



**SPL-LED-450**



## User Manual

Please read the instruction carefully before use

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## 01/ Safety Information

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Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

**Important:**

Damages caused by the disregard of this user manual are not subject to warranty. The dealer

will not accept liability for any resulting defects or problems.

Unpack and check carefully to ensure that there is no transportation damage before using the unit.

This product is suitable for wet locations. Do not immerse in water.

DO install and operate by qualified operator.

DO NOT allow children to operate the fixture.

Use safety chain (made of steel, min. diameter 4.0mm) when fixing the unit. Handle the unit by carrying its base instead of head only.

The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.

Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.

Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.

It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

Minimum ambient temperature TA: -10°C. Maximum ambient temperature TA: 40°C. Do not operate this product at a lower or higher temperature.

DO NOT connect the device to any dimmer pack.

Keep flammable materials away from the fixture while operating to avoid fire hazard.

Make sure the power cord is not crimped or damaged; replace it immediately if damaged.

Unit's surface temperature may reach up to 70°C. DO NOT touch the housing bare-handed during its operation.

Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.

DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.

DO NOT touch any wire during operation as there might be a hazard of electric

shock.

Avoid entanglement of the power cord with other wires.

The minimum distance to objects/surface must be more than 4 meters.

In the event of serious operating problem, stop using the unit immediately.

Never turn on and off the unit time after time.

The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

DO NOT open the housing as there are no user serviceable parts inside.

DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.

Disconnect this product from its power source before servicing.

DO use the original packaging if the device is to be transported.

Check that the head tilt lock is released before packing for transportation.

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

DO NOT operate this product if you see damage on the housing, shields, or cables.

Have

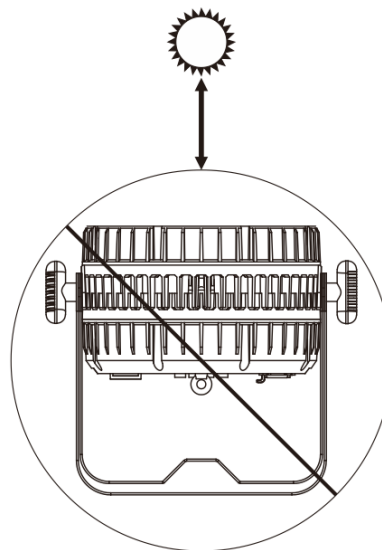
the damaged parts replaced by an authorized technician at once.

External sources of light beams from direct sunlight or any other strong light source, which penetrate the front lens of lighting fixtures, can cause severe internal damage.

DO

NOT expose the fixture front lens to light beams from direct sunlight or any other strong

light source from any angle while unpacking, installation, use, and extended idle times outdoors. DO NOT focus a light beam from one lighting fixture directly towards another.



