

LED 120W Spot Moving Head Light

Item Number: LL120ST

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 safely 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 manufacturer 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 104°F. Do not operate the unit at a higher ambient temperature as the surface temperature of the unit can reach up to 165°F. Do not touch the housing of the unit during operation as this could result in serious injury. 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.

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:

Only lift the unit by its base, not the head. The unit should be mounted via its screw holes on the bracket and firmly fixed to avoid vibration and slipping while operating.

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:

Input power:AC100-240V

Power frequency:50/60Hz

Power consumption: 150W

Fuse:5A

Prism: 6+12 double-layer prism

Color wheel: 7 colors + open

Static gobo wheel: 7 gobos + open

Rotating gobo wheel: 6 gobos + open

Main: 120W white LED, CCT:7500K

Halo Ring:29pcs RGB LED

Average lifespan: 50000 hours

Color wheel:7 colors + open

Linear dimming:0-100% Linear Dimmer

Strobe:0.3-25Hz

Beam Angle: 8°~14°

DMX channels:22CH

DMX connector: 3-Pin XLR input/ output

Power connector: PowerCon input/output

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

Pan: 540°, 8/16 bits scanning

Tilt: 270°, 8/16 bits scanning

LCD color display with 5 buttons

IP Rating: IP20

Housing color: black

Working ambient temp.: -10°C to 40°C (-14°F to 104°F)

Dimensions: 420 x 305 x 300mm / 16.5 x 12.0 x 11.8in

Weight: 6.75kg / 14.9lb

Color Wheel



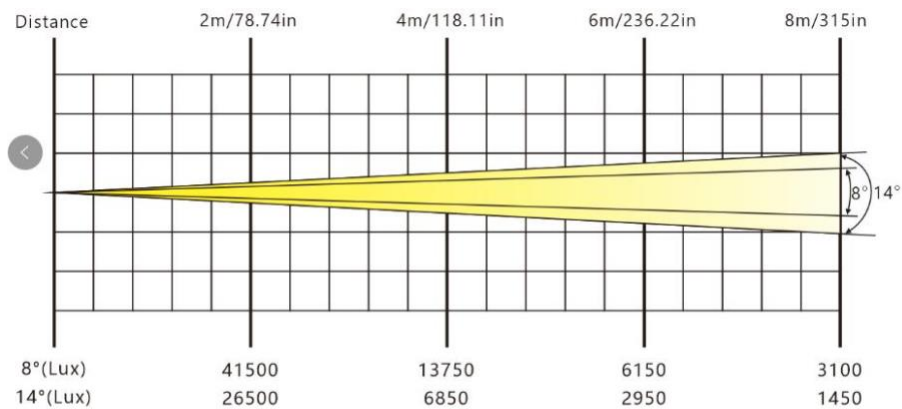
Static Gobo Wheel



Glass Rotatable Gobo Wheel



Photometric Diagram:



Startup Menu:

Reset

" Address: Click to access address settings.

" Settings: Click to enter into system settings.

" Manual: Click to switch to manual mode.

" Calibration: Click and enter the password to access system calibration mode.

" Reset: Click to reset fixture system.

" Information: Click to view system information.

Main Menu	Sub-menu	Options
Address	001 - 512	Address code setting
System Settings	Operating mode	DMX/Sound/Auto1/Auto2
	Channel mode	22CH
	Horizontal reversal	Off/On
	Reverse vertically	Off/On
	Hall error correction	Off/On
	Optocoupler error correction	Off/On
	Signal hold	Off/On
	Screen protector	Off/On
	Screen flip	Off/On/Auto
	Synchronization Update	On/Off
	Language	Chinese/EN
	Reset	Confirm/cancel
Manual Mode	Current channel mode	0-255
System Calibration	Enter password	Luminaire calibration
System Reset	Effect motor reset	
	Scan motor reset	

	All motors reset	
System Info	Reset error message	Display reset error message
	DMX data monitoring	Receive the channel value of the console
	Sensor information	Hall information
		X optocoupler information
		Y optocoupler information
	Hardware version	Show hardware version
	Software version	Show software version

Screen Flip:

The system automatically adjusts the screen orientation based on gravity, eliminating the need for manual adjustments. You can also disable the auto-rotate feature if desired.

Manual Mode:

This interface allows you to control the current fixture manually.

Press the "OK" button to enter edit mode. Use the "Up" and "Down" buttons to adjust the channel value. Press "OK" again to save the changes and exit edit mode. Press "Exit" to leave edit mode without saving the changes.

System Calibration:

Enter the password "6688" and press the "OK" button to proceed.

Options	Explanation
Initial Position	After entering the sub-menu, you can adjust the initial positions of the X-axis, Y-axis, color wheel, gobo wheel, frost mirror, rainbow wheel, prism, and focus motor. The adjustment range is 0~255. Number 127 means no adjustment.

Stroke Calibration	After entering the sub-menu, you can adjust the strokes (motors) of the X-axis, Y-axis, frost mirror, rainbow wheel, prism, and focus motor. The adjustment range is 0~255. Number 127 means no adjustment.
Power	After entering the sub-menu, you can adjust the value of the lamp beads, number 255 means the maximum value.
Other Calibrations	Sound control sensitivity calibration and password modification.

Reset:

Press the "Up" and "Down" keys to switch to reset mode, and press "OK" to reset directly.

Options	Explanation
Effect Motor Reset	Effect motor reset except pan and tilt
Scan Motor Reset	Pan and tilt reset
Reset All Motors	Fixture reset

System Information:

Options	Explanation
System Info	If the red ERR indicator light is on, it indicates an error in the lamp's operation. You can view the details in the sub-interface provided.
DMX Data Monitoring	This will access the sub-menu and display the channel values for easy viewing
Sensor Information	Real-time monitoring of the status of the optocoupler, Hall, and other sensors on the light.
Hardware Version	Light hardware information.
Software Version	Light software version.

