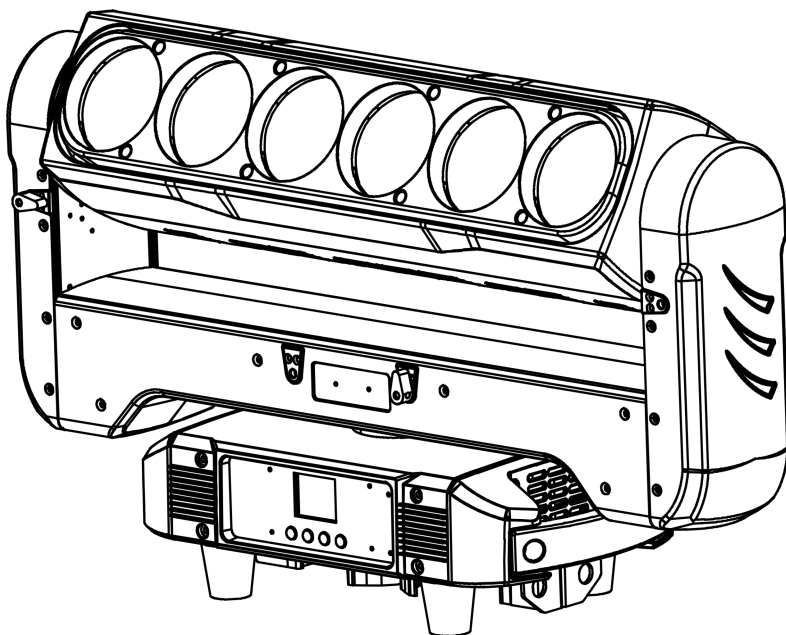


# 660DZ

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## 6\*60W Double Face Led Pixel Zoom and Strobe Bar Moving Head



## USER MANUAL

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## Statement

Fixtures should be fastened on the hooks with screws. Make sure the installation is secure to prevent chattering and slipping during operation. Also make sure that the structure of the connected luminaire can support the luminaire 10 times the weight. At the same time, when

installing the lamps, they also use a safety rope to support the weight of the lamps by 12 times.

The installation of the equipment should be carried out by professionals, and it should also be installed in places where people can't reach them casually or where no one is free to pass by.

## Safety Instructions

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.
- The unit must be installed in a location with adequate ventilation, at least 50 cm 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 fixes this unit. Do not handle the unit by taking its head only, but always by taking its base.
- Maximum ambient temperature is : 45 °C . Do not operate it where the temperature is higher than this Unit surface temperature may reach up to 85 °C . Do not touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.
- 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 us for the technical support

- Do not touch any wire during operation as high voltage might be causing 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, the lenses, must be replaced if they are visibly damaged.

### **Caution:**

There are no user serviceable parts inside the unit. If the service breaks down, you can contact us directly to teach you how to repair it, or send it back to us and we will send it back to you after it is repaired.

### **Installation:**

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

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people.

## Technical Specifications

### Light Sources:

Zoom wash face: 6\*60W 4IN1 RGBW LED;

Strobe face: 20\*10W white led+384\*0.5W 3in1 RGB Led

Beam Angle:3.5°- 45°

PMMA high quality and high output optic

Power Consumption: 700w

Power Voltage: AC 100-240V, 50/60Hz

Dimension:640\*210\*403mm

Net Weight:19.5 kg

Flight case packing 2in1 size: 720x640x600mm

Gross weight: 68.5 kg

Carton packing 1in1 size :735x505x300mm

Gross weight: 22 kg

### Maximum number of connections:

4 units (220V, 50Hz) 2.5mm<sup>2</sup> power cable

3 units (120V, 60Hz) 2.5mm<sup>2</sup> power cable

### Control

DMX Channel:34/54 Channels

Control Protocol: DMX512/RDM

### Pan/Tilt

Pan / Tilt : Infinite Rotation

Pan/Tilt Resolution: 8/16 bit

Magnetic coded reset system is adopted

## **Construction**

Display: 1.8 inch 180° reversible colorful TFT Display

Data In/Out socket: 3-pin & 5-pin XLR sockets

Power Socket: Power-Con in/out

Protection Rating: IP20

Reset the light fixture by menu or console

Equipped with Small and easy to operate Pan & Tilt fix lock

## **Features**

Double face moving head with beam, wash, strobe effect

Good to use for stage effect, background or stage shape

Dimmer: 0~100% smooth dimming

Four dimmer model in optional( delay or without delay)