## 02/ Technical Specifications

**Input voltage:** AC100-240V, 50/60Hz

**Power consumption :** 210W

**Light source:** 4pcs\*50W RGBW

**Beam lens angle:** 36°

**Electrical dimming:** 0%~100%Linear dimming

**Electrical strobe:** 1S/25HZ(Multiple strobe effects)

**Color:** Continuous effect transitions

**Built-in effects:** The built-in programs can be selected via DMX console and pre-set programs, with adjustable speed

**Display:** LED display

**Control mode:** DMX/AUTO/RDM

**8/16/20 CH DMX Channels**

**Software can be updated through the DMX**

**DMX Connection:** 3-Pins XLR input and output

**Power connection:** PowerCon In/out

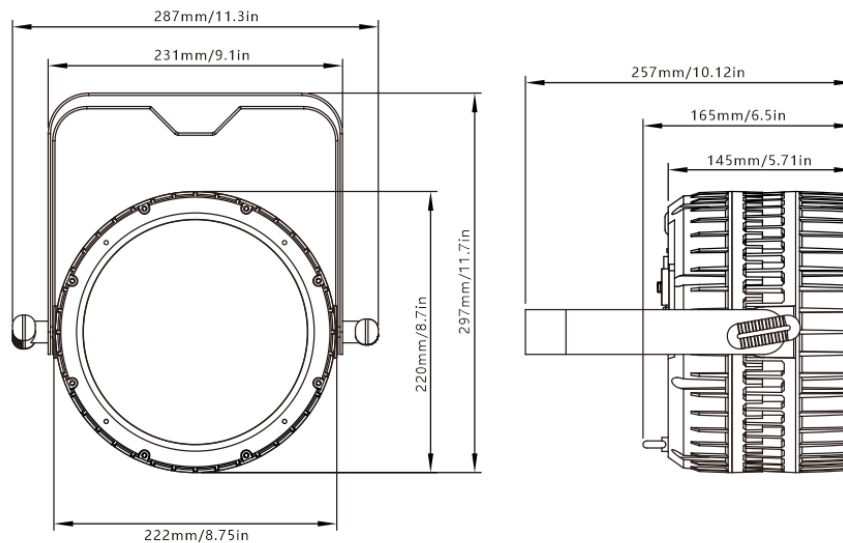
**IP Rate:** IP65

**Max. Operating ambient temperature:** 45°

**Product size:** 287 mm (11.3")x222 mm (8.75")x257mm (10.12")(LxWxH)

**N.W:** 5.1Kg (9.5 lbs)

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### 03/ Connecting Power and Data

To apply power, first check that the head pan and tilt locks are released.

This fixture can operate on any 180-240Vac; 50/60Hz AC mains power supply.







The maximum power consumption is 350W.

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.

Wiring and connection work must be carried out by a qualified electrician.

The power cable color coding is given in the figure below:

Wire	Color (US)	Wire	Color (EU)	Symbol	Conductor
	black		brown	L	live
	white		blue	N	neutral
	green		yellow/green	$\perp$ or $\oplus$	ground (earth)

Power cord set should be used: Listed SJOW flexible cord with rating: 300V, 105°C, VW-1,

14AWG x 3C, molded with 5-20P attachment plug and terminated with cord connector model RCAC3F-X-000-01 with rating 250V, 16A by Neutrik Technology (Ningbo) Co., Ltd.

The power cord shall be at least 914mm (It is to be measured from the face of attachment

plug to the face of connector).

**CAUTION!**

**DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.**

## 04/ Connecting Data

The fixture is equipped with 5-pin (or 3-pin) XLR sockets for DMX input and output.

Use a

high-quality DMX cable designed for RS-485 and 5-pin (or 3-pin) XLR-plugs and connectors

in order to connect the controller with the fixture or one fixture with another. For outdoor

installations, use only IP-rated XLR connectors suitable for outdoor use.

Building a serial DMX chain:

Connect the DMX data output from the controller to the fixture's data input socket.

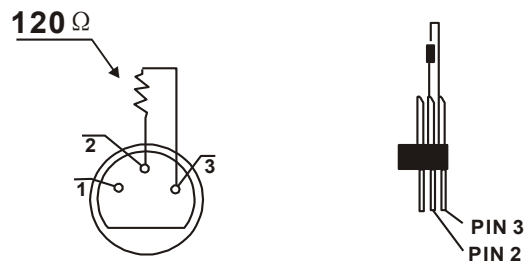
Connect

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 120 ohm DMX terminator.



## 05/ Address Setting

All fixtures should be given a DMX starting address when operating with a DMX controller, in order to ensure that the correct fixture responds to the correct control signal. Incorrect settings will result in unpredictable responses from the lighting controller.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture.

Setting all fixtures to the same DMX address will cause all fixtures to react in the same way. In this case, please note that changing the settings of one channel will affect all the fixtures simultaneously.

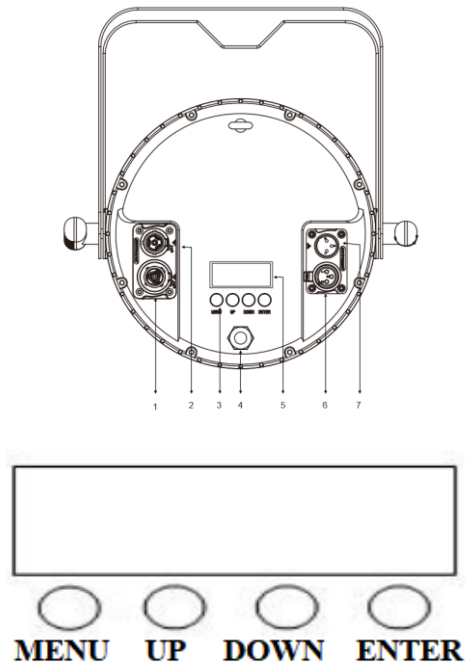
If you set each fixture to a different DMX address, each unit will “listen” starting at the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture.