DMX CHART

Channel Mode: 22

Channel	Function	DMX Value	Describe
CH1	Pan	0-255	0-540 degrees
CH2	Pan Fine	0-255	0-2 degrees
CH3	Tilt	0-255	0-270 degrees
CH4	Tilt Fine	0-255	0-1 degree
CH5	Pan & Tilt Speed	0-255	From fast to slow
CH6	Strobe	0-3	Light off
		4-99	Synchronized strobe
		100-149	Pulse strobe
		150-199	Strobe
		200-249	Random strobe
		250-255	Light on
CH7	Dimmer	0-255	0-100% dimming
CH8	Color	0-11	Open
		12-19	Red
		20-27	Yellow
		28-35	Green
		36-41	Blue
		42-49	Pink
		50-57	Orange
		58-65	Light Blue
		66-73	Open + Red
		74-81	Red + Yellow
		82-87	Yellow + Green

		88-95	Green + Blue
		96-103	Blue + Pink
		104-111	Pink + Orange
		112-119	Orange + Light blue
		120-127	Light blue + Open
		128-189	Rotation clockwise from fast to slow
		190-193	Stop rotation
		194-255	Rotation counterclockwise from slow to fast
CH9	Static Gobo	0-14	Open
		15-29	Gobo 1
		30-44	Gobo 2
		45-59	Gobo 3
		60-74	Gobo 4
		75-89	Gobo 5
		90-104	Gobo 6
		105-119	Gobo 7
		120-129	Gobo 1 shakes from slow to fast
		130-139	Gobo 2 shakes from slow to fast
		140-149	Gobo 3 shakes from slow to fast
		150-159	Gobo 4 shakes from slow to fast
		160-169	Gobo 5 shakes from slow to fast
		170-179	Gobo 6 shakes from slow to fast
		180-189	Gobo 7 shakes from slow to fast
		190-221	Rotation clockwise from fast to slow
		222-223	Stop rotation
		224-255	Rotation counterclockwise from slow to fast

CH10	Gobo Wheel Rotation	0-9	Open
		10-28	Gobo 1
		29-47	Gobo 2
		48-66	Gobo 3
		67-85	Gobo 4
		86-104	Gobo 5
		105-123	Gobo 6
		124-134	Gobo 1 shakes from slow to fast
		135-145	Gobo 2 shakes from slow to fast
		146-156	Gobo 3 shakes from slow to fast
		157-167	Gobo 4 shakes from slow to fast
		168-178	Gobo 5 shakes from slow to fast
		179-189	Gobo 6 shakes from slow to fast
		190-221	Rotation counterclockwise from fast to slow
		222-223	Stop rotation
		224-255	Rotation clockwise from slow to fast
CH11	Gobo Rotation	0-127	0-400 degrees
		128-190	Rotation counterclockwise from fast to slow
		191-192	Stop
		193-255	Rotation clockwise from slow to fast
CH12	Prism	0-31	No function
		32-63	Prism
		64-255	Prism rotation from slow to fast
CH13	Zoom	0-255	From narrow to wide
CH14	Halo Ring Strobe	0-4	Light on
		5-250	Synchronized strobe from slow to fast

		251-255	Light on+
CH15	Halo Ring Dimmer	0-255	Master dimmer (from dark to bright)
CH16	Halo Ring Green	0-255	Green dimmer (from dark to bright)
CH17	Halo Ring Red	0-255	Red dimmer (from dark to bright)
CH18	Halo Ring Blue	0-255	Blue dimmer (from dark to bright)
CH19	Halo Ring Color	0-255	Foreground color gradient
CH20	Halo Ring Macro Effect	0-4	Invalid
		5-9	Effect 1
		10-14	Effect 2
		15-19	Effect 3
		20-24	Effect 4
		25-29	Effect 5
		30-34	Effect 6
		35-39	Effect 7
		40-44	Effect 8
		45-49	Effect 9
		50-54	Effect 10
		55-59	Effect 11
		60-64	Effect 12
		65-69	Effect 13
		70-74	Effect 14
		75-79	Effect 15
		80-84	Effect 16
		85-89	Effect 17
		90-94	Effect 18
		95-99	Effect 19
		100-104	Effect 20
		105-109	Effect 21

		110-114	Effect 22
		115-119	Effect 23
		120-124	Effect 24
		125-129	Effect 25
		130-134	Effect 26
		135-139	Effect 27
		140-144	Effect 28
		145-149	Effect 29
		150-154	Effect 30
		155-159	Effect 31
		160-164	Effect 32
		165-169	Effect 33
		170-174	Effect 34
		175-179	Effect 35
		180-184	Effect 36
		185-189	Effect 37
		190-194	Effect 38
		195-199	Effect 39
		200-204	Effect 40
		205-209	Effect 41
		210-214	Effect 42
		215-219	Effect 43
		220-224	Effect 44
		225-229	Effect 45
		230-234	Effect 46
		235-239	Effect 47
		240-244	Effect 48
		245-249	Effect 49

		250-254	Effect 50
		255	Effect 51
CH21	Halo Ring Macro Effect Speed	0-127	Forward from slow to fast
		128-255	Backward from slow to fast
CH22	Reset	100-125	Head motor resets after more than 5 seconds
		150-175	XY motor resets after more than 5 seconds
		220-255	Resets after more than 5 seconds

Symbol Instruction on Fixture:



CE certificate



RoHS certificate