4pcs 60w 4in1 Turbofan LED moving head light

User Manual

This manual contains important information. Please read before operating fixture.

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1. GETTING STARTED

What's In The Box?

- 1 x 460 light
- 1 x AC Power Cord
- 1 x Signal Cord
- 2 x Omega Bracket
- This Lovely User Manual

Getting It Out Of the Box

Congratulations on purchasing the 460, the ultra-bright and durable Zoom LED Beam wall wash dyeing fixture. Now that you've got your 460, you should carefully unpack the box and check the contents to ensure that all parts are present and in good condition. If anything looks as if it has been damaged in transit, notify the shipper immediately and keep the packing material for inspection. Again, please save the carton and all packing materials.

Powering Up!

All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.

Warning! All fixtures must be connected to circuits with a suitable Ground (Earthing).

Getting A Hold Of Us

If something happens goes wrong, please feel free to contact me.We'll be happy to help, honest.

Disclaimer: The information and specifications contained in this document are subject to change without notice. We assumes no responsibility or liability for any errors or omissions that may appear in this user manual.We reserves the right to update the existing document or to create a new document to correct any errors or omissions at any time.

Safety Instructions

Please read these instructions carefully. They include
important information about the installation, usage and
maintenance of this product.

•Please keep this User Guide for future use. If you sell the unit to someone else, be sure that they also receive this User Guide.

• ALWAYS make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.

• Make sure there are no flammable materials close to the unit while operating.

• The unit must be installed in a location with adequate ventilation, at least 20in (50cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.

• ALWAYS disconnect from the power source before servicing.

• ALWAYS secure mounted fixtures with a safety cable. NEVER carry the fixture by its head. Use its carrying handles.

• DO NOT operate at ambient temperatures higher than 104°F (40°C).

• 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.

• NEVER connect the device to a dimmer pack.

• Make sure the power cord is never crimped or damaged.

• Never disconnect the power cord by pulling or tugging on the cord.

• Avoid direct eye exposure to the light source while it is on.

Caution! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself.

2. MEET THE 460

Main Features

•Power supply ： 100-240V 50/60Hz
•Power : 250W
•LAMP SOURCE:4×60W RGBW LEDs,
•LED Average Life : 50,0000 h
•Zoom : 3°-35° Electronic Zoom Range
•Individual LED control for each parameter
•MY Wheel: Magenta, Yellow
•Pan : 540° , 16 bit
•Tilt : 210° , 16 bit
•0-100% linear electronic dimmer
•Adjustable speed stop/strobe effect, with instantaneous blackout
•Feature: Zoom, beam, Frost Effects
•Pixel Patterning Macros with enhanced control
•Power Con In and Out
•Net Weight : 21.5KG
•Product Size:418X273X572mm

Control

• Protocol: DMX-512
• DMX channels: 25/45ch
• 3-pin XLR DMX input/output
• Easy-to-use 4-button control panel with LCD display
• Operating modes: DMX512, master/slave, auto,sound

DMX Quick Reference (25/45)

25CH

25CH	DMX Value	Function
1	0-255	Pan coarse adjustment
2	0-255	pan fine
3	0-255	Tiltl coarse adjustment
4	0-255	Tilt Fine
5	0-255	Pan/Tilt speed
6	0-139	No function
	140-149	P/T reset
	150-159	Lamp cap reset
	160-199	No function
	200-209	Complete machine reset
	210-255	No function
7	0-255	Color wheel
8		Pattern
9	0-4	Cease
	5-124	Clockwise rotation from fast to slow
	125-135	Cease
	136-255	Counterclockwise rotation from slow to fast
10	0-255	Fan blade opening 100% - 0%
11	0-255	Maximum to minimum light spot
12	**Backlight macro channel**	
	0-127	No function
	128-255	Control the color change of channel 13
13	**Macro color (controlled by 12 channels 128-255)**	
	0-4	Color 1
	5~9	Color 2
	10~14	Color 3
	15-19	Color 4
	20-24	Color 5
	25-29	Color 6
	30-34	Color 7
	35-39	Color 8

