

www.event-lighting.com.au



OUTBACK350H

Outdoor 350W LED Moving Head Hybrid

USER MANUAL



For your safety, please read this user manual carefully before use.

Event Lighting reserves the right to revise the manual at any time. Information and specifications within this manual are subject to change without notice. Event Lighting assumes no liability or responsibility for any errors or omissions. Please consult Event Lighting for any clarification or information regarding this item.

Version 1.1 (27/02/2025)

CONTENTS

Safety information.....	3
Introduction.....	5
Technical Specification	7
Operation.....	8
DMX 512 Channels	10
Connecting power and data.....	16
Fixture Installation	17
Troubleshooting.....	21
Fixture cleaning	23
Warranty.....	24

1. Safety information



Please read the instruction carefully which includes important information about the installation, usage and maintenance.

WARNING

Please keep this user manual for future reference. If you sell or transfer the unit to another user, ensure they receive the manual and understand the instructions.

Important:

Damage resulting from failure to follow this manual is not covered under warranty. The dealer is not liable for any defects or malfunctions caused by improper use.

Safety Precautions:

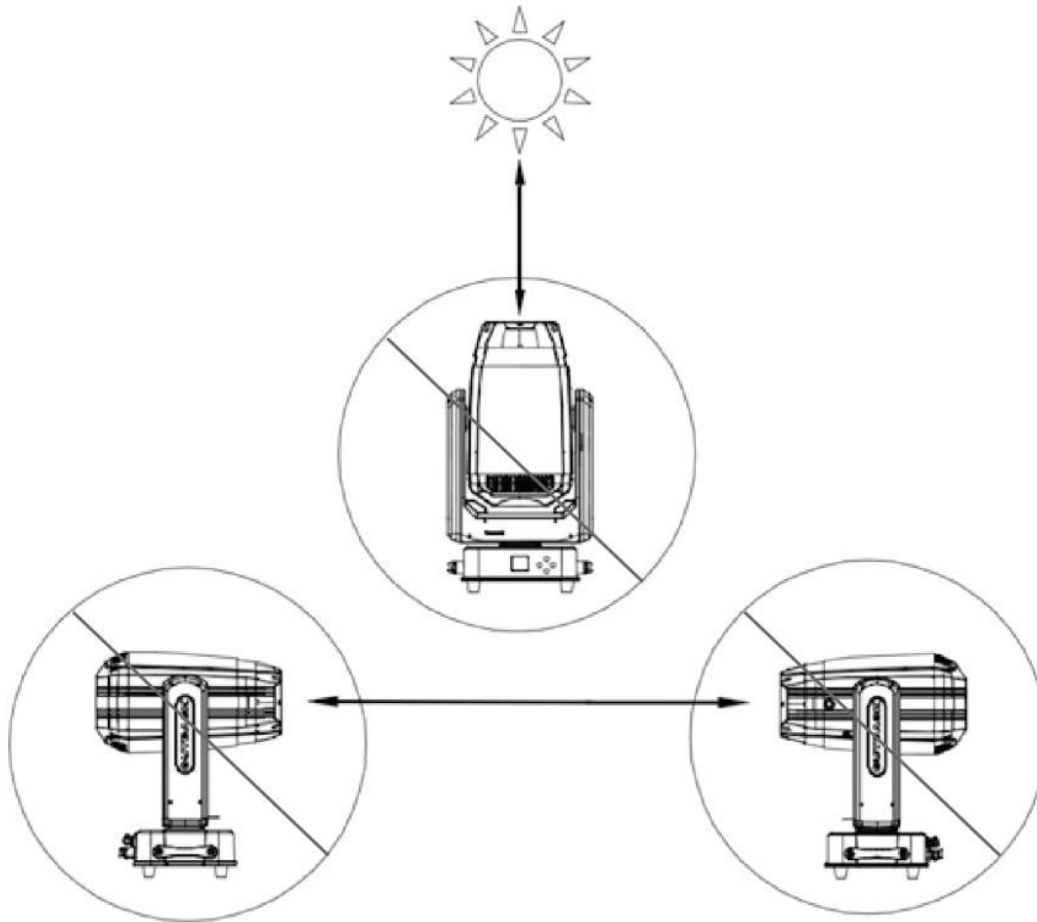
- Carefully unpack and inspect the device for transportation damage before use. If any damage is found, do not use the device—contact your local dealer or manufacturer immediately.
- **Do not** connect the device to a dimmer pack.
- Installation and operation must be performed by a qualified professional.
- The yellow/green conductor must be properly grounded to avoid electric shock.
- Always disconnect the power before servicing, cleaning, or when the device is not in use for an extended period.
- Keep the fixture out of reach of children.
- Use a safety cable when mounting the unit. Always carry the fixture by its base.
- Ensure the device is securely mounted to prevent vibration or accidental movement during operation.
- Install the device in a well-ventilated area, maintaining at least **50 cm clearance** from adjacent surfaces. Do not block ventilation slots, as overheating may occur.
- Verify that the device is connected to the correct voltage, as specified in the manual or on the product label.
- Operating temperature range: **-15°C to 45°C**. Do not operate the device outside this range.
- Before replacing any accessories, ensure the power is disconnected to prevent electric shock.

