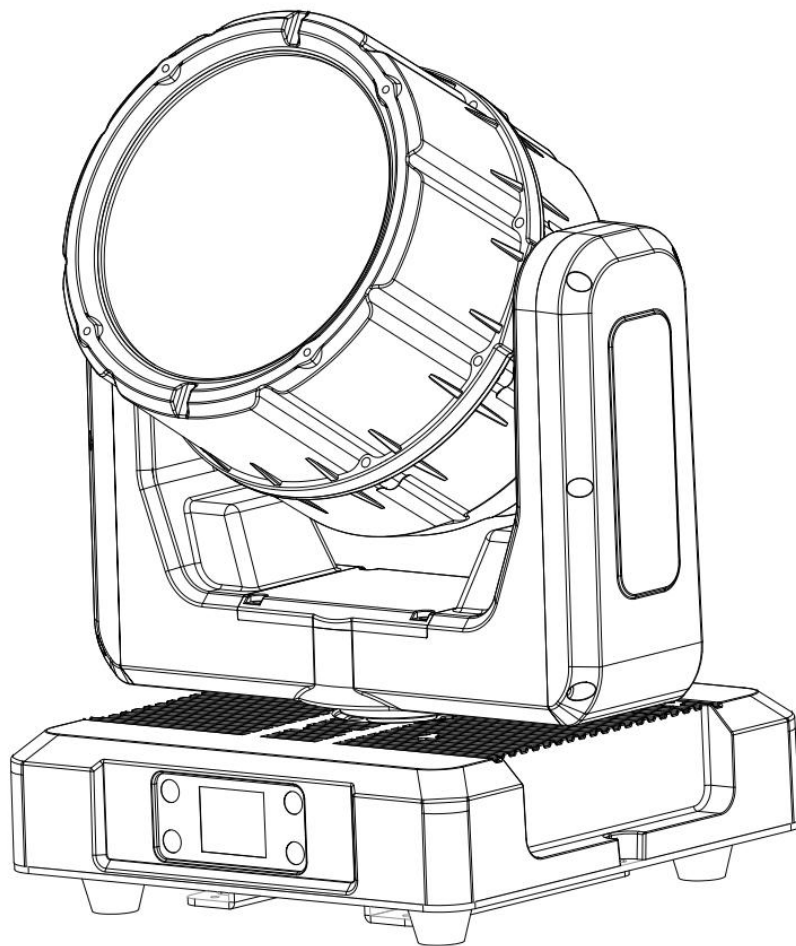




FOS Hydor 120W RGBL

# User Manual



# SAFETY PRECAUTIONS

This fixture is a sophisticated piece of electronic equipment. To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. Professional is not responsible for injuries and/or damages resulting from the misuse of this fixture due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of this fixture and only the original rigging parts included with this fixture should be used for installation. Any modifications to the fixture and/or the included mounting hardware will void the original manufacturer's warranty and increase the risk of damage and/or personal injury.



**PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.**



**THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.**



**DO NOT PLUG FIXTURE INTO A DIMMER PACK!  
NEVER OPEN THIS FIXTURE WHILE IN USE!  
UNPLUG POWER BEFORE SERVICING FIXTURE!**

**NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT! KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!**



**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!  
RETINA INJURY RISK - MAY INDUCE BLINDNESS!  
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!**



**ENSURE ALL CONNECTIONS AND END CAPS ARE PROPERLY SEALED WITH A DIELECTRIC GREASE (AVAILABLE AT MOST ELECTRICAL SUPPLIERS) TO PREVENT WATER CORROSION AND/OR ELECTRICAL SHORT CIRCUIT.**