	40-44	Color 9
	45-49	Color 10
	50-54	Color 11
	55-59	Color 12
	60-64	Color 13
	65-69	Color 14
	70-74	Color 15
	75-79	Color 16
	80-84	Color 17
	85-89	Color 18
	90-94	Color 19
	95-99	Color 20
	100-104	Color 21
	105-109	Color 22
	110-114	Color 23
	115-119	Color 24
	120-124	Color 25
	125-129	Color 26
	130-124	Color 27
	125-129	Color 28
	130-134	Color 29
	135-139	Color 30
	140-144	Color 31
	145-149	Color 32
	150-154	Color 33
	155-204	Color gradient from slow to fast
	205-255	Color jump from slow to fast
14	0-255	Red dimmer
15	0-255	Red fine
16	0-255	Green dimmer
17	0-255	Green fine
18	0-255	Blue dimmer
19	0-255	Blue fine
20	0-255	White dimmer
21	0-255	White fine
22	0-255	CTO,Total color temperature adjustment, cold white (8000K) to warm white (2700k)
23	**Strobe**	
	0-31	Strobe off
	32-63	Strobe on

	64-95	Strobe from slow to fast
	96-127	Strobe on
	128-143	Strobe from slow to fast
	144-159	Strobe from fast to slow
	160-191	Strobe on
	192-223	Random strobe from slow to fast
	224-255	Strobe on
24	0-255	Dimming from dark to bright
25	0-255	Dimmer fine

45CH

45CH	DMX Value	Function
1	0-255	Pan coarse adjustment
2	0-255	Pan fine
3	0-255	Tilt coarse adjustment
4	0-255	Tilt Fine
5	0-255	P/T speed
6	0-139	No Function
	140-149	Pan/Tilt reset
	150-159	Lamp cap reset
	160-199	No function
	200-209	Complete machine reset
	210-255	No function
7	0-255	Color wheel
8		pattern
9	0-4	Cease
	5-124	Clockwise rotation from fast to slow
	125-135	Cease
	136-255	Counterclockwise rotation from slow to fast
10	0-255	Fan blade opening 100% - 0%
11	0-255	Maximum to minimum light spot
12	**Backlight macro channel**	
	0-127	No function
	128-255	Control the color change of channel 13
13	**Macro color (controlled by 12 channels 128-255)**	
	0-4	Color 1

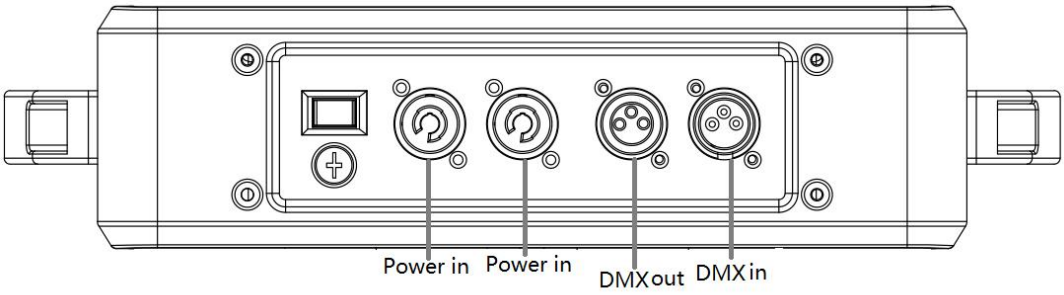
	5~9	Color 2
	10~14	Color 3
	15-19	Color 4
	20-24	Color 5
	25-29	Color 6
	30-34	Color 7
	35-39	Color 8
	40-44	Color 9
	45-49	Color 10
	50-54	Color 11
	55-59	Color 12
	60-64	Color 13
	65-69	Color 14
	70-74	Color 15
	75-79	Color 16
	80-84	Color 17
	85-89	Color 18
	90-94	Color 19
	95-99	Color 20
	100-104	Color 21
	105-109	Color 22
	110-114	Color 23
	115-119	Color 24
	120-124	Color 25
	125-129	Color 26
	130-124	Color 27
	125-129	Color 28
	130-134	Color 29
	135-139	Color 30
	140-144	Color 31
	145-149	Color 32
	150-154	Color 33
	155-204	Color gradient from slow to fast
	205-255	Color jump from slow to fast
14	0-255	LED1 RED
15	0-255	LED1 GREEN
16	0-255	LED1 BLUE
17	0-255	LED1 WHITE
18	0-255	CTO,LED1 color temperature adjustment, cold white (8000K) to warm white (2700k)
19	**When LED1 is strobe on / strobe on**	
	0-31	Strobe off