Led single controlled

Strong beam effects with high brightness

Led temperature protection & auto adjust led brightness

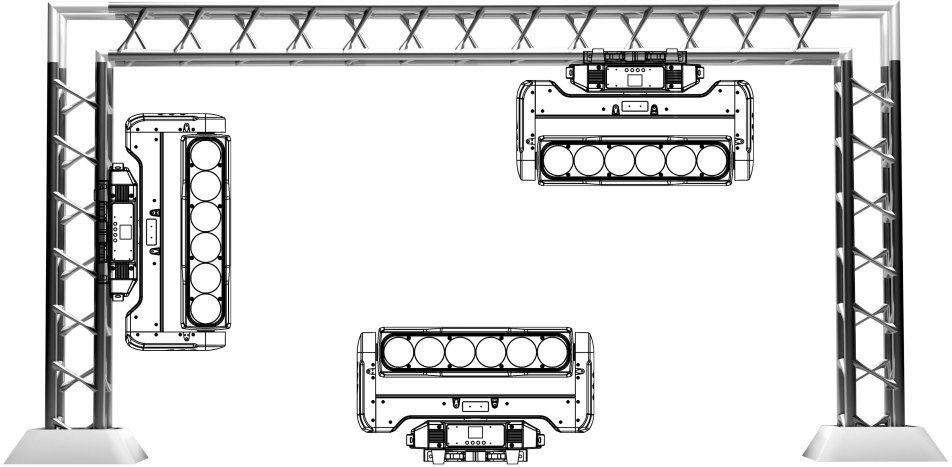
Fan run speed automatic based on the head temperature.

## **Mounting**

When installing the unit, the trussing or area of installation must be able to hold 10 times the weight without any deformation. When installing the unit must be secured with a secondary safety attachment, e.g. and appropriate safety cable. Never stand directly below the unit when mounting, removing, or servicing the unit.

Overhead mounting requires extensive experience, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and unit. If you lack these qualifications, do not attempt the installation yourself.

These installation should be checked by a skilled person once a year.



660DZ is fully operational in three different mounting positions, hanging upside-down from a ceiling, sideways on trussing, or set on a flat level surface. Be sure this fixture is kept at least 12m (40ft) away from any flammable materials

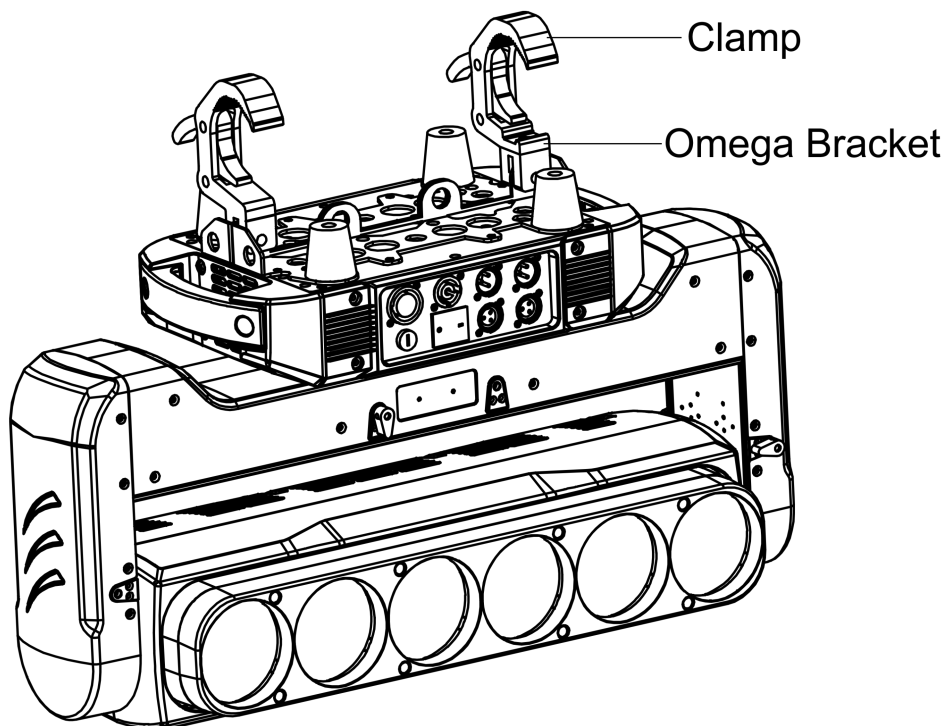
(decoration etc.). Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the because of clamp fails (see next page). Never use the carrying handles for secondary attachment.