Operational Safety:

- Keep flammable materials away from the fixture during operation to prevent fire hazards.
- Ensure that the power cable is not crimped or damaged. If damaged, replace it immediately.
- The fixture's surface temperature may reach **up to 65°C** — do not touch the housing with bare hands during operation.
- Prevent flammable liquids, water, or metal from entering the unit. If this occurs, immediately disconnect the power.
- Do not operate the device in excessively dirty or dusty environments. Clean the fixture regularly.
- Avoid touching any internal wires while the fixture is operating, as this poses a risk of electric shock.
- Keep power cables separate from other wires to prevent entanglement.
- Maintain a minimum **5-meter distance** between the fixture and any objects.
- Avoid direct eye exposure to the light source while the fixture is in operation.
- If the housing or lenses become visibly damaged, they must be replaced with original manufacturer parts only.

Maintenance & Handling:

- Do not use the fixture if it becomes damaged. Do not attempt repairs yourself—unskilled repairs can cause further damage or malfunction. Contact an authorized service center for repairs.
- When transporting the device, use the original packaging and ensure **PAN/TILT locks are released before** packing.
- Avoid exposing the front lens of the fixture to direct sunlight or strong light sources during unpacking, installation, operation, or long periods of inactivity outdoors, as this can cause severe internal damage.
- After any contact with water, ensure the fixture is wiped down, dry and has been ventilated before storing.
- To ventilate the unit, run the fixture upright in a dry area for at least 15 minutes and up to 2 hours (depending on exposure to liquids). Ensure the release valve (Item 4 in section 2.3) is not covered so any water inside the unit can evaporate.
- If you notice any water inside the fixture (Behind the lens or the LCD display), do not open the fixture. Contact your purchasing agent and arrange repair.
- No parts in this unit are user serviceable. Do not open the fixture, if there is issues with this fixture please contact your purchasing agent for more advice. **Opening this fixture will void the warranty.**

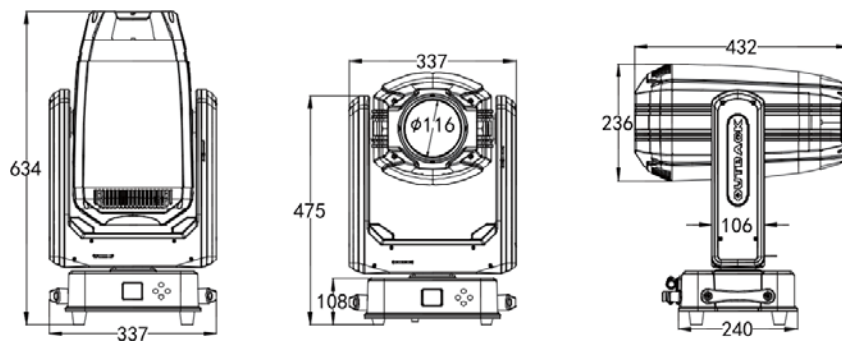


2. Introduction

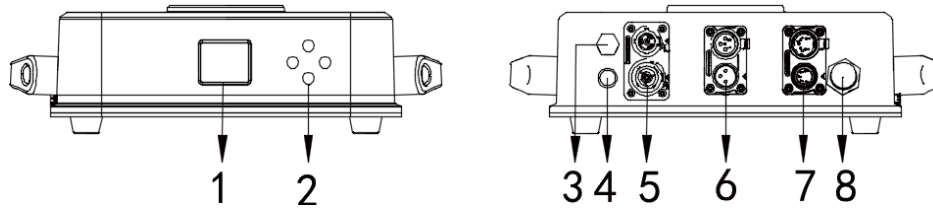
2.1. Package & Transportation :

Do not pack the device into carton or flight case before cooling completely, only 2 flight cases can be allowed to stack.

2.2. Dimensions (mm)



23. Overview:



1.Display	Show menus and functions	
2.Buttons	MENU	To move backward or leave the menu
	^ UP	To go backward to move up
	v DOWN	To go forward to move down
	ENTER	To confirm the selected function
3.Release Valve		
4.Fuse		
5.Power IN/OUT	To connect to supply power and next fixture	
6.DMX IN/OUT	3-PIN XLR (Firmware optional)	
7.DMX IN/OUT	5-PIN XLR (Firmware optional)	
8.Waterproof wireless antenna		

2.4.Accessories :

Item	Qty	
Omega bracket	2	PCS
Safety cable	1	PCS
Signal cable	1	PCS
Power cable	1	PCS