	32-63	Strobe on
	64-95	Strobe from slow to fast
	96-127	Strobe on
	128-143	Strobe from slow to fast
	144-159	Strobe from fast to slow
	160-191	Strobe on
	192-223	Random strobe from slow to fast
	224-255	Strobe on
20	0-255	LED1 Dimming from dark to light / when the color macro is on, it is the total dimming
21	0-255	LED1 Total dimming when dimming / color macro is on
22	0-255	LED2 RED
23	0-255	LED2 GREEN
24	0-255	LED2 BLUE
25	0-255	LED2 WHITE
26	0-255	CTO,LED2 Color temperature adjustment, cold white (8000K) to warm white (2700k)
27	**LED2 Strobe**	
	0-31	Strobe off
	32-63	Strobe on
	64-95	Strobe from slow to fast
	96-127	Strobe on
	128-143	Strobe from slow to fast
	144-159	Strobe from fast to slow
	160-191	Strobe on
	192-223	Random strobe from slow to fast
	224-255	Strobe on
28	0-255	LED2 Dimming from dark to bright
29	0-255	LED2 dimmer fine
30	0-255	LED3 Red
31	0-255	LED3 Green
32	0-255	LED3 Blue
33	0-255	LED3 White
34	0-255	CTO,LED3 Color temperature adjustment, cold white (8000K) to warm white (2700k)
35	**LED3 Strobe**	
	0-31	Strobe off
	32-63	Strobe on
	64-95	Strobe from slow to fast
	96-127	Strobe on
	128-143	Strobe from slow to fast

	144-159	Strobe from fast to slow
	160-191	Strobe on
	192-223	Random strobe from slow to fast
	224-255	Strobe on
36	0-255	LED3 Dimming from dark to bright
37	0-255	LED3 dimmer fine
38	0-255	LED4 Red
39	0-255	LED4 Green
40	0-255	LED4 Blue
41	0-255	LED4 White
42	0-255	CTO,LED4 Color temperature adjustment, cold white (8000K) to warm white (2700k)
43	**LED4 Strobe**	
	0-31	Strobe off
	32-63	Strobe on
	64-95	Strobe from slow to fast
	96-127	Strobe on
	128-143	Strobe from slow to fast
	144-159	Strobe from fast to slow
	160-191	Strobe on
	192-223	Random strobe from slow to fast
	224-255	Strobe on
44	0-255	LED4 Dimming from dark to bright
45	0-255	LED4 dimmer fine

460 Pin-Up Picture

The Rear Connections



3. SETUP

Before replacing a fuse, disconnect the power cord.
ALWAYS replace with the same type and rating of fuse.

Fuse Replacement

The 1940 utilizes a high-output switch-mode power supply with an internal fuse. Under normal operating conditions, the fuse should not require replacement. The fuse is field replaceable, however it is an advanced procedure suited to qualified individuals. Should the fuse require replacement, please contact we for instructions.

Connecting A Bunch of 1940 Fixtures

You will need a serial data link to run light shows using a DMX-512 controller or to run shows on two or more fixtures set to sync in master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Fixtures on a serial data link must be daisy chained in one single line. Also, connecting more than 8 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal. The maximum recommended cable-run distance is 500 meters (1640 ft). The maximum recommended number of fixtures on a serial data link is 8 fixtures.