**MINIMUM DISTANCE TO OBJECTS/SURFACES**

**MUST BE 3.3 FEET (1 METER)**

**MAXIMUM TEMP OF EXTERNAL SURFACE 185° F (85° C)**

**MINIMUM DISTANCE OF FLAMMABLE MATERIALS FROM THE SURFACE IS 1.6 FEET (0.5 METER)**

## **SAFETY PRECAUTIONS**

- DO NOT TOUCH the fixture housing during operation. Turn OFF the power and allow approximately 15 minutes for the fixture to cool down before servicing.
- DO NOT shake fixture, and avoid brute force when installing and/or operating fixture.
- DO NOT operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease.
- NEVER force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of the same power rating.
- DO NOT block any air ventilation slots.
- All fan and air inlets must remain clean and never blocked.
- Allow approx. 6" (15cm) between fixture and other devices or a wall for proper cooling.
- Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure.
- Only handle the power cord by the plug end. Never pull out the plug by tugging the wire portion of the cord.
- During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture. This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.
- Consistent operational breaks will ensure fixture will function properly for many years .
- ONLY use the original packaging and materials to transport the fixture in for service.

# MAINTENANCE GUIDELINES



**DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!**

## CLEANING

Frequent cleaning is recommended to ensure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Periodically clean the external lens surface with a soft cloth to avoid dirt/debris accumulation. **NEVER** use alcohol, solvents, or ammonia-based cleaners .

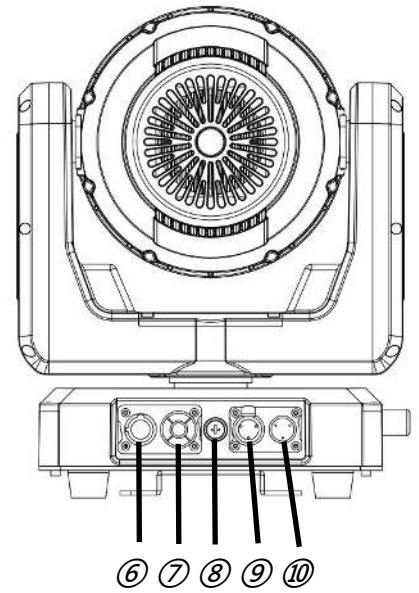
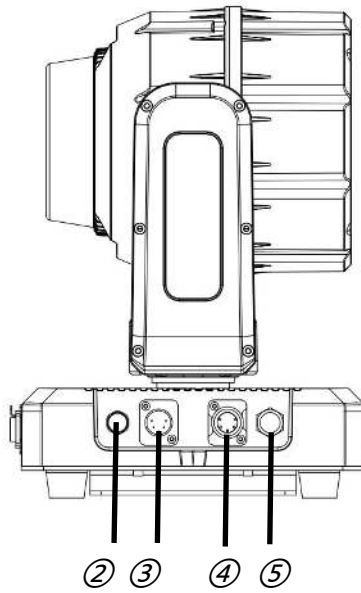
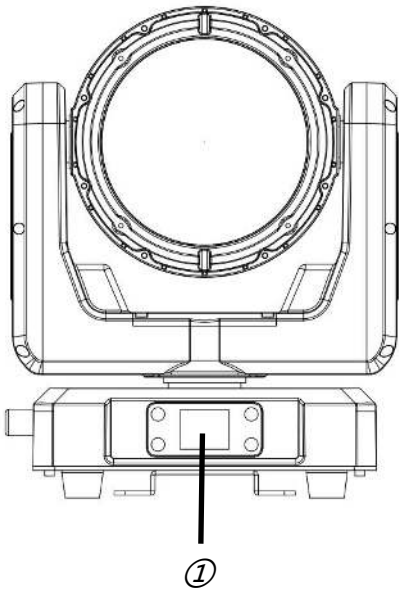
## MAINTENANCE

Regular inspections are recommended to ensure proper function and extended life. There are no user serviceable parts inside this fixture. Please refer all other service issues to an authorized our service technician. Should you need any spare parts, please order genuine parts from your local dealer.

Please refer to the following points during routine inspections:

- A detailed electric check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, color lenses, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
- Electric power supply cables must not show any damage, material fatigue or sediments. **NEVER** remove the ground prong from the power cable.

# OVERVIEW



① System Menu LCD Display

② Value

③ 5 PIN DMX Input

④ 5 PIN DMX Output

⑤ Antenna

⑥ Power Input

⑦ Power Output

⑧ Fuse

⑨ 3 PIN DMX Input

⑩ 3 PIN DMX Output

## INSTALLATION GUIDELINES



### FLAMMABLE MATERIAL WARNING

Keep fixture minimum 5.0 feet (1.5m) away from flammable materials and/or pyrotechnics.