## Mounting

**NOTICE:** The suitable environmental temperature for this lighting fixture is between -25° C to 45° C. Do not place this lighting fixture in an environment where the temperatures are under or above the temperatures stated. This will allow the fixture to run at its best and help prolong the fixture life.

1. Bolt each clamp to the Omega holder with screw and lock nut through the hole in the holder.

2. Fasten the omega holders on the bottom of the base by inserting quick-lock fasteners into the holes of the base and tighten fully clockwise.
3. Hang the fixture to the support using the clamps and tighten the screws. Fasten a safety cable through the bottom of the base and over the support.

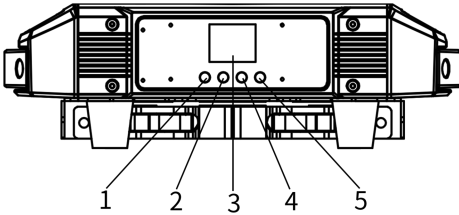


Screw one clamp each via a M12 screw and nut into the Omega holders. Insert the quick-lock fasteners of the Omega holder's into the respective holes on the bottom of the 660DZ. Tighten the quick-lock fasteners fully clockwise. Then install the second Omega holder. Pull the safety-cable through the openings located on the base plate and over the trussing system or a safe fixation spot. Insert and tighten the safety screw.

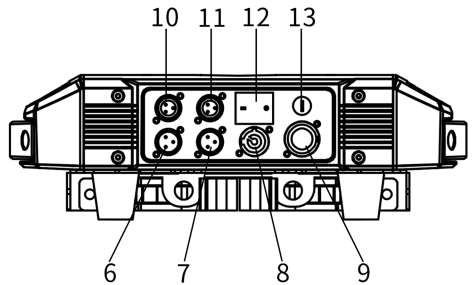


# Display and Menu

**FRONT VIEW**



**REAR VIEW**



## Display:

1. MENU: To select the programming functions
2. UP: To go forward in the selected functions
3. DISPLAY: To show the various menus and the selected function.
4. DOWN: To go backward in the selected functions
5. ENTER: To confirm the selected functions
6. DMX OUT
7. DMX IN
8. FUSE
9. POWER IN
10. POWER OUT
11. ON/OFF

## Set DMX Address Code:

- Press **"Menu"** to "Set DMX Address", and press **"ENTER"** keys to enter into
- Show "Set DMX Address DMX Address:001", Press the **"UP and DOWN"** keys to amended
- Press **"ENTER"** keys to save and Exit, Press the **"MENU"** Keys does not save and Exit

1	Address	Address 001~512	Address setting 001-512
2	Mode	1.DMX512	Console control
		2.Auto	1.Master
			2.Alone
		3.Sound	1.Master
			2.Alone
		4.Manual	1.Pan:0-255
			2.Tilt:0-255
			3.Focus:0-255
			4.Rota:0-255
			5.Red:0-255
			6.Green:0-255
			7.Blue:0-255

			8.White:0-255
			9.Strobe:0-255
3	Channel	21ch	Select channel mode
3	Channel	24ch	Select channel mode
		32ch	
		56ch	
4	Invert	1.Pan Invert	1.NO, 2.YES
		2.Tilt Invert	1.NO, 2.YES
5	Degree	1.540,2.360	
6	No signal	1.black out	2.hold
7	Fan set	1.auto, 2.high, 3.low	
8	Reset	1.NO	Reset
		2.YES	
9	Default	3.Yes	Factory setting
		4.No	
10	Inform	1.Soft V.XXX	Show the version number
		2.Temp ____°C	Show the temperature of led board
11	Adjust	Pass word	****

		1.Pan	0-255Pan fine control
		2.Tilt	0-255Tilt fine control
		3.Focus	0-255 Zoom fine control
		4.Rota	0-255
		5.Red	0-255
		6.Green	0-255
		7.Blue	0-255
		8.White	0-255