Data/DMX Cabling

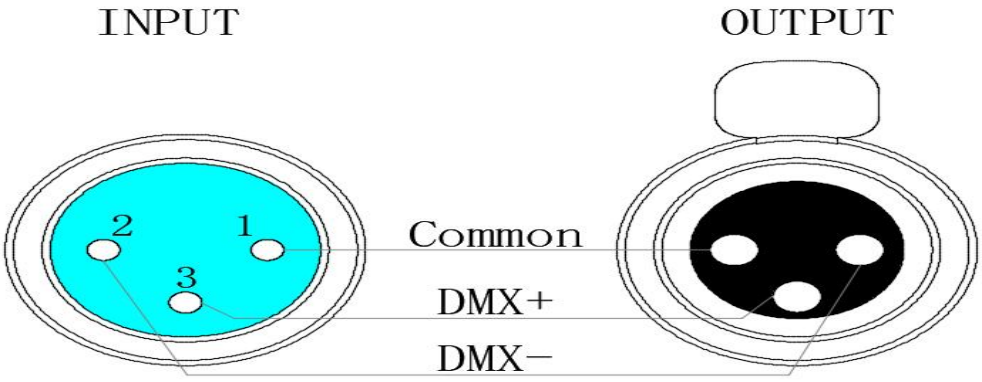
To link fixtures together you'll need data cables. You should use data-grade Cables that can carry a high quality signal and are less prone to electromagnetic interference.

In any event,the cable should have the following characteristics:

- •2-conductor twisted pair plus a shield
- •Maximum capacitance between conductors – 30 pF/ft.
- •Maximum capacitance between conductor & shield – 55 pF/ft.
- •Maximum resistance of 20 ohms / 1000 ft.
- •Nominal impedance 100 – 140 ohms

Cable Connectors

Cables must have a male XLR connector on one end and a female XLR connector on the other end. (Duh!)



CAUTION: Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

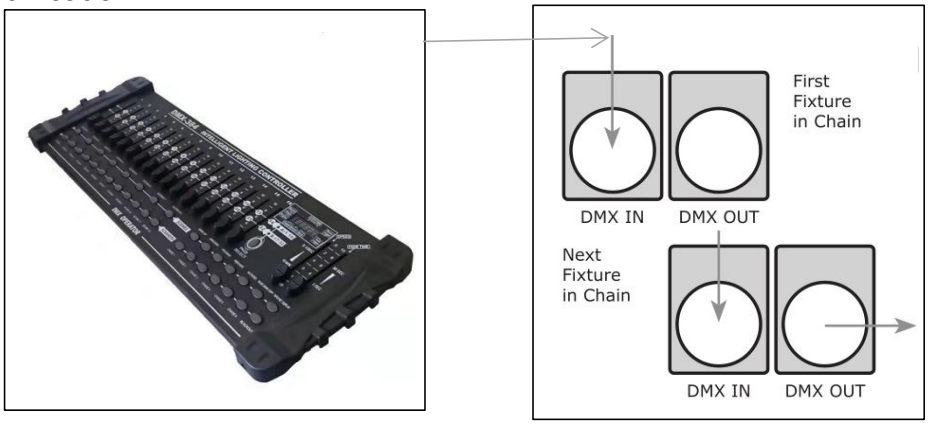
Take It To The Next Level: Setting Up DMX Control

Step 1: Connect the male connector of the DMX cable to the female connector (output) on the controller.

Step 2: Connect the female connector of the DMX cable to the first fixture's male connector(input).

Note: It doesn't matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture number first, and so on.