For example, if the first fixture is set to 43 ch DMX mode with a start DMX address of 1, the following fixture in the DMX chain should then be set to a DMX address of 44. As the first fixture uses all the first 43 DMX channels, the next available channel is 44 ( $43+1=44 >> 44$ ).

See the chart below for more details:

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address	Unit xxx Address
43 channels	1	44	87	130	.....
34 channels	1	35	69	103	.....
32 channels	1	33	65	97	.....
23 channels	1	24	47	90	.....

## 06/ Overview



1. Display	To show the various menus and the selected function	
2. Buttons	MENU	To enter into move backward or leave the menu
	UP	To go backward to move up in the menu
	DOWN	To go forward to move down in the menu
	ENTER	To perform the desired functions
3.4 Power	Connect to the power supply	
5. DMX IN	For DMX512 link, use 5-pin XLR cable to link the unit and DMX controller to input DMX signal (optional with 3-pin IP XLR)	
6. DMX OUT	For DMX512 link, use 5-pin XLR cable to link the next units to output DMX signal (optional with 3-pin IP XLR)	

## 07/ Display and operation

Number	Content	Value range	Function and Description
1	D001	001- 512	DMX512 16 channels address setting
2	A001	001- 512	DMX512 8 channels address setting
3	H001	001- 512	DMX512 20 channels address setting
4	R255	000-255	Red dimming,from dark to bright
5	G255	000-255	Green dimming,from dark to bright
6	B255	000-255	Blue dimming,from dark to bright
7	W255	000-255	White dimming,from dark to bright
8	FH99	01 - 99	Strobe,the speed from slow to fast
9	SP01	01 - 99	Effect speed, from slow to fast
10	SP01	01 - 99	Effect speed,from slow to fast
11	Sound	1 - 9	Sound

## 08/ DMX Protoco

### 8-CHANNEL MODE A001:

Channel	Function	Value	Instruction
CH1	Master dimming	0-255	R,G,B,W master dimming,from slow to fast
CH2	R Dimmer	0-255	Red dimmer
CH3	G Dimmer	0-255	Green dimmer
CH4	B Dimmer	0-255	Blue dimmer
CH5	W Dimmer	0-255	White dimmer
CH6	Master strobe	0-255	R,G,B,W master strobe,from slow to fast
CH7	Function selection	0-15	Blackout
		16-224	19 Effect
		225-255	Sound
CH8	Function speed	0-255	Function speed,from slow to fast

### 16-CHANNEL MODE D001:

Channel	Function	Value	Instruction
CH1	R1 Dimming	0-255	R1 dimming,from slow to fast
CH2	R2 Dimming	0-255	R2 dimming,from slow to fast
CH3	R3 Dimming	0-255	R3 dimming,from slow to fast
CH4	R4 Dimming	0-255	R4 dimming,from slow to fast
CH5	G1 Dimming	0-255	G1 dimming,from slow to fast
CH6	G2 Dimming	0-255	G2 dimming,from slow to fast

CH7	G3 Dimming	0-255	G3 dimming,from slow to fast
CH8	G4 Dimming	0-255	G4 dimming,from slow to fast
CH9	B1 Dimming	0-255	B1 dimming,from slow to fast
CH10	B2 Dimming	0-255	B2 dimming,from slow to fast
CH11	B3 Dimming	0-255	B3 dimming,from slow to fast
CH12	B4 Dimming	0-255	B4 dimming,from slow to fast
CH13	W1 Dimming	0-255	14 dimming,from slow to fast
CH14	W2 Dimming	0-255	W2 dimming,from slow to fast
CH15	W3 Dimming	0-255	W3 dimming,from slow to fast
CH16	W4 Dimming	0-255	W4 dimming,from slow to fast