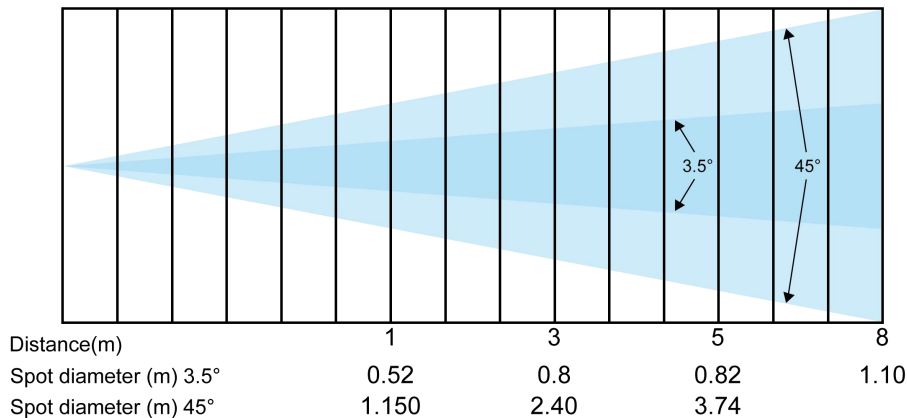
# LUX Data

## Min Zoom Range = 3.5°

R lux	28800	6350	3700	2080
G lux	57500	17500	9020	4570
B lux	10500	3210	1640	810
W lux	80700	21400	11600	5980
4in1 lux	165000	45500	24100	12500

## Min Zoom Range = 45°

R lux	4030	576	215	103
G lux	9700	1520	568	251
B lux	1890	290	110	476
W lux	13000	2010	745	335
4in1 lux	26700	4100	1520	687

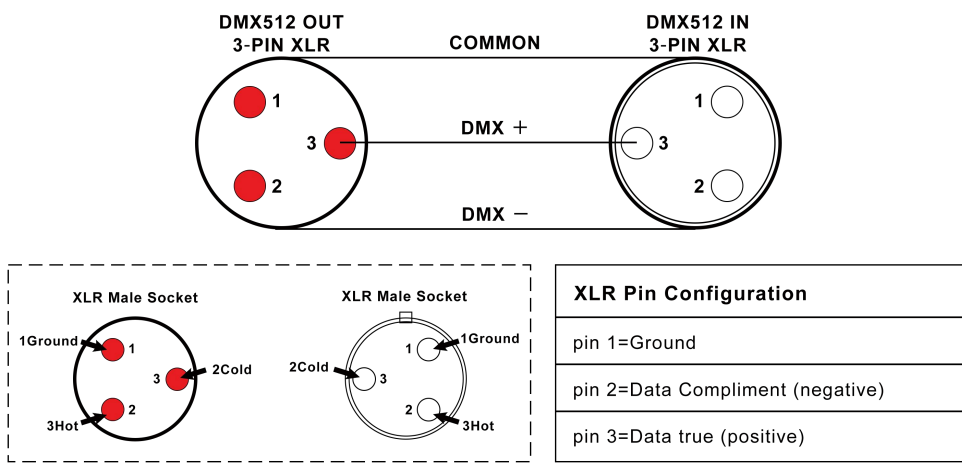


**Power Supply:** The 660DZ contains a automatic voltage switch, which will auto sense the voltage when it is plugged into the power source. With this switch there is no need to worry about the correct power voltage, this unit can be plugged in anywhere.

**Data Cable (DMX Cable) Requirements (For DMX Operation):** The 660DZ can be controlled via DMX-512 protocol. The 660DZ has 4 DMX channel modes. Your unit and your DMX controller require a standard 3-pin or 5-pin

XLR connector for data input and data output (Figure 1). If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable may be purchased at almost all pro lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and cannot be split.

**Notice:** When making your own cable, be sure to carefully observe and follow the instructions shown in the diagram. Do not use the ground lug on the XLR connector. Do not connect the cable's shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR's outer casing. Grounding the shield could cause a short circuit and erratic behavior.



