LED 800W Profile
Moving Head Light

Item Number: LL800PRO

USER MANUAL

This user manual includes important information for installation and operation. Please read this user manual carefully to install, operate, and maintain the lighting safety and correctly. A verified technician should do the installation and operation.

Please carefully check for any damages caused by transportation.

Before delivery, this device has passed strict quality control and inspection. Please follow the user manual for proper operation. If this fixture is damaged due to operation error or disregard of this manual, the fixture will be out of warranty, and the manufacture or dealer will not be held responsible.

Installation:

This unit is for indoor use only. Use only in a dry location. To prevent or reduce the risk of electrical shock or fire, do not expose to rain or moisture.

Maximum ambient temperature for operation is between 25°F and 104°F. Do not use under or above this range. Turn off the power and allow 15 minutes for the unit to cool down before handling. Do not open the unit within five minutes after switching off.

Keep the fixture at least 1.5ft. away from any combustible material, as it is not suitable for direct installation on these surfaces. The unit must be installed in a location with adequate ventilation, at least 20 inches from adjacent surfaces. Ensure that no ventilation slots are blocked.

The fixture should be protected from shock, strong vibrations or shaking during transportation and installation.

We advise that an electrician confirms the safety of the electrical data prior to installation. Power off the fixture before installation or maintenance. Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.

Rigging:

Carefully hold the fixture upside down by its base, unfold the two integrated clamps at the bottom, and rotate one of the clamps to the desired direction. Hang the clamps onto the truss and tighten the screw.

Insert the quick-lock fasteners of the first holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise.

Pull the safety rope through the holes on the bottom of the base and fasten it on the truss or other fixing point. Ensure that the fixture is secure and will not drop due to clamp damage.

The truss used for hanging this fixture must be able to hold 10 times the weight of this fixture without deformation one hour after installation. Always use a safety cable that can hold 12 times the weight of the unit. Do not stand directly under the fixture while installing, uninstalling or adjusting the fixture.

Product Specifications:

Electrical:
Input power: AC100-240V
Power Frequency: 50/60Hz
Power: 900W
Fuse: 12A

Light Source:
Source: 800W LED
Average Lifespan: 50,000 hours

Color System:

Color: 7 colors + open

CMY+CTO color mixing

Electronics:

Linear dimming: 0-100% Linear Dimmer

Strobe: 1-25Hz

Optics:

Beam Angle: 4-49°

Dynamic Effects:

Static gobo wheel: 8 gobos + open + shaking function

Rotatable gobo wheel: 6 replaceable gobos + open + shaking function

Color wheel: 7 colors + open

Smooth CMY + CTO color mixing system

Prism 1: 6-facet rotatable; prism 2: 3 facet rotatable

Control:

DMX channels: 36 channels

DMX connector: 5-Pin XLR input and output

Power connector: True1

Control mode: DMX/Master-Slave/Auto/Sound/RDM

With RDM function and software upload via DMX cable

Pan: 540°, 16 bits scanning

Tilt: 270°, 16 bits scanning

LCD touch display with 5 buttons

Physical:

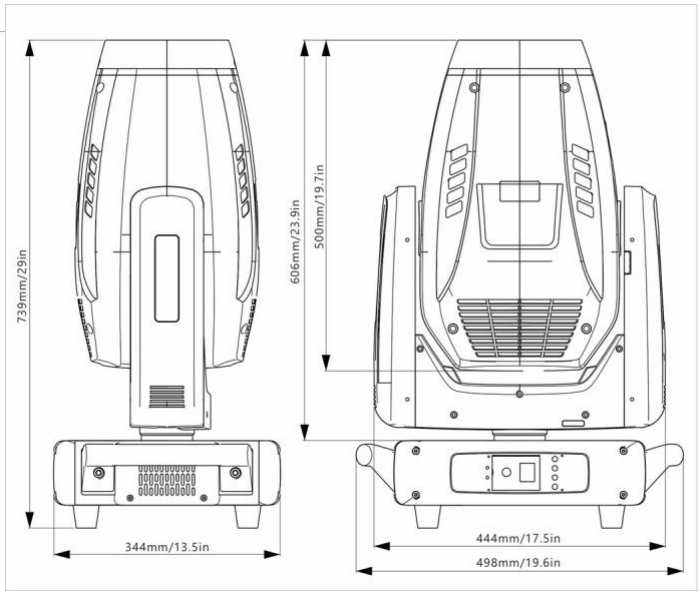
IP Rating: IP20

Housing color: black

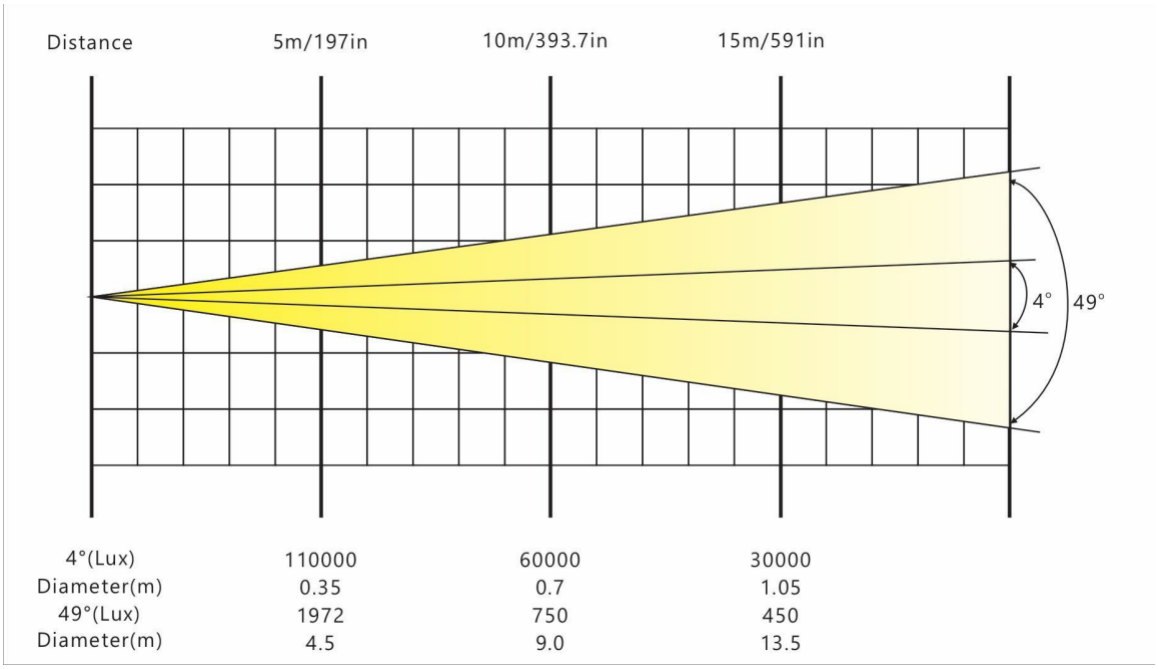
Working ambient temp: 25°F to 104°F

Dimension: 498*344*739*mm/19.6*13.5*29.1in

Weight: 35kg/77.2lb



Photometric Diagram



4°(Lux)	110000	60000	30000
Diameter(m)	0.35	0.7	1.05
49°(Lux)	1972	750	450
Diameter(m)	4.5	9.0	13.5

RDM Operation:

RDM (Remote Device Management) is an extended version of the DMX512-A protocol that enables bidirectional communication, unlike the traditional one-way DMX512 protocol. RDM operates on an RS-485 bus, a timesharing, multipoint, half-duplex protocol that allows only one device to output to the host at a time.

Use RDM Compatible Equipment: Ensure that both the controller and the fixtures support the RDM Protocol.

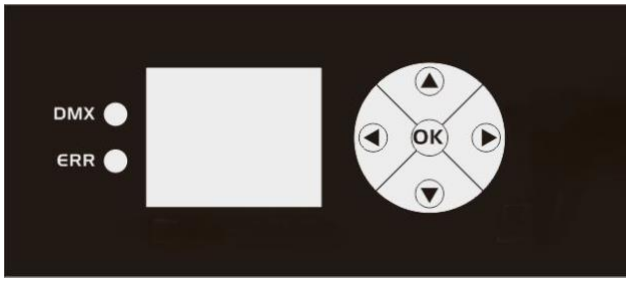
Bidirectional Signal Amplifier Required: A traditional one-way signal amplifier is not suitable for RDM as it requires feedback data. Using a one-way amplifier will block the return data, which will prevent the fixture from being detected.