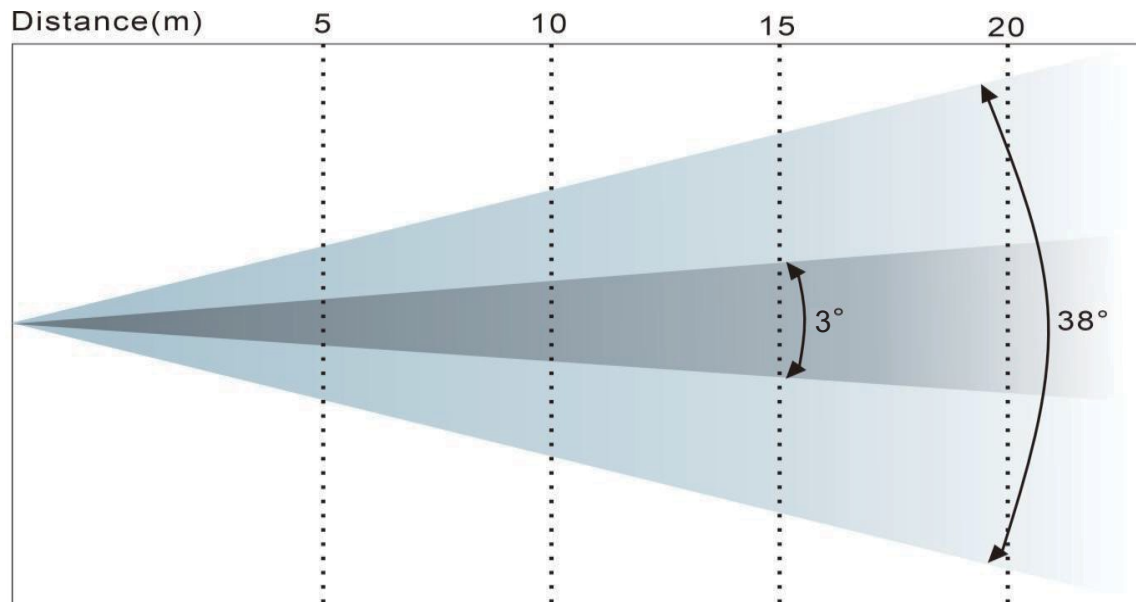
3. Technical Specification

3.1. Specification

AC POWER/ Frequency	100-264Vac; 50/60Hz	
Power Consumption	230Vac/522W;110Vac/542W	
Light Source	SD03-2319SD50Ra70-350W LED	
Color Temperature	8000K	
Zoom Range	3°-38°	
	CMY	Cyan+ Magenta+Yellow
Color System	Color wheel-1	4 + open
	Color wheel-2	5 + open
Gobo Wheels	Rotated gobo wheel-1	7 + open (exchangeable)
	Rotated gobo wheel-2	7 + open (exchangeable)
Movement	PAN	540°
	TILT	270°
	Automatic PAN/TILT repositioning	
	16-bit precision scanning	
	Mechanical PAN/TILT lock for safe transportation and maintenance	
Construction	Display	TFT screen
	DMX IN/OUT	3-PIN/5-PIN XLR(Firmware optional)
	Power IN/OUT	Waterproof power connector in/out
	Protection rating	IP65
Control and Programming	DMX channels	30CH
	Protocols	DMX 512, RDM, W-DMX.(Art -Net, sACN, optional)
	Firmware update	Via DMX
Dynamic Effects	0-100% continuous dimming and strobe effects	
	CMY color mixing	
	CTO	
	Two indexing/rotating prisms (4-facet circular prism + 4-facet linear prism, overlap)	
	Independent frost effect	

	Motorized zoom system
	Motorized focus system
Dimensions	337*240*634 mm
Weight	21 kg

32. Photometrics :



Lux 3°	70298	16072	7167	3897
Diameter(m)	0.35	0.69	1.05	1.4
Lux38°	2538	646	286	163
Diameter(m)	3.55	6.92	10.4	13.8

4. Operation

*Press [MENU] button to control menus.

*Press [^UP] and [vDOWN] button to navigate the menu structure.

*To select menu option or confirm the selection, press [ENTER]

*Return to upper level or without any change, press [MENU] button








*With battery inside, press one of buttons for 5 seconds to operate the menu if disconnect the power.




















Note: The screen will be automatically locked if without any operation for a long time, and press [^UP], [vDOWN], [MENU] and [ENTER] button in sequence to unlock the screen.
















Main functions:

Run Mode	DMX	27CH/30CH	
	Auto	Master/Alone	
	Manual	Pan/Tilt	
Setup	Pan Reverse	On/Off	
	Tilt Reverse	On/Off	
	Screen Reverse	UP/DOWN/AUTO	
	Auto Reposition	On/Off	
	Pan Angle	540/360/180	
	Tilt Angle	Full/180/90	
	Limit Mode	Off/Up/Down	
	Password	On/Off	
	Fan Mode	Auto/Full/ECO	
	DMX Backlight	On/Off	
	DMX Loss	Hold/ Black	
	Dimmer Curve	Line/Square Law/Inv Square/ S-Curve	
	Dimmer Freq	600/1200/1800/3600/7200/25K	
	W-DMX setting	W-DMX Off/W-DMX On/W-DMX Reset	
	Calibrate	Password Pan	
Factory Set	On/Off		
Reset	System Reset		
	Reset Scan		
	Reset Other		
System Info	Temperature		
	Error List		
	Software Version		
	System Update	On/Off	
	System Info		
Program	Select Program	Program 1 ~10	
	Program Edit	Auto Program 1 Auto Program 10	Test Step 1=Scene Step 8=Scene
	Scene Edit	Scene Edit: 001- 128	Pan...Pan=.. Scene Time=..