The DMX512 is widely used in intelligent lighting control, with a DMX 512 controller. connect several lights together, dmx in and dmx out,3 pin XLR connectors: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

# DMX Channel List

DMX channel’s functions and values (54 DMX channels):

Channel	Function		Description	Value
CH-1	Pan		Pan adjustment	0 --- 255
CH-2	Pan fine		Pan fine adjustment	0 --- 255
CH-3	Tilt		Tilt adjustment	0 --- 255
CH-4	Tilt fine		Tilt fine adjustment	0 --- 255
CH-5	Pan/Tilt speed		from fast to slow	0 --- 255
CH-6	Pan infinite rotation		No function	0 --- 55
			Rotating from slow to fast	56 --- 155
			Rotating from slow to fast	156---255
CH-7	Tilt infinite rotation		No function	0 --- 55
			Clockwise rotating from slow to fast	56 --- 155
			Anticlockwise rotating from slow to fast	156---255
CH-8	6x60w	strobe	No function	0-15
			Strobe from fast to slow	16--214

	wash face		Random strobe	215--225
CH-9		Dimmer	From dark to bright	0-255
CH-10	6x60W wash face	Dimmer mode	Model - 1	0 --- 49
			Model - 2	50 --- 99
			Model - 3	100--- 149
			Model - 4	150--- 255
CH-11		zoom	Angle from big to small	0 --- 255
CH-12		Red - 1	From dark to bright	0 --- 255
CH-13		Green - 1		
CH-14		Blue - 1		
CH-15		White - 1		
CH-16		Red - 2		0 --- 255
CH-17		Green - 2		
CH-18		Blue - 2		
CH-19		White - 2		
CH-20		Red - 3		0 --- 255
CH-21		Green - 3		
CH-22		Blue - 3		0 --- 255
CH-23		White - 3		
CH-24		Red - 4		



CH-25	6x60W wash face	Green - 4	From dark to bright	0 --- 255
CH-26		Blue - 4		
CH-27		White - 4		
CH-28		Red - 5		0 --- 255
CH-29		Green - 5		
CH-30		Blue - 5		
CH-31		White - 5		0 --- 255
CH-32		Red - 6		
CH-33		Green - 6		
CH-34		Blue - 6		
CH-35		White - 6		
CH-36	Static color	No function	0----15	
		R 100%,G up,B0%	16----35	
		R down,G 100%,B0%	36----55	
		R 0%,G 100%,B up	56----75	
		R 0%,G100%,B up	76----95	
		R up,G0%,B100%	96----115	
		R 100%,G0%,B down	116----135	
		R 100%,G up,B up	136----155	
		R100%,G down,B100%	156----175	

CH-36	6x60W wash face	Static color	R100%,G 100%,B100%,W100%	176----195
			2800K	196----200
			3200K	201----205
			3500K	206----210
			4000K	211----215
			4500K	216----220
			5000K	221----225
			5500K	226----230
			6000K	231----235
			6500K	236----240
			7000K	241----245
			7500K	246----250
			8000K	251----255
CH-37	6x60W wash face	Effect	No function	0 ----9
			11 DMX value per effect	10 --- 99
			Jump change	100--- 149
			gradual change	150--- 255
			No Effect	0 --- 9
			Static Pattern -1	10 --- 19

CH-38	6x60W wash face	Patterns	Static Pattern -2	20 --- 29
			Static Pattern -3	30 --- 39
			Static Pattern -4	40 --- 49
			Static Pattern -5	50 --- 59
			Static Pattern -6	60 --- 69
			Static Pattern -7	70 --- 79
			Static Pattern -8	80 --- 89
			Static Pattern -9	90 --- 99
			Static Pattern -10	100--- 109
			Static Pattern -11	110--- 119
			Static Pattern -12	120--- 129
			Static Pattern -13	130--- 139
			Static Pattern -14	140--- 149
			Static Pattern -15	150--- 159
			Static Pattern -16	160--- 169
			Dynamic Pattern -1	170--- 179
			Dynamic Pattern -2	180--- 189
			Dynamic Pattern -3	190--- 199
			Dynamic Pattern -4	200--- 209
			Dynamic Pattern -5	210--- 219

		Patterns	Dynamic Pattern -6	220--- 229
			Dynamic Pattern-7	230--- 239
			Dynamic Pattern -8	240---255
CH-39		Pattern change speed		0 --- 255
CH-40		Pattern change fade		0 --- 255
CH-41		Pattern with Red color from dark to bright		0 --- 255
CH-42		Pattern with green color from dark to bright		
CH-43	Pattern with blue color from dark to bright			
CH-44	Pattern with white color from dark to bright			
CH-45	Strobe face	Dimmer	From dark to bright	0--255
CH-46		Strobe	Led on	0---3
			Synchronously strobe speed from slow to fast	4--203
			Random strobe	201--255
CH-47		Dimming of middle area white led from dark to bright		0--255
CH-48		Dimming of two side red led from dark to bright		0--255
CH-49		Dimming of two side green led from dark to bright		0--255
CH-50		Dimming of two side blue led from dark to bright		0--255