### ELECTRICAL CONNECTIONS

A qualified electrician should be used for all electrical connections and/or installations.



**MINIMUM DISTANCE TO SURFACES/OBJECTS IS 3.3 FEET (1 METER).**

**MINIMUM DISTANCE TO FLAMMABLE MATERIALS IS 1.6 FEET (0.5 METER).**

**EXTERNAL SURFACE CAN REACH TEMPERATURES OF 185° F (85° C).**



**DO NOT INSTALL THE FIXTURE IF YOU ARE NOT QUALIFIED TO DO SO!**

Fixture **MUST** be installed following all local, national, and country commercial electrical and construction codes and regulations.

Before rigging/mounting a single fixture or multiple fixtures to any metal truss/structure or placing the fixture(s) on any surface, a professional equipment installer **MUST** be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture(s), clamps, cables, and accessories.

Overhead rigging requires extensive experience, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the fixture, among other skills. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Fixture ambient operating temperature range is -4° to 113°F (-20° to 45°C). Do not operate the fixture when the ambient temperature falls outside of this range.

Fixture(s) should be installed away from walking paths, seating areas, or areas where unauthorized personnel might reach the fixture by hand.

**NEVER** stand directly below the fixture(s) when rigging, removing, or servicing.

Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable.

Allow approximately 15 minutes for the fixture to cool down before serving.

# SYSTEM MENU

Main Menu	Sub Menu	Option/Value	
Control	DMX Address	001-512	
	Channel Mode	12CH	
		22CH	
	Signal Select	XLR First	
		Only XLR	
		Only Wireless	
		Wireless First	
		Wireless to XLR	
	Wireless Free	Cancel	
		OK	
	Manual	Pan Pan Fine ... Control	
	Settings	Display	Always ON
			10 sec
30 sec			
1min			
Display Reversal		NO	
		YES	
Key Lock		NO	
		YES	
DMX Fault		Hold	
		Blacklout	
Dimmer Speed		Standard	
		Fast	
		Slow	

	Dimmer Curve	Linear
		Square
		S-Shape
	Led Frequency	4 KHz
		8 KHz
		16 KHz
		24 KHz
	Red Shift	Off
		On
	Fan Mode	Auto
		Silent
		Full
	Pan Setting	Reversal
		Calibration
		Encoder
	Tilt Setting	Reversal
Calibration		
Encoder		
Zoom Calibration	0-255	
Color Calibration	Raw Mode	
	Adjust	
Factory Reset	No	
	Yes	
Information	Error Info	*
	Temperature	*°C
	Version	V***
	UID	*

# DMX CHART

## 12CH Mode(DMX,sACN)

Channel	Value	Function	Description
1CH	0-255	PAN	540°
2CH	0-255	TILT	230°
3CH	0-255	Zoom	Small angle to large angle
4CH	0-255	Dimmer	
5CH	0-5	Strobe Open	
	6-10	Strobe Closed	
	011-035	Puls Random,slow->fast	
	036-060	Ramp up Random,slow->fast	
	061-085	Ramp down Randon,slow->fast	
	086-110	Random Strobe Effect	
	111-135	Strobe Break Effect	
	136-250	Strobe slow ->fast	
	251-255	Strobe Open	
6CH	0-255	R	
7CH	0-255	G	
8CH	0-255	B	
9CH	0-255	L	
10CH	0-5	Off	
	6-21	1800K	
	22-37	2000K	
	38-53	2500K	
	54-69	2700K	
	70-85	3000K	
	86-101	3200K	
	102-117	3500K	
	118-133	4000K	
	134-149	4500K	
	150-165	5000K	