5. DMX Protocol

CHANNEL	VALUE	FUNCTION
30ch		
1	0 - 255	Pan 0° - 540°
2	0 - 255	Pan fine
3	0 - 255	Tilt 0° - 270°
4	0 - 255	Tilt fine
5	0 - 255	Pan/Tilt speed - fast to slow
6		Shutter
	0 - 3	Off
	4 - 7	On
	8 - 76	Synchronized strobe slow to fast
	77 - 145	Pulse strobe slow to fast
	146 - 215	Random strobe slow to fast
	216 - 255	On
7	0 - 255	Dimmer 0% - 100%
8	0 - 255	Dimmer fine
9		Color wheel 1
	0	Open 
	1 - 56	White - Color 1 (28)
	54 - 74	Color 1 
	75 - 108	Color 1 - Color 2 (91)
	116 - 136	Color 2 
	137 - 175	Color 2 - Color 3 (156)
	176 - 196	Color 3 
	197 - 239	Color 3 - Color 4 (216)
	240 - 255	Color 4 
10		Color wheel 2
	0	Open 
	1 - 44	White - Color 1 (27)
	45 - 59	Color 1 

	60 -96	Color 1 – Color 2 (77)
	97-110	Color 2 
	111 -146	Color 2 – Color 3 (127)
	147-160	Color 3 
	161-197	Color 3 – Color 4 (178)
	198 - 211	Color 4 
	212- 248	Color 4 – Color 5 (228)
	249- 255	Color 5 
11	0 - 255	Cyan 0% - 100%
12	0 - 255	Magenta 0% - 100%
13	0 - 255	Yellow 0% - 100%
14	0- 25	CTO 0% -100%
		Rotate Gobo 1
	0- 8	Open 
	9-15	Gobo 1 
	16-22	Gobo 2 
	23- 29	Gobo 3 
	30-36	Gobo 4 
	37- 43	Gobo 5 
	44-50	Gobo 6 
15	51- 57	Gobo 7 
	58- 67	Gobo 7 shake 
	68-77	Gobo 6 shake 
	78- 87	Gobo 5 shake 
	88- 97	Gobo 4 shake 
	98-107	Gobo 3 shake 
	108 -117	Gobo 2 shake 
	118-127	Gobo 1 shake 
	128 -187	Counter- clockwise rotation, fast to slow

	188 -195	Stop
	196 - 255	Clockwise rotation, slow to fast
16		Gobo 1 rotating
	0 -127	Gobo index
	128 - 187	Counter-clockwise rotation,fast to slow
	188 - 195	Stop
	196 - 255	Clockwise rotation, slow to fast
17		Rotate Gobo 2
	0 - 8	Open 
	9 - 15	Gobo 1 
	16 - 22	Gobo 2 
	23 - 29	Gobo 3 
	30 - 36	Gobo 4 
	37 - 43	Gobo 5 
	44 - 50	Gobo 6 
	51 - 57	Gobo 7 
	58 - 67	Gobo 7 shake 
	68 - 77	Gobo 6 shake 
	78 - 87	Gobo 5 shake 
	88 - 97	Gobo 4 shake 
	98 - 107	Gobo 3 shake 
	108 - 117	Gobo 2 shake 
	118 - 127	Gobo 1 shake 
	128 - 187	Counter- clockwise rotation, fast to slow
	188 - 195	Stop
	196 - 255	Clockwise rotation, slow to fast

18	0 - 127	Gobo index
	128 - 187	Counter-clockwise rotation, fast to slow
	188 - 195	Stop
	196 - 255	Clockwise rotation, slow to fast
19	0 - 255	Focus (0% - 100%)
20	0 - 255	Focus fine
21		Prism 1 (4- facet)
	0-127	Off
	128- 255	On
22		Prism 1 rotation
	0-127	Prism 1 Index
	128-187	Prism 1 counter- clockwise rotation, fast to slow
	188-195	Stop
	196-255	Prism 1 clockwise rotation, slow to fast
23		Prism 2 (4-facet linear)
	0-127	Off
	128 -255	On
24		Prism 2 rotation
	0-127	Prism 2 Index
	128-187	Prism 2 counter-clockwise rotation, fast to slow
	188-195	Stop
	196- 255	Prism 2 clockwise rotation, slow to fast
		Function
	0-31	No function
	32-63	Reset Pan and Tilt Motor(hold 5s)
	64-95	Reset Other Motor(hold 5s)
	96-127	Reset All Motor(hold 5s)

25	128-137	Built - in program 1
	138-147	Built- in program 2
	148-157	Built- in program 3
	158-167	Built- in program 4
	168-177	Built - in program 5
	178 -187	Built- in program 6
	188 -197	Built- in program 7
	198- 207	Built- in program 8
	208- 217	Built- in program 9
	218-227	Built- in program 10
	228-255	No function
26	0-255	Zoom
27	0- 255	Zoom fine
28		Frost
	0-127	Off
	128- 255	On
29		Movement macro
	0- 5	No function
	6-30	Movement macro 1
	31-55	Movement macro 2
	56-80	Movement macro 3
	81-105	Movement macro 4
	106-130	Movement macro 5
	131-155	Movement macro 6
	156-180	Movement macro 7
	181-205	Movement macro 8
	206-230	Movement macro 9
	231-255	Movement macro 10
30	0-255	Move speed (Fast to slow)

6. Connecting Power & Data

6.1 Connecting Power

- Release PAN/TILT locks before connecting power.
- The fixture can be operated on 100 -260Vac, 50/60 Hz AC main power.
- The maximum power consumption is 542W.