DMX Mode Setup: Set all fixtures to DMX mode and ensure there is only one master fixture on the entire DMX line.

Impedance Matching Register: Insert a 120-ohm resistor between terminals 2 and 3 of the terminal plug to reduce signal reflection, especially for long signal lines, which stabilizes the differential signal and improves communication quality.

Troubleshooting Non-Detectable Fixtures: If a fixture accepts DMX control but cannot be detected by RDM, first check the signal amplifier, then inspect lines 2 and 3 of the signal cable for poor connection.

Display and Operations



Button	Function
Up	Scroll upward
Down	Scroll down
Left	Left or return
Right	Right
OK	Confirm
DMX	DMX signal indicator
ERR	Error indicator

DMX Set:

Button: Press UP or DOWN button, or press LEFT or RIGHT button to adjust the DMX address. Press OK to return.

Manual: Press digital directly. First put the hundreds, then the tens, then the last place (ex: input DMX address 286, press 2, press 8, then press 6.)

Setup:

OPTION	DETAILS	
DMX Channel	36CH	36-channel mode
RDM Function	Off	
	On	
Language	Chinese	Set Chinese interface
	English	Set English interface
Display Reverse	Off	Invert display
Display AUTO	On	Display auto reverse
DMX Signal	Kee	Continue running in the original state
	Clear	Motor return, stop running

Screen Saver	Of	
	On	
X Reverse	Of	
	On	
Y Reverse	Of	
	On	
XY Swap	Of	
	On	Exchange XY channels（include XY fine）
XY Encoder	Of	No encoder (optocoupler) is used to correct the position
	On	Use the encoder (optocoupler) to check any out-of-steps and automatically correct the position
Restore Default		Press "OK" to see the confirmation dialog box, press "OK" again to restore the default Settings

Run Mode:

OPTIO	DETAILS
Auto mode	DMX
	Sound activated
	Auto
Manual Control	Manual control (no DMX signal control)
Light	Light reset
XY	XY reset
Motor Reset	MT reset

System:

OPTION	DETAILS
System Version	Show system version details
Temperature	Display LED temperature
System Time	Display use time
Sensor Monitoring	
System Error	When there is error, interface shows “error”, when no error, interface shows
DMX Monitoring	

Common error	Details
MT Connection Failure	The motor board is not responding. The serial communication line connecting the display board or the motor board is faulty. motor board is faulty.

X Reset Failure	problem with the X-axis photoelectric switch, or the X-axis motor or
Y Reset Failure	problem with the Y-axis photoelectric switch, or the Y-axis motor or
X Hall Error	problem with the X-axis Hall, or the motor board
Y Hall Error	problem with the Y-axis Hall, or the motor board
Color Wheel Reset Failure	problem with the color wheel Hall, or the motor board for color
Gobo Wheel Reset Failure	problem with the gobo wheel Hall, or the motor board for gobo
Focus Reset Failure	problem with the focus Hall, or the motor board for focus
Lamp Control Failure	Failure to turn OFF/ON the lamp, problem with lamp or ballast

Dimmer Curve:

OPTION	DETAILS	OPTIO
Lamp Control	Dimmer Curve	Linear
		scurve
		Insquare
		Square

OPTION	DETAILS	OPTION
Lamp Control	Dimmer Curve	Linear
		scurve
		Insquare
		Square

Factory:

Motor Calibration	X calibration	After entering the sub-interface, you can adjust the reset position of the X axis, Y axis and other motors to make up for the error on the hardware installation. The adjustment range is -12 to +127, and +0 indicates that there is no adjustment.
	.....	
	color	
Stroke Calibration	X stroke	
	Y stroke	
XY Speed Adjustment	X speed	
	Y speed	

DMX Chart:

36 Channel Mode

Channel	Function	Value	Details
CH1	Pan	0-255	0-540°
CH2	Pan Fine	0-255	0-2°
CH3	Tilt	0-255	0-270°
CH4	Tilt fine	0-255	0-1°
CH5	Pan/Tilt speed	0-255	Fast to slow
CH6	Strobe	0-3	Off
		4-127	Pulse strobe slow to fast
		128-191	Strobe fading slow to fast
		192-251	Random strobe slow to fast
		252-255	ON
CH7	Dimmer	0-255	Master dimmer
CH8	Cyan	0-255	Cyan 0-100% dimmer
CH9	Magenta	0-255	Magenta 0-100% dimmer
CH10	Yellow	0-255	Yellos 0-100% dimmer
CH11	CTO	0-255	CTO 0-100% dimmer
CH12	Color Wheel	0-127	Linear color
		128-137	Color 1
		138-146	Color 2
		147-155	Color 3
		156-164	Color 4
		165-173	Color 5
		174-182	Color 6
		183-191	Color 7
		192-222	Gobo forward rotation fast to slow
		223-224	Stop
		225-255	Gobo reverse rotation slow to fast
CH13	CRI Option	0-255	CRI option
CH14	Fixed Gobo Wheel	0-9	open
		10-19	Gobo 1
		20-29	Gobo 2
		30-39	Gobo 3
		40-49	Gobo 4
		50-59	Gobo 5
		60-69	Gobo 6
		70-79	Gobo 7
		80-89	Gobo 8
		90-99	Gobo 1 shake slow to fast

		100-109	Gobo 2 shake slow to fast
		110-119	Gobo 3 shake slow to fast
		120-129	Gobo 4 shake slow to fast
		130-139	Gobo 5 shake slow to fast
		140-149	Gobo 6 shake slow to fast
		150-159	Gobo 7 shake slow to fast
		160-169	Gobo 8 shake slow to fast
		170-212	Forward gobo rotation slow to fast
		213-215	Stop
		216-255	Backward gobo rotation slow to fast
CH15	Glass Gobo Wheel	0-9	Open
		10-19	Gobo 1
		20-29	Gobo 2
		30-39	Gobo 3
		40-49	Gobo 4
		50-59	Gobo 5
		60-69	Gobo 6
		70-79	Gobo shake slow to fast gobo 1
		80-89	Gobo shake slow to fast gobo 2
		90-99	Gobo shake slow to fast gobo 3
		100-109	Gobo shake slow to fast gobo 4
		110-119	Gobo shake slow to fast gobo 5
		120-129	Gobo shake slow to fast gobo 6
		130-190	Forward gobo rotation slow to fast
		191-192	Stop
		193-255	Backward gobo rotation slow to fast
CH16	Glass Gobo Rotating Speed	0-127	Rotation angle adjustment (0-360°)
		128-190	Forward gobo rotation fast to slow
		191-192	Stop
		193-255	Backward gobo rotation slow to fast
CH17	Effect Wheel	0-10	No function
		11-255	Insert
CH18	Effect Wheel Rotation	0-2	Stop
		3-128	Forward rotation fast to slow
		129-255	Backward rotation slow to fast
CH19	Focus	0-255	Focus
CH20	Focus Fine	0-255	Fine focus
CH21	Zoom	0-255	Zoom narrow to wide

CH22	Prism 1+2	0-63	No function
		64-127	Prism 1
		128-191	Prism 2
		192-255	Prism 1+2 overlay
CH23	Prism 1 Rotation	0-127	Switch rotation angle
		128-187	Forward rotation fast to slow
		188-195	Stop
		196-255	Rotation backward slow to fast
CH24	Prism 2 Rotation	0-127	Switch rotation angle
		128-187	Forward rotation fast to slow
		188-195	Stop
		196-255	Rotation backward slow to fast
CH25	Frost	0-127	No
		128-255	Frost
CH26	Cutter 1A	0-255	Insert linearly cutter 1A
CH27	Cutter 1B	0-255	Insert linearly cutter 1B
CH28	Cutter 2A	0-255	Insert linearly cutter 2A
CH29	Cutter 2B	0-255	Insert linearly cutter 2B
CH30	Cutter 3A	0-255	Insert linearly cutter 3A
CH31	Cutter 3B	0-255	Insert linearly cutter 3B
CH32	Cutter 4A	0-255	Insert linearly cutter 4A
CH33	Cutter 4B	0-255	Insert linearly cutter 4B
CH34	Cutter Rotation	0-255	Switch rotation angle
CH35	Iris	0-127	From big to small
		128-255	Slow to fast
CH36	Reset	0-209	No
		210-215	Reset XY after 6 seconds
		220-235	Reset motors after 6 seconds
		240-255	Reset all after 6 seconds

Symbol Instruction on Fixture:

CE certificate

RoHS certificate