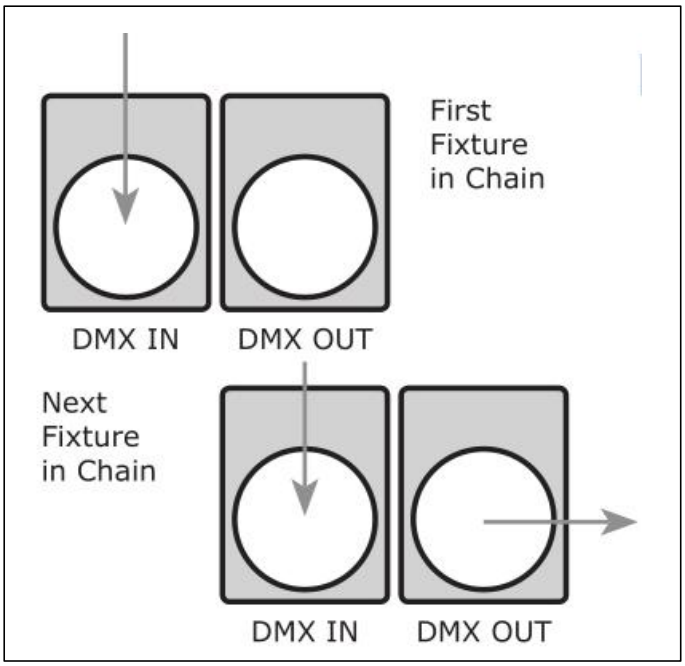
Step 3: Connect other fixtures in the chain from output to input as above. Place a DMX terminator on the output of the final fixture to ensure best communication.



Fixture Linking (M/S Mode)

1. Connect the male connector side of the DMX cable to the output female connector of the first fixture.

2. Connect the end of the cable coming from the first fixture which will have a female connector to the input connector of the next fixture consisting of a male connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.



A quick note: Often, the setup for Master-Slave and Standalone operation requires that the first fixture in the chain be initialized for this purpose via either settings in the control panel or DIP-switches. Secondarily ,the fixtures that follow may also require a slave setting.

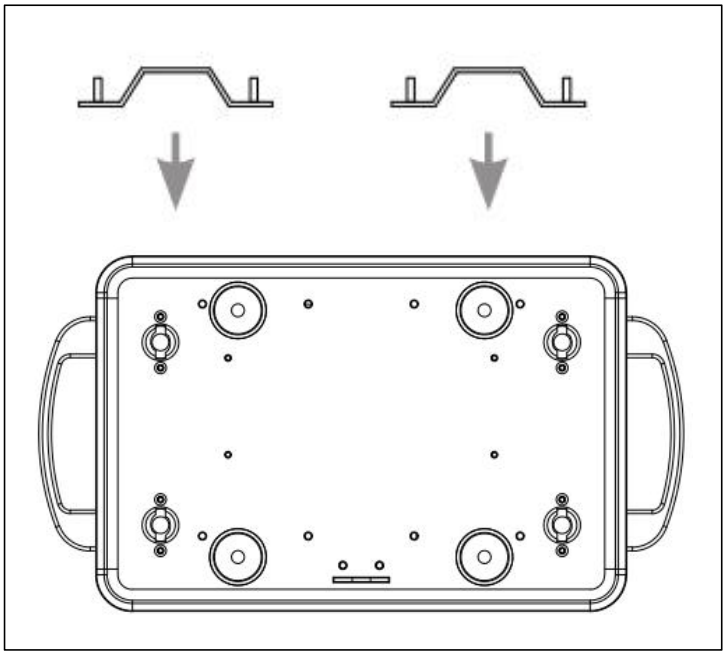
Check the “**Operating Adjustments**” section in this manual for complete instructions for this type of setup and configuration.

Mounting & Rigging

This fixture may be mounted in any SAFE position provided there is enough room for ventilation. The fan or vents pathway must never obstructed.

A mounting bracket assembly is provided that secures the bottom of the base, the Omega bracket, and the safety cable rigging point together. When mounting to truss, be sure to secure an appropriately rated clamp to the omega bracket.

IMPORTANT: Regardless of the rigging option you choose for your fixtures, always be sure to secure your fixture with a safety cable.



Attach the 2x ¼-turn quick lock Omega brackets to the base, and the clamps to the brackets.