The fixture must be grounded/earthed and able to be isolated from AC power. The AC power supply must incorporate a fuse or circuit breaker for fault protection. All wiring and connecting works must be handled by qualified electrician.

Power cables color code as below:

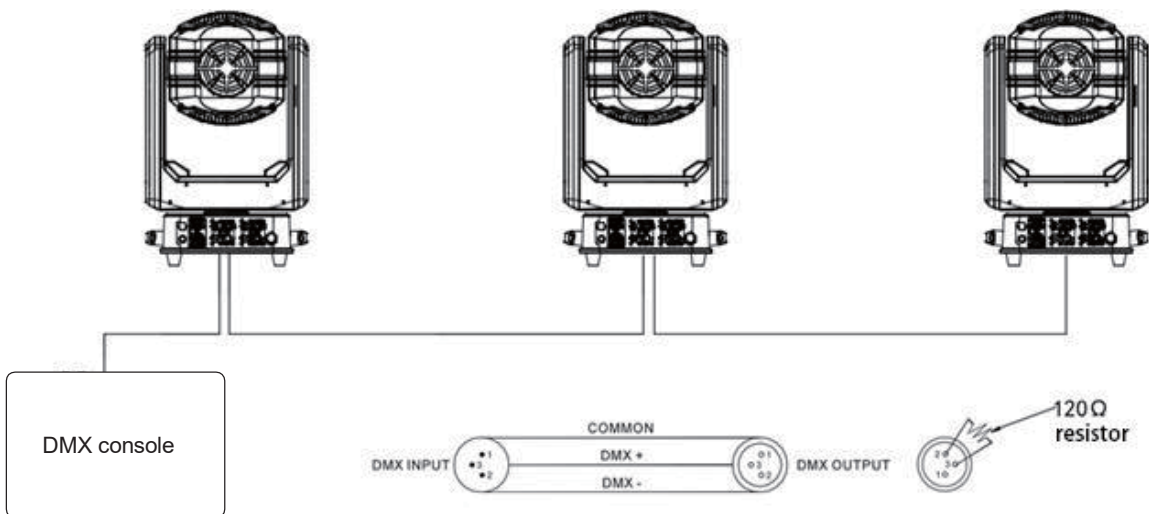
Cable	Color (US)	Cable	Color (EU)	Symbol	Conductor
	Black		Brown	L	Live
	White		Blue	N	Neutral
	Green		Yellow/Green	 Or 	Ground(earth)

6.2 Connecting Data

The fixture is equipped with 3-PIN / 5-PIN XLR sockets for DMX IN/OUT. Normally 150 meters is workable for signal cable, and signal amplifier will be necessary if longer than this distance. Use a IP-rated XLR to connect the controller with the fixture or one fixture with another.

Building a serial DMX chain:

Connect the DMX data output from the controller to the fixture's data input socket. Connect the DMX output of the first fixture in the DMX chain with the DMX input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected. Up to 32 fixtures can be connected to the same DMX link. Terminate the DMX out cable of the last fixture in the data link with a 120Ω DMX terminator.



7. Installation

7.1. General Instructions

This fixture is IP65-rated, making it suitable for both indoor and outdoor use. It is designed to be resistant to:

- **Dust** – Prevents dust from entering in amounts that could interfere with operation.
- **Water jets** – Protected against water sprayed from any direction.

Important Safety Notes:

1. Installation and operation must be performed by a qualified professional.
2. The fixture should be installed away from walkways, seating areas, and locations accessible to unauthorized personnel.
3. Never stand directly beneath the fixture during installation, removal, or servicing.