CH-51	Strobe face	Dynamic patterns	No function	0--9
			Dynamic pattern 1	10--19
			Dynamic pattern 2	20-29
			10 DMX value per pattern	.....
			Dynamic pattern 16	160--255
CH-52		Patterns translation (work with CH 51)	Select pattern scene	0--255
CH-53		Pattern auto run speed (work with CH 51)	No function	0--9
			forward run fast to slow	10--132
			Reverse run slow to fast	133--255
CH-54	Reset		No function	0 ---79
			Reset	80---99
			No function	100---255

### DMX channel's functions and values (34 DMX channels):

Channel	Function	Description	Value
CH-1	Pan	Pan adjustment	0 --- 255
CH-2	Pan fine	Pan adjustment	0 --- 255

CH-3	Tilt		Tilt adjustment	0 --- 255
CH-4	Tilt fine		Tilt adjustment	0 --- 255
CH-5	Pan/Tilt speed		from fast to slow	0 --- 255
CH-6	Pan infinite rotation		No function	0 --- 55
			Clockwise rotating from slow to fast	56 --- 155
			Anticlockwise rotating from slow to fast	156---255
CH-7	Tilt infinite rotation		No function	0 --- 55
			Clockwise rotating from slow to fast	56 --- 155
			Anticlockwise rotating from slow to fast	156---255
CH-8	6*60w wash	Strobe	No function	0 --- 15
			from slow to fast	16 --- 214
			Random strobe	215---255

CH-9	face	Dimmer	From dark to bright	0 --- 255
CH-10	Dimmer Model		Model - 1	0 --- 49
			Model - 2	50 --- 99
			Model - 3	100--- 149
			Model - 4	150--- 255
CH-11	6*60w wash face	Zoom	Angle from big to small	0 --- 255
CH-12		Red	From dark to bright	0 --- 255
CH-13		Green		
CH-14		Blue		
CH-15		White		
			No function	0----15
			R 100%,G up,B0%	16----35
			R down,G 100%,B0%	36----55
			R 0%,G 100%,B up	56----75
			R 0%,G100%,B up	76----95

CH-16		Static color	R up,G0%,B100%	96----115
			R 100%,G0%,B down	116----135
			R 100%,G up,B up	136----155
			R100%,G down,B100%	156----175
			R100%,G 100%,B100%,W100%	176----195
			2800K	196----200
			3200K	201----205
			3500K	206----210
			4000K	211----215
			4500K	216----220
CH-16	6*60w wash face	Static color	5000K	221----225
			5500K	226----230
			6000K	231----235
			6500K	236----240
			7000K	241----245



			7500K	246----250
			8000K	251----255
CH-17		Effects	No function	0 ---- 9
			11 DMX value per effect	10 --- 99
			Jump change	100 --- 149
			gradual change	150 --- 255
CH-18	6*60w wash face		No Effect	0 --- 9
			Static Pattern -1	10 --- 19
			Static Pattern -2	20 --- 29
			Static Pattern -3	30 --- 39
			Static Pattern -4	40 --- 49
			Static Pattern -5	50 --- 59
			Static Pattern -6	60 --- 69
			Static Pattern -7	70 --- 79
			Static Pattern -8	80 --- 89
			Static Pattern -9	90 --- 99
			Static Pattern -10	100--- 109
			Static Pattern -11	110--- 119

	6*60w face		Static Pattern -12	120--- 129
			Static Pattern -13	130--- 139
			Static Pattern -14	140--- 149
			Static Pattern -15	150--- 159
			Static Pattern -16	160--- 169
			Dynamic Pattern -1	170--- 179
			Dynamic Pattern -2	180--- 189
			Dynamic Pattern -3	190--- 199
			Dynamic Pattern -4	200--- 209
			Dynamic Pattern -5	210--- 219
			Dynamic Pattern -6	220--- 229
			Dynamic Pattern -7	230---239
			Dynamic Pattern -8	240---255
CH-19		Pattern change speed		0 --- 255
CH-20		Pattern change fade		0 --- 255
CH-21		Pattern with Red from dark to bright		0 --- 255
CH-22		Pattern with Green from dark to bright		0 --- 255
CH-23		Pattern with Blue from dark to bright		0 --- 255