	166-181	5600K	
	182-197	6000K	
	198-213	6500K	
	214-229	7200K	
	230-255	8000K	
11CH	0-255	Color Macros	
	000-005	/	
	006-010	Magenta	R=255,G=020,B=015
	011-015	Peacock Blue	R=051,G=255,B=051
	016-020	Steel Blue	R=206,G=255,B=056
	021-025	Light Blue	R=074,G=255,B=082
	026-030	Dark Blue	R=000,G=186,B=255
	031-035	Leaf Green	R=206,G=255,B=000
	036-040	Dark Green	R=084,G=255,B=013
	041-045	Mauve	R=227,G=041,B=056
	046-050	Deep Golden Amber	R=255,G=058,B=000
	051-055	Pale Lavender	R=255,G=197,B=061
	056-060	Primary Green	R=077,G=255,B=000
	061-065	Bright Blue	R=000,G=255,B=087
	066-070	Apricot	R=255,G=143,B=013
	071-075	Pale Gold	R=253,G=171,B=026
	076-135	Rainbow Effect	Smooth Gradient
	136-195	Color Macro Jumping	
	195-255	Color Macro Gradient	Smooth Gradient
12CH	0-4	/	
	5-9	The display stays on	3 seconds delay start
	10-14	The display shows 10 seconds	3 seconds delay start
	15-19	The display shows 30 seconds	3 seconds delay start
	20-24	The display shows 1 mins	3 seconds delay start
	25-29	Screen lock off	3 seconds delay start
	30-34	Screen lock on	3 seconds delay start
	35-39	Signal Hold	3 seconds delay start

40-44	Black Field	3 seconds delay start
45-59	/	
60-64	Standard dimming	3 seconds delay start
65-69	Fast dimming	3 seconds delay start
70-74	Slow dimming	3 seconds delay start
75-84	/	
85-89	Linear	3 seconds delay start
90-94	Square	3 seconds delay start
95-99	S-curve	3 seconds delay start
100-109	/	
110-114	4000hz	3 seconds delay start
115-119	8000hz	3 seconds delay start
120-124	16000hz	3 seconds delay start
125-129	24000hz	3 seconds delay start
130-139	/	3 seconds delay start
140-144	Fan automatic	3 seconds delay start
145-149	Silent fan	3 seconds delay start
150-154	Fan full on	3 seconds delay start
155-164	/	
165-169	Red drift off	3 seconds delay start
170-174	Red drift on	3 seconds delay start
175-179	/	
180-184	Pan Reverse Off	3 seconds delay start
185-189	Pan reverse On	3 seconds delay start
190-194	Pan error correction off	3 seconds delay start
195-199	Pan error correction on	3 seconds delay start
200-204	Tilt Reverse Off	3 seconds delay start
205-209	Tilt reverse On	3 seconds delay start
210-214	Tilt error correction off	3 seconds delay start
215-219	Tilt error correction on	3 seconds delay start
220-224	Pan&Tilt Reset	3 seconds delay start
225-229	Zoom Reset	3 seconds delay start
230-234	Reset All	3 seconds delay start
235-255	/	3 seconds delay start

# **SPECIFICATIONS**

## **LIGHT SOURCE**

Main LED:120W RGBL

Lumen Output:2500lm

Intensity:375,000 cdinnarrow beam

Flicker-Free operation

LED Driver frequency adjustable for demanding applications

## **COLOR PALETTE**

RGBL color mixing with very bright and vibrant saturated colors,as well as soft pastels and white tones

Calibrated and Extended Color Modes

Calibrated Color

Temperature Control:1800–8000K

Calibrated Green Magenta Shift(Tint)

## **OPTICS**

140 mm Fresnel lens

3.8 to 38 degrees zoom

Defined narrow beam

Soft edge wide wash

Minimal color temperature

Minimal stray light

shift from center to edge

## **ELECTRICAL AND CONNECTORS**

Input Voltage Range:100-240V;50/60Hz

Power In/Out:Waterproof power connector in/out

Data In/Out:3-pin or 5-pin waterproof XLR

## **CONTROL**

Control Mode:12CH

DMX,W-DMX

## **CONSTRUCTION**

Dimensions:282x250x364.8MM

Weight:7 kg

## **IP RATED:**

IP65

# DIMENSIONAL DRAWINGS

