

SK[®]

SPL-LED-100S



User Manual

Please read the instruction carefully before use

CONTENTS

01/ Safety Information.....	3-4
02/ Technical Specifications.....	5-6
03/ Connecting Power and Data.....	6
04/ Connecting Data.....	7
05/ Address Setting.....	8
06/ Overview.....	9
07/ Display and operation.....	9-11
08/ DMX Protoco.....	12-17
09/ Troubleshooting.....	18
10/ Fixture Cleaning.....	19

01/ Safety Information

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 consumptionn: 500W

Source: LED 1: 256pcs 1W white LED
LED 2: 864pcs 0.2W RGB LED

Color : White+RGB

Average lifespan: 50000 hours

Beam angle: 120°

Electronic Dimming: 0-100%

Strobe: 1S/25

Rotate: Yes

DMX channel: 7/21/22/23/25/153/345 CH

Control mode: DMX /RDM

Display mode: LED

Pan: 540°

Tilt: 270°

IP rating: IP20

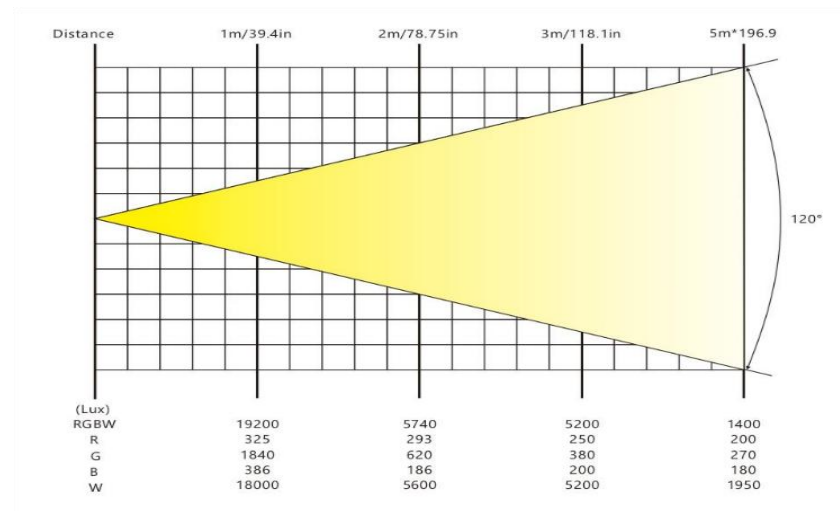
Housing color: black

Ambient temperature: -20°C-45°C

Product dimension: 470x200x390mm

N.W: 9.5kG

PHOTOMETRIC DIAGRAM:



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.

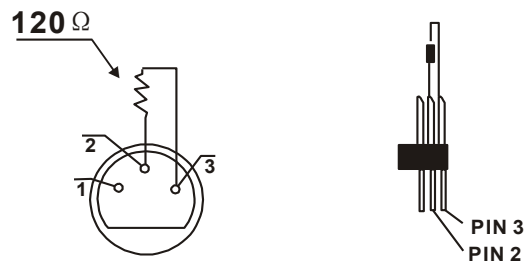
Connect

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 ($43+1=44 \gg 44$).

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



07/ Display and operation

Main menu	submenu	Menu function description
1. setup	1. DMX address	Modify the DMX address code up or down (the address code can be selected in the range 001-512), and save it with the confirmation key, which is 001 by default.
	2. Encoder	Modify the encoder on/off up or down, confirm key to save, and enable by default.
	3. X reversal	Modify X up or down to reverse on/off, confirm key to save, off by default.
	4. Y reversal	Modify Y up or down to turn on/off, confirm key to save, and turn off by default.
	5. No signal	Modify the signal to clear/hold up or down, save the confirmation key, and clear by default.
	6. Voice-activated sensitivity	Modify the voice sensitivity (000-099) up or down, default 009.
	7. Advanced settings	
2. mode	1. Operation mode	Up or down to select the run mode DMX/Voice Activated/Auto, confirm key to save, default DMX.