CH-24		Pattern with White from dark to bright		0 --- 255
CH-25	Strobe  face	Dimmer	0-100% linear dimmer	0--255
CH-26		Strobe	Led on	0--3
			Synchronously strobe from slow to fast	4--203
			Random strobe	204--255
CH-27		Middle white Led 0-100% dimmer		0--255
CH-28		Both side Red led 0-100% dimmer		0--255
CH-29		Both side Green led 0-100% dimmer		0--255
CH-30		Both side Blue led 0-100% dimmer		0--255
CH-31		Dynamic pattern	No function	0--9
			Dynamic pattern 1	10--19
	Dynamic pattern 2		20--29	
	10 DMX value per pattern		.....	
	Dynamic pattern 15		150--159	
	Dynamic pattern 16		160--255	

CH-32	Strobe face	Pattern translatio n (work with CH31)	Select pattern scene	0--255
CH-33		Pattern auto run speed(w ork with CH31)	No function	0--9
			Forward run from fast to slow	10--132
			Reverse fun from slow to fast	133-255
CH-34	Reset		No function	0 --- 79
			Reset	80 --- 99
			No	100 --- 255

## Attention

- When the lamp is powered on and lit, try to avoid looking directly at the light emitted by the lamp beads.
- When loading or unloading the lamp, be sure to cut off the main power supply connected to the device before you can open the cover on which the lamp bead is installed.

## Trouble Shooting

Following are a few common problems that may occur during operation. Here are 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 main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED.

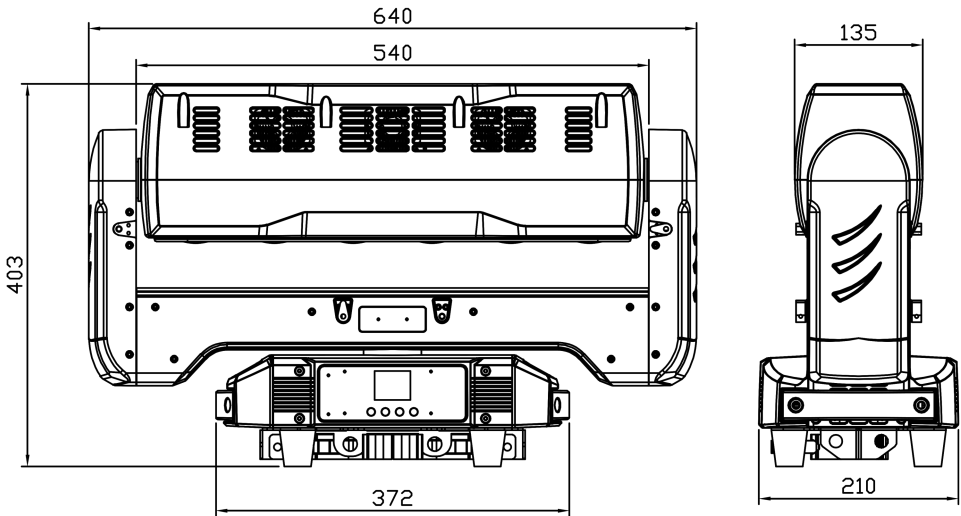
### **B. Not responding to DMX controller**

1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

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

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

## Products Size



## Fixture Cleaning

The outside of the lens must always be wiped so that the lighting effect is better. Wipe frequency according to the environment. Humidity, excessive smoke, and a particularly dirty environment can make the lens dusty.

- Use a soft cloth and special glass cleaner.

- Wipe the exterior of the lens at least every 30 days.
- Use vacuum cleaners or air guns inside the luminaire and clean it at least twice a year.
- Always be sure to dry all parts completely before plugging the unit back in.

## Multiple Unit Power Linking

With this feature you can connect the fixtures to one another using the power-con input and output sockets. The maximum that can be connected is 3 fixtures @ 120V and 7 fixtures @ 240V. After the maximum connected fixtures you will need to use a new power outlet.

**NOTE:** USE WITH CAUTION WHEN POWER LINKING OTHER FIXTURES TO THE 660DZ AS THE POWER CONSUMPTION OF OTHER LIGHTING FIXTURES WILL VARY!

## Fuse Replacement

Unplug the unit from any power source it may be connected to. Once the power has been disconnected, use a Phillips head screw driver to unscrew the fuse holder located next to the power-con input.

Remove the bad fuse and replace with a new one, and screw the fuse holder back in.