7.2 Installation Process

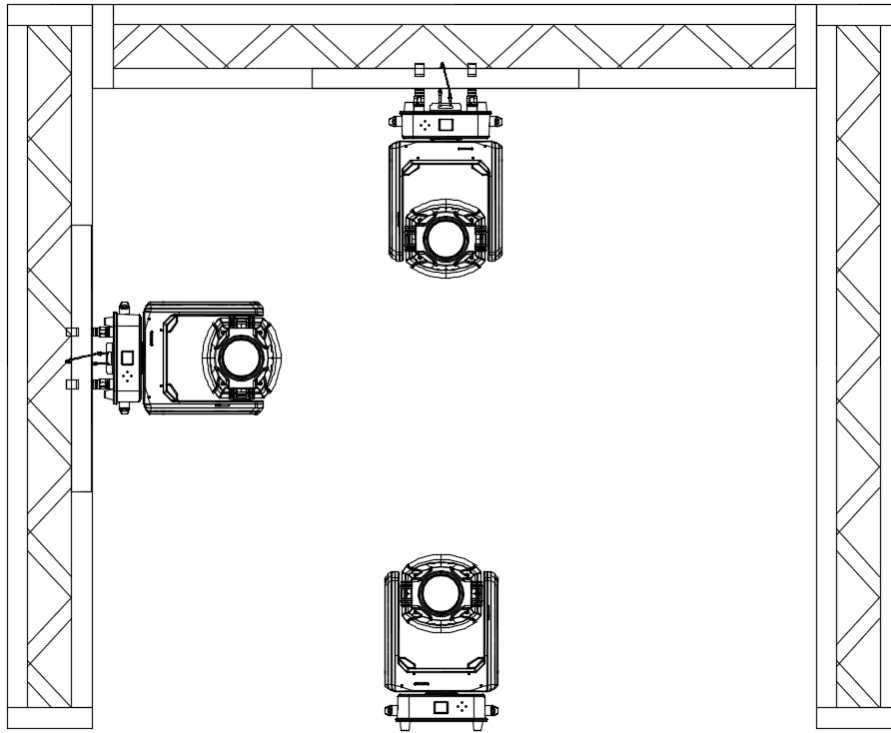
1. Check Equipment Integrity:

- Ensure that all clamps and safety cables are intact before installation.
- The truss or mounting structure must support at least six times the weight of the fixture without deformation.
- An additional safety cable is required and must support at least ten times the fixture's weight to prevent falling in case of clamp failure.
- Do not attach the safety cable to the bracket.

2. Mounting Options:

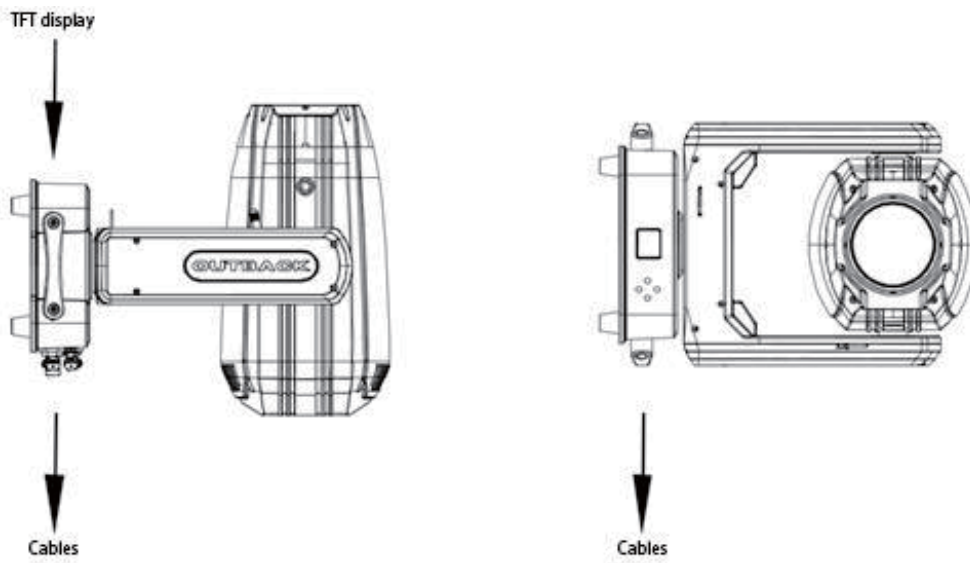
The fixture can be installed in three different positions:

- Hanging upside-down
- Mounted sideways on trussing
- Standing on the floor

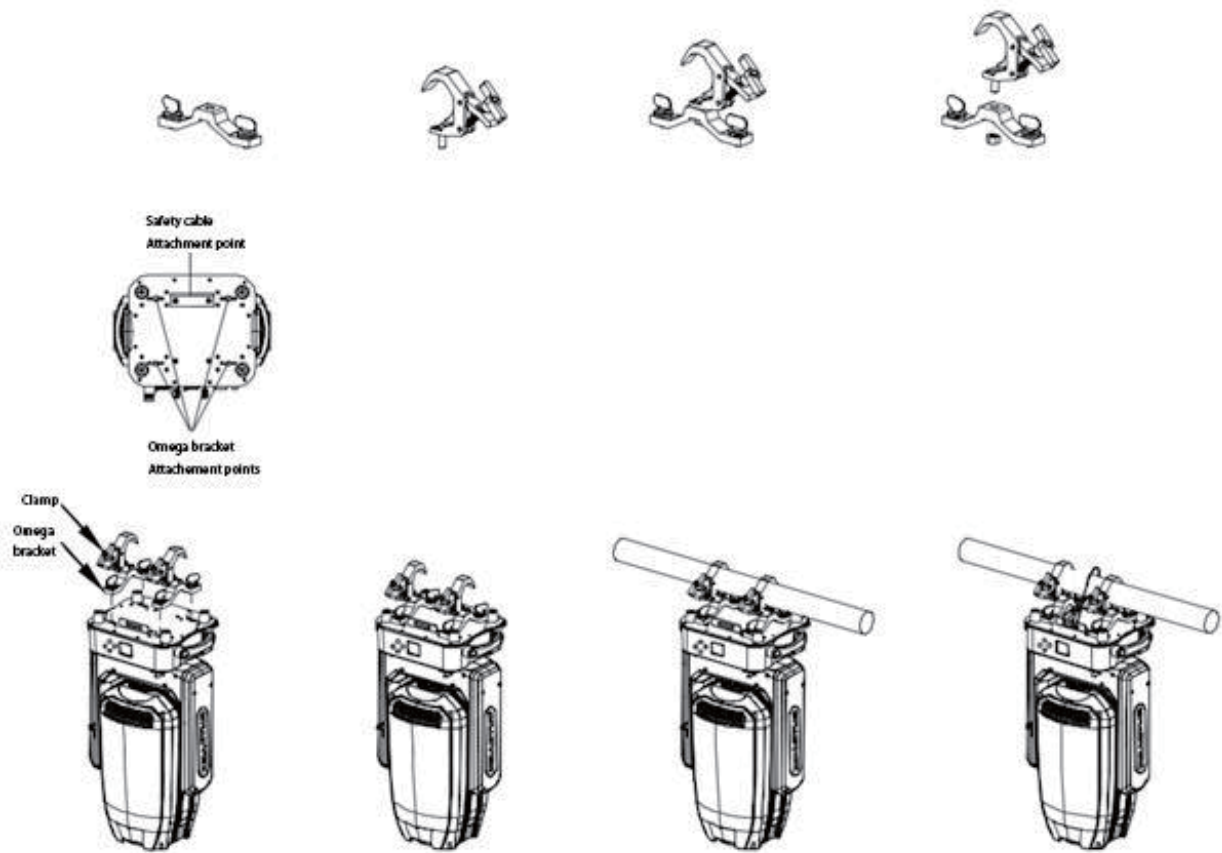


Side Mounting

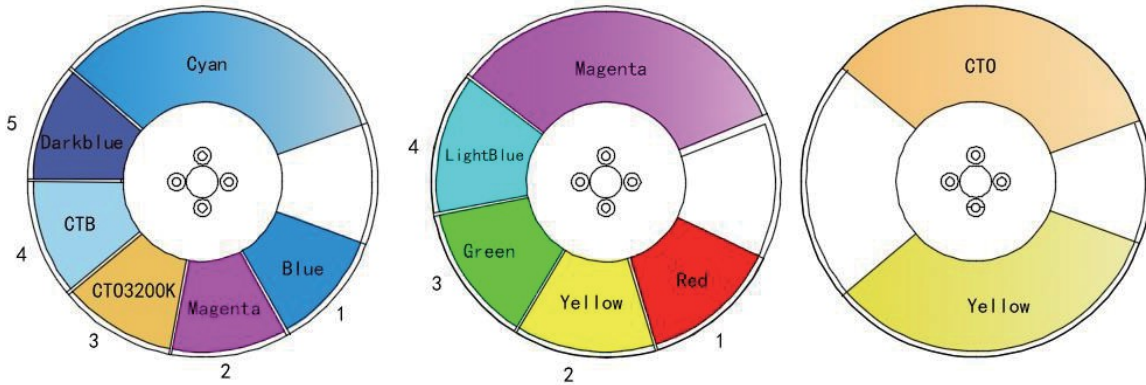
To maintain the IP65 rating integrity of the fixture, all cables must be towards the ground to prevent water accumulation around connectors.



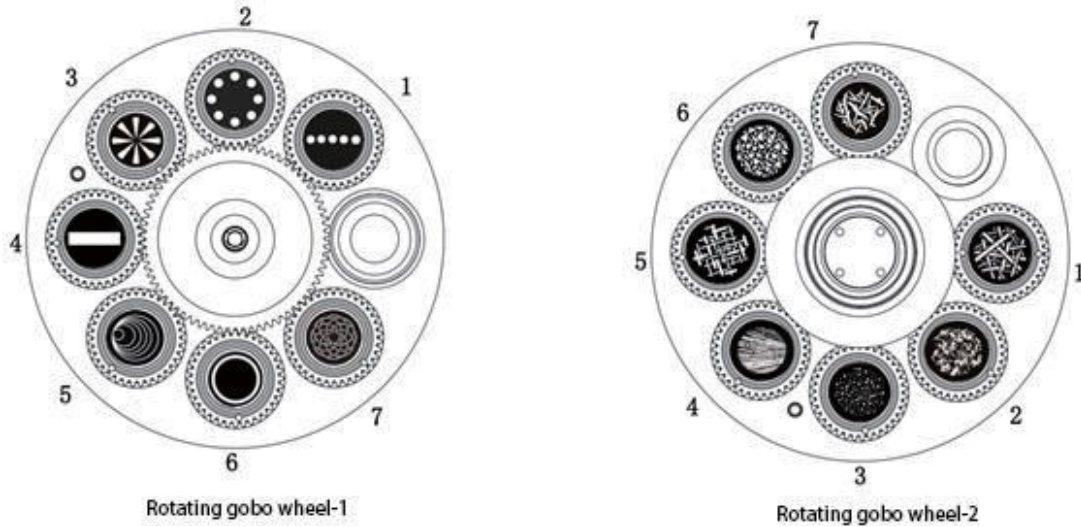
1). Installing steps



2). Color wheels



3). Gobo wheels



Pay attention to exchange gobo as below:

- There is a special coating on original gobo for heat resisting, and high temperature resistance material or high quality glass is asked for customized gobo.
- Customized gobo dimension, structure and material must same as original, it will be damaged if different and out of the range of warranty.
- Do not use the gobo with black coating on both sides, it will be nondurable as to absorb abundant heats.

No	Gobo wheel	Gobo Diameter	Image Area Diameter	Gobo Thickness
1	Rotating gobo wheel-1	19mm	15mm	1.1mm
2	Rotating gobo wheel-2	19mm	13mm	1.1mm

8. Troubleshooting

Error warning are mentioned in display when fixture fail and will disappear when it is repaired

Problem	Potential cause(s)	Remedies
Fixture not respond when power on	No power	Power on
	Fuse damaged	Replace fuse
	No power output from PSU	Inspect PSU
	Internal circuit in poor contact	Reconnect
Fixture out of control	DMX cable is disconnected	Inspect DMX cable
	Incorrect DMX address or DMX mode	Inspect and enter into correct DMX address or DMX mode
Light output cuts off suddenly	Fixture is too hot	Power off and cool fixture; clean fixture;
PAN/TILE reset error	Inspect the position of magnet if fall off or damage	Adjust/Replace
	Whether there are obstacles around operating range	Inspect
	Whether if hall element on PAN/TILT is damaged	Inspect/Replace
	Whether the wire connecting the hall element on PAN/TILT and the PCB board are in poor contact or disconnected	Reconnect
	Whether motor is damaged	Inspect/Replace
	Whether the related circuit of motor drive PCB is damaged	Inspect/Replace
	Whether the encoder is damaged	Inspect/Replace

	Whether the wire connecting the encoder and PCB board are in poor contact or disconnected	Reconnect
Cyan/Magenta/Yellow /CTO reset error	Inspect the position of magnet if fall off or damage	Inspect/Replace
	Whether obstacles around operating range	Inspect
	Whether the hall element on color wheel is damaged	Inspect/Replace
	Whether the wire connecting the hall element on color wheel and PCB board in poor contact or disconnected	Reconnect
	Whether the related circuit of color wheel motor and drive PCB is damaged	Replace
Rotating Gobo wheel reset error	Inspect the position of magnet if fall off or damage	Inspect/Replace
	Whether obstacles around operating range	Inspect
	Whether the hall element on gobo wheel is damaged	Adjust/Replace
	Whether the wire connecting the hall element on color wheel and PCB board in poor contact or disconnected	Reconnect
	Whether the related circuit of gobo wheel motor and drive PCB is damaged	Replace
Prism reset error	Inspect the position of magnet if fall off or damage	Adjust/Replace
	Whether obstacles around operating range	Inspect
	Whether the hall element on prism is damaged	Adjust/Replace
	Whether the wire connecting the hall element on prism and PCB board in poor contact or disconnected	Reconnect
	Whether the related circuit of prism motor and drive PCB is damaged	Replace
	Inspect the position of magnet if fall off or damage	Adjust/Replace

Focus/Zoom reset error	Whether obstacles around operating range	Inspect
	Whether the hall element on focus or zoom is damaged	Adjust/Replace
	Whether the wire connecting the hall element and PCB board in poor contact or disconnected	Reconnect
	Whether the related circuit of motor and drive PCB is damaged	Replace
Impure color	Light output to be feeble	Replace
	Dust or spot on color filter	Clean
	Color filter fall off or damage	Replace
Dim image	Dust or spot on optical lens	Clean
	Optical lens damaged	Replace
Noted! All these Potential causes for reference only, do not disassemble or maintenance by unqualified personnel		

9. Fixture cleaning

Regular cleaning is essential to maintain the fixture's performance and extend its lifespan. The buildup of dust, dirt, smoke particles, and fog fluid residues can reduce light output and impair cooling efficiency.

The required cleaning frequency depends on the operating environment. Factors that may necessitate more frequent cleaning include:

- Use of smoke or fog machines
- High airflow rates (e.g., near air conditioning vents)
- Airborne dust from stage effects, building structures, fittings, or outdoor environments

If any of these factors are present, inspect the fixture before operation and clean it as needed.

Cleaning Guidelines:

- Perform cleaning in a clean, dry, and well-lit area.
- Use only gentle pressure when cleaning optical components.
- For best results, use water with a mild detergent.
- Do not use alcohol, solvents, or abrasive materials, as they can damage optical components.
- Optical components are delicate and easily scratched—handle with care during cleaning.

Warranty

Please refer to your local dealer or contact Event Lighting.

www.event-lighting.com.au