Mount the fixture using a suitable "C" or "O" type clamps. The clamps should be rated to hold at least 10x the fixture’s weight to ensure structural stability. Do not mount to surfaces of unknown strength, and ensure properly rated rigging is used when mounting fixtures overhead.
Overhead mounting requires extensive experience, which includes calculating working load limits, knowledge of the installation material being used, and periodic safety inspections. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

4. OPERATING ADJUSTMENTS

The Control Panel

All of the features and different modes possible with this fixture are accessed by using the control panel on the front of the fixture. There are 4 control buttons next to the LED display which allow you to navigate through the various control panel menus.

<MENU>
Is used to navigate to the previous higher-level menu item.

<UP>
Scrolls through menu items and numbers in ascending order.

<DOWN>
Scrolls through menu items and numbers in descending order.

<ENTER>
Is used to select and confirm/store the current selection.

Pressing any button from the home screen will show the selectable menu items from the menu map on page #18. When a menu function is selected, the display will immediately show the first available option for the selected menu function. To select a menu item, press **<ENTER>**.

Use the <UP> and <DOWN> buttons to navigate the menu options. Press the <ENTER> button to select the menu function currently displayed, or to enable a menu option. To return to the previous option or menu without changing the value, press the <MENU> button.

Control Panel Menu Structure

Set Up	DMX Address	1-512
	Show ID	1-255
	Run Mode	DMX512,Sound,Auto
	Master-slave	Master mode Slave mode
	Return	
Option	Language	Chinese/English
	Channel	25/45CH
	Reset	YES/NO
	Default Set	YES/NO
	Pan Invert	YES/NO
	Tilt Invert	YES/NO
	Display	YES/NO
	Display Saver	YES/NO
	Return	
Adj. Set	Access code	0-999
Test	Channel 1	0-255
	Channel 2	0-255
	Channel 13	0-255
	Channel 14	0-255
	...	0-255
	Channel 45	0-255
About	Display Ver.	3.2
	Holder Control	1.6
	Pan/Tilt	1.0
	User of time	
	Return	

DMX Mode

Allows the unit to be controlled by any universal DMX controller.

Starting DMX Address
1.) Navigate the main menu until you reach DMX, and press the **<ENTER>** button.
2.) Then highlight Address, and press **<ENTER>**.
3.) Use the **<UP/DOWN>** buttons to select a starting DMX address ranging from 001-512, and press the **<ENTER>** button to confirm.

DMX Channel Mode
1.) Navigate the main menu until you reach DMX, and press the **<ENTER>** button.
2.) Then highlight Channel Mode, and press **<ENTER>**.
3.) Use the **<UP/DOWN>** buttons to select **Normal,Standard,** or **Extened**, and press the **<ENTER>** button to confirm.

5. APPENDIX

Keeping Your 460 As Good As New

The fixture you've received is a rugged, tough piece of pro lighting equipment, and as long as you take care of it, it will take care of you. That said, you'll need to take care of it if you want it to operate as designed. You should keep the fixture clean, especially if you are using it in an environment with a lot of dust, fog, haze, wild animals, wild teenagers or spilled drinks.

Cleaning the optics routinely with a suitable glass cleaner will greatly improve the quality of light output. Keeping the fans free of dust and debris will keep the fixture running cool and prevent damage from overheating.

In transit, keep the fixtures in cases. You wouldn't throw a prized guitar, or other piece of expensive gear into a gear trailer without a case, and similarly, you shouldn't even think about doing it with your shiny new light fixtures.

Common sense and taking care of your fixtures will be the single biggest thing

you can do to keep them running at peak performance and let you worry about designing a great light show, putting on a great concert, or maximizing your client's satisfaction and "wow factor." That's what it's all about, after all!

