller

The easy remote control is used only in master/slave mode. By connecting to the 1/4" jack socket of the first unit, you will find that the remote controller on the first unit will control all the other units for Stand by, Function and Mode selection.



Blackout	Blackout the unit	
Function	1. Sound Strobe (Full On) 2. Auto Strobe (Full On)	Select Show Show 1-4
Mode	Random Show (LED OFF)	Show (LED ON)

4.3 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 up to when the **DMX Address** is showing on the display. Press the **ENTER** button and the display will blink. Use the **DOWN/UP** buttons to change the DMX512 address. Once the address has been selected, press the **ENTER** button to setup. To go back to the functions

Channel Mode	Unit 1	Unit 2	Unit 3	Unit 4
1 channel	1	2	3	4
7 channels	1	8	15	22
13 channels	1	14	27	40
37 channels	1	38	75	112

without any changes press the **MENU** button again. Press and hold the **MENU** button for about one second or wait for about one minute to exit the menu mode.

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

5. DMX512 Configuration

1/7 Channels Mode:

1 Channel Mode	7 Channels Mode						
Ch1	Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7
SHOW (SOUND)	PAN MOVEMENT	TILT1 MOVEMENT	TILT2 MOVEMENT	MASTER DIMMER	STROBE	LED CHASE	LED CHASE SPEED
194-255 Show 4	255 540°	255 150°	255 150°	255 100%	248-255 Open	248-255 Full On	255 Fast
132-193 Show 3					240-247 Strobe by sound	233-247 Chase 16	
070-131 Show 2					232-239 Open	218-232 Chase 15	
008-069 Show 1					190-231 Fast open Slow close	203-217 Chase 14	
000-007 Blackout	0 0°	0 60°	0 60°	0 0%	182-189 Open	188-202 Chase 13	
					140-181 Slow open Fast close	173-187 Chase 12	
					132-139 Open	158-172 Chase 11	
					008-131 ⚡⚡⚡	143-157 Chase 10	
					000-007 ⚡	128-142 Chase 09	
						113-127 Chase 08	
						098-112 Chase 07	
						083-097 Chase 06	
						068-082 Chase 05	
						053-067 Chase 04	
						038-052 Chase 03	
						023-037 Chase 02	
						008-022 Chase 01	
						000-007 Blackout	0 Slow

13 Channels Mode:

13 Channels Mode						
Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	
PAN MOVEMENT	TILT1 MOVEMENT	TILT2 MOVEMENT	MASTER DIMMER	STROBE	COLOR LED 1	
255 540° 0 0°	255 150° 0 60°	255 150° 0 60°	255 100% 0 0%	248-255 Open 240-247 Strobe by sound 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	248-255 Color change by sound 128-247 Color change slow to fast 120-127 R + G + B + W 112-119 G + B + W 104-111 R + B + W 096-103 R + G + W 088-095 R + G + B 080-087 B + W 072-079 G + W 064-071 G + B 056-063 R + W 048-055 R + B 040-047 R + G 032-039 W (White) 024-031 B (Blue) 016-023 G (Green) 008-015 R (Red) 000-007 All Off	
Ch7	Ch8	Ch9	Ch10	Ch11	Ch12	Ch13
COLOR LED 2	COLOR LED 3	COLOR LED 4	COLOR LED 5	COLOR LED 6	COLOR LED 7	COLOR LED 8
248-255 Color change by sound	248-255 Color change by sound	248-255 Color change by sound	248-255 Color change by sound	248-255 Color change by sound	248-255 Color change by sound	248-255 Color change by sound
128-247 Color change slow to fast	128-247 Color change slow to fast	128-247 Color change slow to fast	128-247 Color change slow to fast	128-247 Color change slow to fast	128-247 Color change slow to fast	128-247 Color change slow to fast
120-127 R + G + B + W	120-127 R + G + B + W	120-127 R + G + B + W	120-127 R + G + B + W	120-127 R + G + B + W	120-127 R + G + B + W	120-127 R + G + B + W
112-119 G + B + W	112-119 G + B + W	112-119 G + B + W	112-119 G + B + W	112-119 G + B + W	112-119 G + B + W	112-119 G + B + W
104-111 R + B + W	104-111 R + B + W	104-111 R + B + W	104-111 R + B + W	104-111 R + B + W	104-111 R + B + W	104-111 R + B + W
096-103 R + G + W	096-103 R + G + W	096-103 R + G + W	096-103 R + G + W	096-103 R + G + W	096-103 R + G + W	096-103 R + G + W
088-095 R + G + B	088-095 R + G + B	088-095 R + G + B	088-095 R + G + B	088-095 R + G + B	088-095 R + G + B	088-095 R + G + B
080-087 B + W	080-087 B + W	080-087 B + W	080-087 B + W	080-087 B + W	080-087 B + W	080-087 B + W
072-079 G + W	072-079 G + W	072-079 G + W	072-079 G + W	072-079 G + W	072-079 G + W	072-079 G + W
064-071 G + B	064-071 G + B	064-071 G + B	064-071 G + B	064-071 G + B	064-071 G + B	064-071 G + B
056-063 R + W	056-063 R + W	056-063 R + W	056-063 R + W	056-063 R + W	056-063 R + W	056-063 R + W
048-055 R + B	048-055 R + B	048-055 R + B	048-055 R + B	048-055 R + B	048-055 R + B	048-055 R + B
040-047 R + G	040-047 R + G	040-047 R + G	040-047 R + G	040-047 R + G	040-047 R + G	040-047 R + G
032-039 W (White)	032-039 W (White)	032-039 W (White)	032-039 W (White)	032-039 W (White)	032-039 W (White)	032-039 W (White)
024-031 B (Blue)	024-031 B (Blue)	024-031 B (Blue)	024-031 B (Blue)	024-031 B (Blue)	024-031 B (Blue)	024-031 B (Blue)
016-023 G (Green)	016-023 G (Green)	016-023 G (Green)	016-023 G (Green)	016-023 G (Green)	016-023 G (Green)	016-023 G (Green)
008-015 R (Red)	008-015 R (Red)	008-015 R (Red)	008-015 R (Red)	008-015 R (Red)	008-015 R (Red)	008-015 R (Red)
000-007 All Off	000-007 All Off	000-007 All Off	000-007 All Off	000-007 All Off	000-007 All Off	000-007 All Off