	2. Channel selection	Up or down select channels CH07 , CH21, CH22, CH23, CH25, CH153, CH345, confirm key to save, default CH21.
3. Manual	1. X	Modify the value of the running parameters of the X motor up or down (adjustable range 000-255), save the confirmation button, default 000.
	2. X fine-tuning	Modify the value of the fine-tuning parameter of the X motor up or down (adjustable range 000-255), save the confirmation key, and default 000.
	3. Y	Modify the value of the running parameters of the Y motor up or down (adjustable range 000-255), and save the confirmation button, default 128.
	4. Y fine-tuning	Modify the fine-tuning parameter value of the Y motor up or down (adjustable range 000-255), save the confirmation key, default 000.
	5. XY speed	Modify the value of the XY motor running speed parameter up or down (adjustable range 000-255), save the confirmation button, default 000.
	6. Dimming	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	7. Strobe	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	8. Red	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	9. Green	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	10. Blue	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	11. Mode	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	12. Speed	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	13. colorful	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	14. W strobe	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	15. White	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	16. W mode	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	17. W speed	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	18. Background color	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.
	19. Background color light	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.

	20. Characters	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.	
	21. Direction	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.	
	22. Resetting	Modify the dimming up or down (adjustable range 000-255), confirm the key to save, default 000.	
4. Display	1. Language selection	Select Chinese/EN (English) up or down, confirm the key to save, default Chinese.	
	2. Inverted display settings	Up or down select Off/On Inverted Settings, Confirm key Save, and turn off by default.	
	3. Screensaver settings	Up or down select Off/On screensaver settings, confirm key to save, and enable by default.	
	4. Software version	A233	
5. Info	sensor	Used to view Hall status and temperature communication status	
	error message	Used to display error messages	
	Channel information	Used to display DMX channel data	
	Time information	Lights on time Fixture time	
6. Factory	DisplayPlease enter password! Modify it up or down to 138, and then press the confirm button to enter the factory settings.	1. X-axis calibration	Modify up or down (000-255), OK key to save, default is 128.
		2. Y-axis calibration	Modify up or down (000-255), OK key to save, default is 128.
		3. Red	Modify up or down (000-255), OK key to save, default 255.
		4. Green	Modify up or down (000-255), OK key to save, default 255.
		5. Blue	Modify up or down (000-255), OK key to save, default 255.
		6. White	Modify up or down (000-255), OK key to save, default 255.
		7. LED	Modify LEDA/LEDB up or down, save the key and default LEDB.
		8. Power	Modify up or down (000-255), OK key to save, default is 195.
		9. Logo	Modify 000/001 up or down, OK key to save, default 000.
		10. Temperature	Modify up or down (40-70° C), OK key to save, default 055.
		11. Temperature-fan	Up or down select Off/On Fan Control, confirm key to save, off by default.
		12. Time clearing	Modify yes/no up or down, OK key to save, default no.

08/ DMX Protoco

8-CHANNEL MODE:

Channel	Channel value	Function
CH1	000-255	X
CH2	000-255	Y
CH3	000-255	red
CH4	000-255	green
CH5	000-255	blue
CH6	000-255	white
CH7	000-255	reposition

21-CHANNEL MODE:

Channel	Channel value	Function
1	000-255	X
2	000-255	X fine-tuning
3	000-255	Y
4	000-255	Y fine-tuning
5	000-255	Y speed
6	000-255	Dimming
7	000-255	RGBW strobe
8	000-255	red
9	000-255	green
10	000-255	blue
11	000-255	white
12	000-255	RGB Mode
13	000-255	RGB speed
14	000-255	Colorful
15	0-3	void
	4-255	W mode (4 values per mode, 63 patterns in total).
16	000-255	W speed
17	000-255	Background color
18	000-255	Background dimming

19	000-255	character
20	000-255	direction
21	000-255	reposition

22-CHANNEL MODE:

Channel	Channel value	Function
1	000-255	X
2	000-255	X fine-tuning
3	000-255	Y
4	000-255	Y fine-tuning
5	000-255	Y speed
6	000-255	RGBW dimming
7	000-255	RGB strobe
8	000-255	red
9	000-255	green
10	000-255	blue
11	000-255	RGB Mode
12	000-255	RGB speed
13	000-255	Colorful
14	000-255	White strobe
15	000-255	white
16	0-3	void
	4-255	W mode (4 values per mode, 63 patterns in total).
17	000-255	W speed
18	000-255	Background color
19	000-255	Background dimming
20	000-255	character
21	000-255	direction
22	000-255	reposition

23-CHANNEL MODE:

Channel	Channel value	Function
1	000-255	X
2	000-255	X fine-tuning
3	000-255	Y

4	000-255	Y fine-tuning
5	000-255	Y speed
6	000-255	Dimming
7	000-255	RGBW strobe
8	000-255	red
9	000-255	green
10	000-255	blue
11	000-255	white
12	000-255	RGB Mode
13	000-255	RGB speed
14	000-255	Colorful
15	0-3 4-255	void W mode (4 values per mode, 63 patterns in total).
16	000-255	W speed
17	000-255	RGBW mode
18	000-255	RGBW speed
19	000-255	Background color
20	000-255	Background dimming
21	000-255	character
22	000-255	direction
23	000-255	reposition

25-CHANNEL MODE:

Channel	Channel value	Function
1	000-255	X
2	000-255	X fine-tuning
3	000-255	Y
4	000-255	Y fine-tuning
5	000-255	Y speed
6	000-255	RGB dimming
7	000-255	RGB strobe
8	000-255	red
9	000-255	green
10	000-255	blue

11	000-255	RGB Mode
12	000-255	RGB speed
13	000-255	Colorful
14	000-255	W dimming
15	000-255	W strobe
16	000-255	white
17	0-3 4-255	void W mode (4 values per mode, 63 patterns in total).
18	000-255	W speed
19	000-255	RGBW mode
20	000-255	RGBW speed
21	000-255	Background color
22	000-255	Background dimming
23	000-255	character
24	000-255	direction
25	000-255	reposition

153-CHANNEL MODE:

Channel	Channel value	Function
1	000-255	X
2	000-255	X fine-tuning
3	000-255	Y
4	000-255	Y fine-tuning
5	000-255	Y speed
6	000-255	RGB dimming
7	000-255	RGB strobe
8	000-255	red
9	000-255	green
10	000-255	blue
11	000-255	RGB Mode
12	000-255	RGB speed
13	000-255	Colorful
14	000-255	W dimming
15	000-255	W strobe

16	000-255	white
17	0-3 4-255	void W mode (4 values per mode, 63 patterns in total).
18	000-255	W speed
19	000-255	RGBW mode
20	000-255	RGBW speed
21	000-255	Background color
22	000-255	Background dimming
23	000-255	character
24	000-255	direction
25	000-255	reposition
26	000-255	W1
... 	... 	 
57	000-255	W32
58	000-255	RGB1
... 	... 	 
153	000-255	RGB96

345-CHANNEL MODE:

Channel	Channel value	Function
1	000-255	X
2	000-255	X fine-tuning
3	000-255	Y
4	000-255	Y fine-tuning
5	000-255	XY velocity
6	000-255	RGB dimming
7	000-255	RGB strobe
8	000-255	red
9	000-255	green
10	000-255	blue
11	000-255	RGB Mode
12	000-255	RGB speed
13	000-255	Colorful

14	000-255	W dimming
15	000-255	W strobe
16	000-255	white
17	0-3 4-255	void W mode (4 values per mode, 63 patterns in total).
18	000-255	W speed
19	000-255	RGBW mode
20	000-255	RGBW speed
21	000-255	Background color
22	000-255	Background dimming
23	000-255	character
24	000-255	direction
25	000-255	reposition
26	000-255	W1
... 	... 	 
57	000-255	W32
58	000-255	R1
59	000-255	G1
60	000-255	B1
... 	... 	 
343	000-255	R96
344	000-255	G96
345	000-255	B96

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

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.