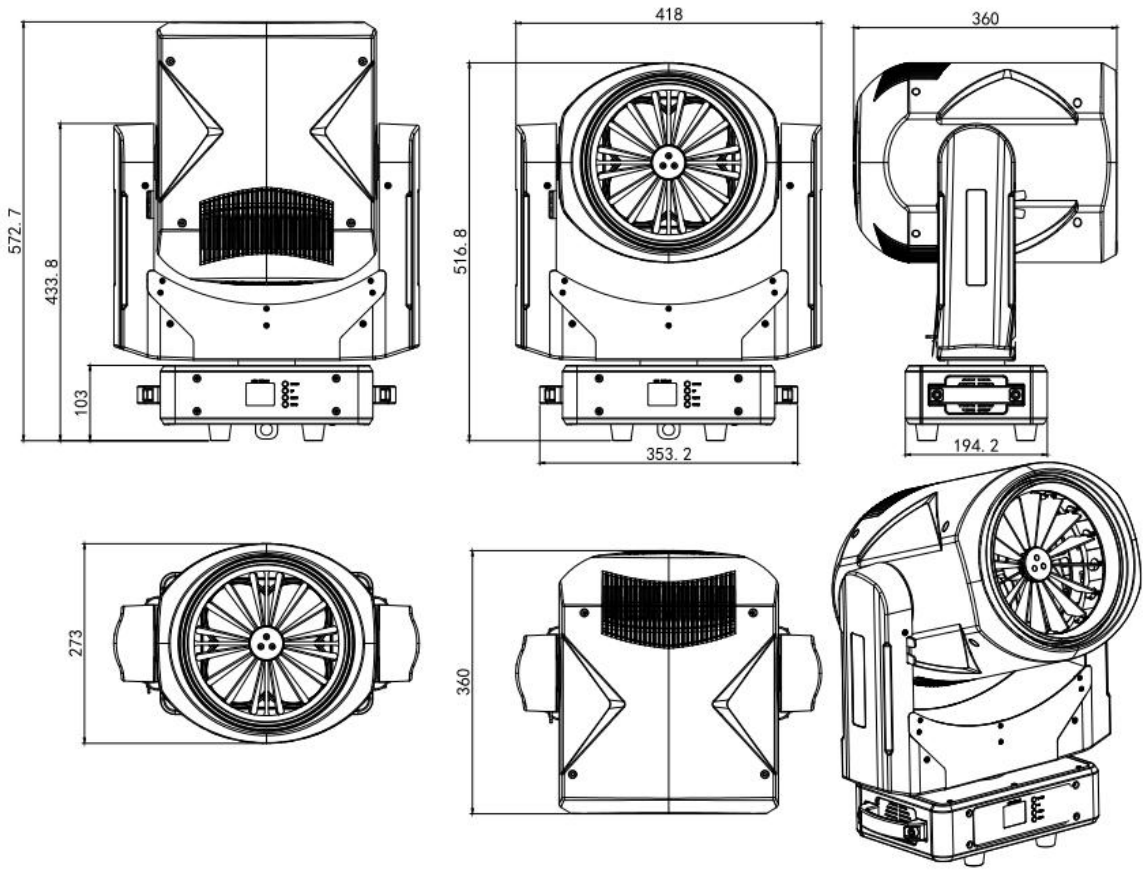
Shipping Issues

Damage incurred in shipping is the responsibility of the shipper, and must be reported to the carrier immediately upon receipt of the items. Claims must be made within seven (7) days of receipt.

Tech Specs

Power	
Operating Voltage	100-240V 50/60Hz
Power Consumption	250w
Light Source	
LED	4×60W RGBW LEDs
Optical	
Zoom	3°-35° Electronic Zoom Range
Movement Range	
Pan	540° , 16 bit
Tilt	270° , 16 bit
Thermal	
Maximum ambient temp	40 °C(104℉)
Maximum surface temp	90 °C(194℉)
Minimum operating temp	20 °C(68℉)
Control	
Protocol	DMX-512
DMX Channels	25/45CH
Input/Output	3-pin XLR male/female
Other Operating Modes	DMX 512, Auto, Master-slave, Sound
Warranty	2-year limited warranty, does not cover malfunction caused by damage to LEDs.

Dimensional Drawings



Enjoy your product!

Our sincerest thanks for your purchase!