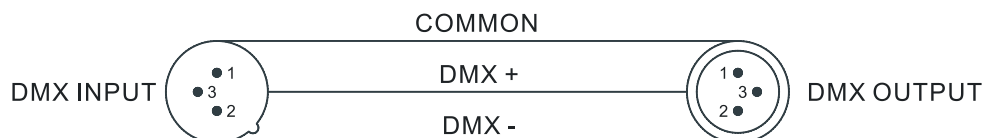
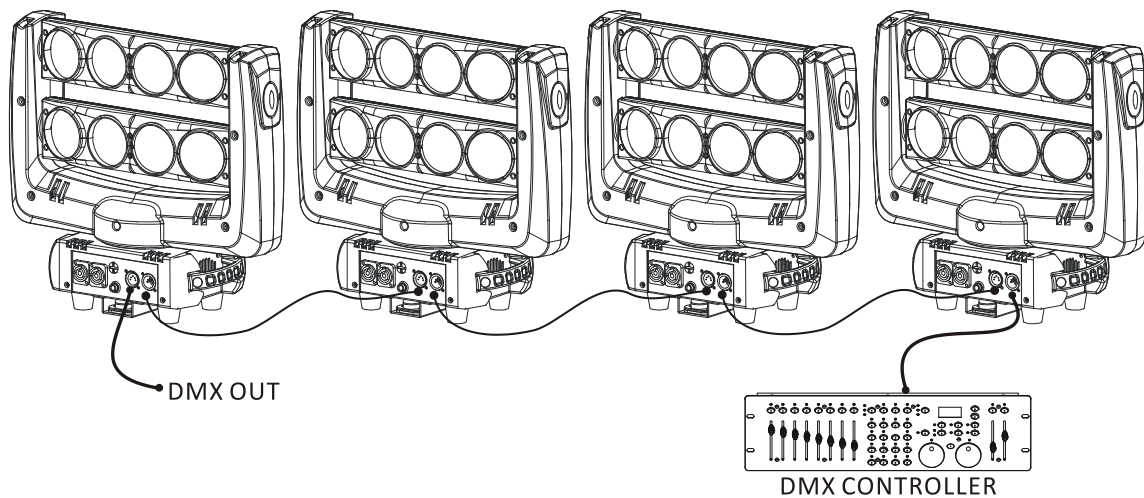
37 Channels Mode:

37 Channels Mode (1)						
Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	
PAN MOVEMENT	TILT1 MOVEMENT	TILT2 MOVEMENT	MASTER DIMMER	STROBE	RED LED 1	
				248-255 Open 240-247 Strobe by sound 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		
Ch7	Ch8	Ch9	Ch10	Ch11	Ch12	Ch13
GREEN LED 1	BLUE LED 1	WHITE LED 1	RED LED 2	GREEN LED 2	BLUE LED 2	WHITE LED 2

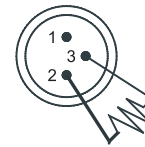
37 Channels Mode (2)

Ch14	Ch15	Ch16	Ch17	Ch18	• • •
RED LED 3	GREEN LED 3	BLUE LED 3	WHITE LED 3	RED LED 4	• • •
255 100% 0 0%	255 100% 0 0%	255 100% 0 0%	255 100% 0 0%	255 100% 0 0%	• • • • •
• • •	Ch33	Ch34	Ch35	Ch36	Ch37
• • •	WHITE LED 7	RED LED 8	GREEN LED 8	BLUE LED 8	WHITE LED 8
• • • • •	255 100% 0 0%	255 100% 0 0%	255 100% 0 0%	255 100% 0 0%	255 100% 0 0%

6. DMX Connection



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. Connect the fixture together in a “daisy chain” with XLR cables from the output of the fixture to the input of the next fixture. The cable cannot be branched or split to a “Y” cable.
 2. The DMX output and input connectors are pass-through to maintain the DMX circuit when one of the units’ power is disconnected.
 3. The last units DMX cable has to be terminated with a 120 ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) of a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
 4. Each fixture unit 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 (+)
Pin 4/Pin 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.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX cables to see if linked properly.
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.
4. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference.

C. Some fixtures don't respond to the easy controller

1. You may have a break in the DMX cabling. Check the LED for the response of the master/slave mode signal.
2. Wrong DMX address in the unit. Set the correct address.

D. No response to the sound

1. Make sure the fixture is not receiving a DMX signal.
2. Check microphone by tapping it.
3. Make sure the fixture is not set into Blackout mode

8. Fixture Cleaning

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

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

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 89/336/EEC.

EN55103-1: 2009 ; EN55103-2: 2009; EN62471: 2008;
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