SPL-MHL-300BSW

User Manual

Please read the instruction carefully before use

CONTENTS

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℃. Maximum ambient temperature TA: 40℃. 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℃. 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.

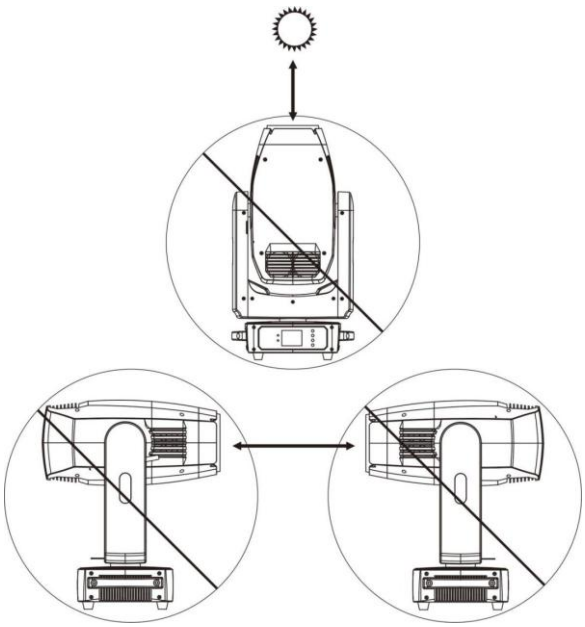
Disconnect this product from its power source before servicing.

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.

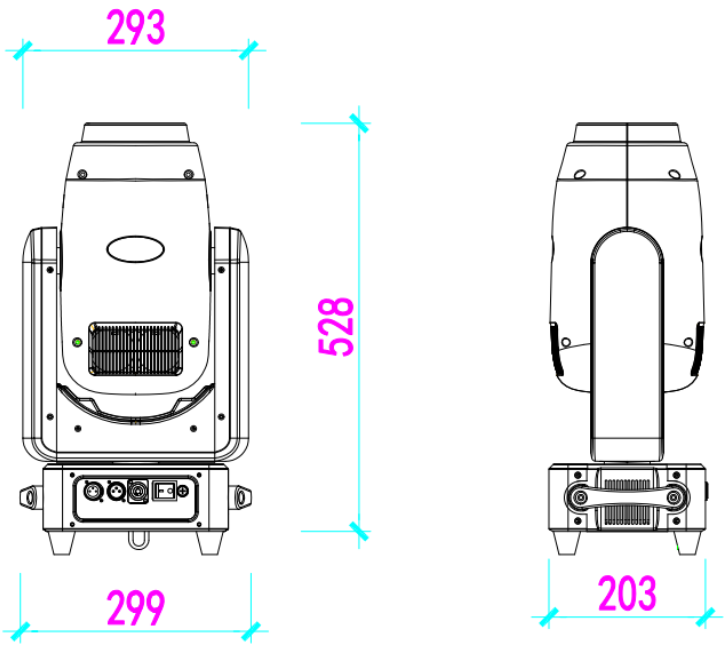
DO NOT operate this product if you see damage on the housing, shields, or cables. Have
the damaged parts replaced by an authorized technician at once.
External sources of light beams from direct sunlight or any other strong light source, which penetrate the front lens of lighting fixtures, can cause 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

1. Voltage：100-240V，50/60HZ；
2. Power Consumption：450W；
3. Lamp: 300 W　9000K white led module
4. DMX Channel: 19CH
5. Operation mode: master-slave/DMX/Auto
6. strobe:25Hz
7. Beam angle：3.8°-30°
8. Fixed pattern: 1 fixed pattern plate
9. rotating gobo wheel: 6 gobos+white
10. Color wheel: 14 colors+open
11. Prism: 1x8prismcan berotatedin
12. Pan: 540°(16bits)
13. Tilt: 270°(16bits)
14. Display: LCD touch screen

Product dimension：299*203*528 mm
N.W：12.4kG



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 800W.
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:

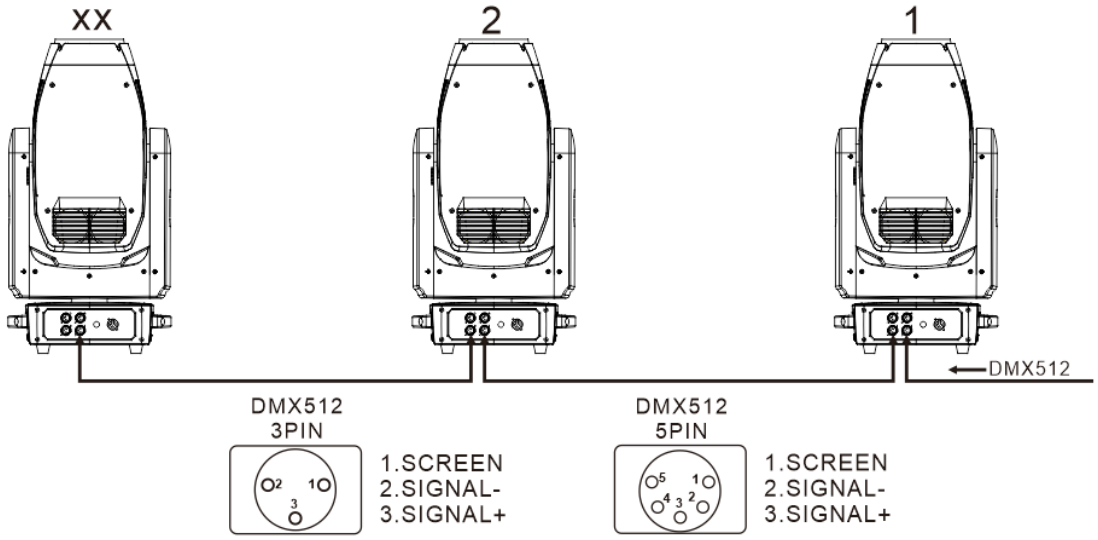
Wire	Color (US)	Wire	Color (EU)	Symbol	Conductor
	black		brown	L	live
	white		blue	N	neutral
	green		yellow/green	⏚ or ⏚	ground (earth)

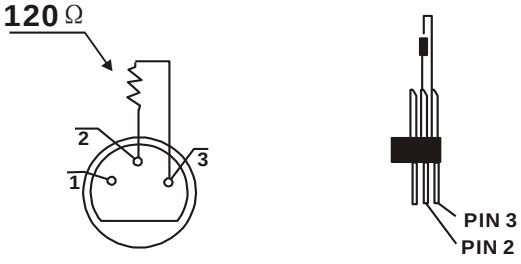
Power cord set should be used: Listed SJOW flexible cord with rating: 300V, 105°C, VW-1,
14AWG x 3C, molded with 5-20P attachment plug and terminated with cord connector model RCAC3F-X-000-01 with rating 250V, 16A by Neutrik Technology (Ningbo) Co., Ltd.
The power cord shall be at least 914mm (It is 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.

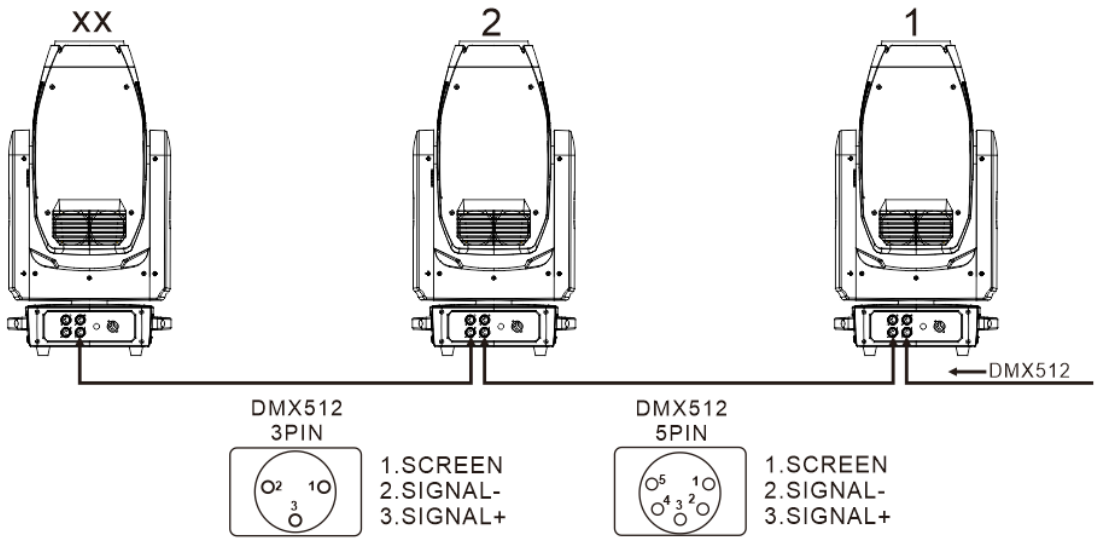
You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture.

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.

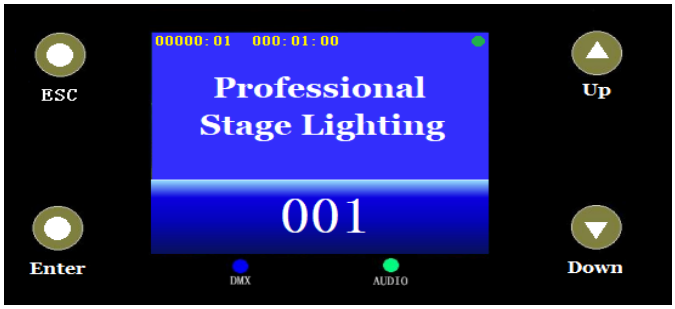
For example, if the first fixture is set to 43 ch DMX mode with a start DMX address of 1, the following fixture in the DMX chain should then be set to a DMX address of 44. As the first fixture uses all the first 43 DMX channels, the next available channel is 44 (43+1=44 >> 44).