**20-CHANNEL MODE H001:**

Channel	Function	Value	Instruction
CH1	Master dimming	0-255	R1-4,G1-4,B1-4,W1-4 master dimming,from slow to fast
CH2	R1 Dimming	0-255	R1 dimming,from slow to fast
CH3	G1 Dimming	0-255	G1 dimming,from slow to fast
CH4	B1 Dimming	0-255	B1 dimming,from slow to fast
CH5	W1 Dimming	0-255	W1 dimming,from slow to fast
CH6	R2 Dimming	0-255	R2 dimming,from slow to fast
CH7	G2 Dimming	0-255	G2 dimming,from slow to fast
CH8	B2 Dimming	0-255	B2 dimming,from slow to fast
CH9	W2 Dimming	0-255	W2 dimming,from slow to fast
CH10	R3 Dimming	0-255	R3 dimming,from slow to fast
CH11	G3 Dimming	0-255	G3 dimming,from slow to fast
CH12	B3 Dimming	0-255	B3 dimming,from slow to fast
CH13	W3 Dimming	0-255	W3 dimming,from slow to fast
CH14	R4 Dimming	0-255	R4 dimming,from slow to fast
CH15	G4 Dimming	0-255	G4 dimming,from slow to fast
CH16	B4 Dimming	0-255	B4 dimming,from slow to fast
CH17	W4 Dimming	0-255	W4 dimming,from slow to fast
CH18	Master strobe	0-255	R1-4,G1-4,B1-4,W1-4 master strobe,from slow to fast
CH19	Function selection	0-15	Blackout
		16-224	19 Effect
		225-255	Sound
CH20	Function speed	0-255	Function speed,from slow to fast

## 09/ Troubleshooting

Problem	Potential cause(s)	Remedies
Fixture does not respond or appears to be off.	No power to the fixture.	Confirm that the power is switched on and cables are plugged in.
	No output from PSU.	Replace the PSU.
Fixture suddenly turned off.	Power was turned off.	Check the power supply, switches and breakers
Light output cuts out intermittently.	Fixture is too hot.	Check fixture's stored error messages for more information. Allow fixture to cool. Clean fixture. Reduce ambient temperature.
Fixture suddenly stopped responding.	DMX cables were disconnected.	Inspect DMX cables.
Fixture operates irregularly / abnormal.	Incorrect DMX address or DMX mode.	Inspect and enter the correct DMX address or mode
	DMX link is not terminated.	Install a XLR 120ohm DMX termination at the end of the DMX link.
	Bad data link.	Replace or repair defective cables and/or connections
	One of the fixtures is defective and is disturbing data transmission on the link.	Track and isolate the corrupted fixture. Have the fixture serviced by a qualified technician.
Pan / tilt is skipping / shuddering	Pan/ tilt locks are not released.	Release the pan / tilt locks
	Obstacles are within the required pan / tilt clearance.	Inspect and remove any obstacles constraining free operation of the pan / tilt.
	The Hall element is damaged	Replace the Hall element
	The magnetic steel fell out	Replace the magnetic steel

## 10/ Fixture Cleaning

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Regular cleaning is very important for fixture life and performance. Buildup of dust, dirt, smoke particles, fog fluid residues, etc. degrades the fixture's light output and cooling ability.

Cleaning schedules for lighting fixtures vary greatly depending on the operating environment.

It is therefore impossible to specify precise cleaning intervals for the fixture.

Environmental

factors that may result in a need for frequent cleaning include:

- Use of smoke or fog machines.

- High airflow rates (near air conditioning vents, for example).

- Airborne dust (from stage effects, building structures and fittings or the natural environment at outdoor events, for example).

If one or more of these factors is present, inspect fixtures within their first few hours of operation to see whether cleaning is necessary. Check again at frequent intervals. This procedure will allow you to assess cleaning requirements in your particular situation.

Follow these precautions when cleaning the fixture:

- Work in a clean, dry, well-lit area.

- Use gentle pressure only. A soft lint-free cloth dampened with a solution of water and a mild detergent is recommended, under no circumstances should alcohol, solvents or abrasives be used! Use care when cleaning optical components: surfaces are fragile and easily scratched.



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