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



DMX	DMX indicator light
AUDIO	Sound indicator light
Up	UP
Down	Down
Left	Left/Return
Right	Right
ENTER	Confirm button
Left time	System using total time（can be closed display under ‘Standard setting’)
Right time	From power in to power off total time（can be closed display under ‘Standard setting’)
Signal	DMX Signal intension, Red: No signal. White: signal intension
Square icon	Green: without error, working well
	Red: Error（Can click the icon or fllowing<information menu/error information/check>to found out the issues)

07/ Display and operation

Standard	Default set	Enter?	Factory default
	Address	001-512	DMX address setting
	DMX mode	Mode1 Mode2 Mode3 Mode4	DMX mode option
	Effect mode	No/Yes	Effect wheel auto found out the shortest distance to rotating
	Started lamp	Off/on	Driving lamp select<off> or <on>
	Switch lamp	Off/on	Manual light on lamp
	No signal	Clear Hold	Store DMX data or clear data under without DMX signal
	UI Color	Green Blue Golden Gray	Display color option

	Show time	No/Yes	Driving time
	Brightness	000-255	Adjust display brightness
	Screensaver	Off/on	Closed display without touch and press buttons
	XY encoder	No/Yes	XY Auto error correction open or closed
	X inversion	No/Yes	Pan clowise or anti-clowise driving
	Y inversion	No/Yes	Tilt clowise or anti-clowise driving
	Focus inversion	No/Yes	Focus clowise or anti-clowise driving
	Zoom inversion	No/Yes	Zoom clowise or anti-clowise driving
Advanced	Here setting for fixture's main parameter,need authority		
Info	Error List	No error/View	Without error or check issues when error
	System ver	Vxxxxxxx	System version
	Serial NO.	xxxxxxxx	Fixture's serial number
	SYS timer	00000.0H	System runing time (hours)
	Run timer	000:00	From power in to power off runing time (hours)
	Lamp timer	00000.0H	Lamp light on time (hours)
	Equip TEMP	000	Main parts temperature(need fixture's supporting)
	Head TEMP	000	Head temperature(need fixture's supporting)
	FAN 1 Speed	0000 RPM	Fan 1 speed (need fixture's supporting)
	FAN 2 Speed	0000 RPM	Fan 2 speed (need fixture's supporting)
perform	Run mode	Auto/Sound	Auto or sound
	Run speed	255	speed
	Run cross	255	Setting run cross of auto or sound(need fixture's supporting)
	Built-in 1	Off/on	Built-in 1 testing
	Built-in 2	Off/on	Built-in 2 testing
	User PRO 1	Off/on	User self-made programme 1
	User PRO 2	Off/on	User self-made programme 2
	User PRO 3	Off/on	User self-made programme 3
	User PRO 4	Off/on	User self-made programme 4
	Circle shape	Off/on	Hold
	Shpae shape	Off/on	Hold
	Shape range	000	Hold
	Sound DB	000	Sound sensitivity adjust
Program	More instruction as below page		
Reset	Reset		

08/ DMX Protoco

CH19-CHANNEL MODE:

19 Channel Mode			
Channel		Value	Function
CH1	Pan	0-255	0-540°
CH2	Pan fine	0-255	0-2.1°
CH3	Tilt	0-255	0-270°
CH4	Tilt fine	0-255	Tilt fine
CH5	Speed	0-255	Fast-slow
CH6	Strobe	0-3	No function
		4-103	Strobe from slow to fast
		104-107	Open
		108-207	Pluse stroe from slow to fast
		208-212	open
		213-251	Random strobe from slow to fast
		252-255	Open
CH7	Dimmer	0-255	Closed-on
CH8	Color	0-5	White
		6-11	White+color 1
		12-17	Color 1
		18-23	Color 1+Color 2
		24-29	Color 2
		30-35	Color 2+Color 3
		36-41	Color 3
		42-47	Color 3+Color 4
		48-53	Color 4
		54-59	Color 4+Color 5
		60-65	Color 5
		66-71	Color 5+Color 6
		72-77	Color 6
		78-83	Color 6+Color 7
		84-89	Color 7
		90-95	Color 7+Color 8

		96-101	Color 8
		102-107	Color 8+Color 9
		108-123	Color 9
		114-127	Color 9+Color 10
		128-191	Rainbow clockwise rotate from slow to fast
		192-255	Rainbow anti-clockwise rotate from slow to fast
CH9	Gobo1	0-8	White
		9-17	Fixed gobo 1
		18-26	Fixed gobo 2
		27-35	Fixed gobo 3
		36-44	Fixed gobo 4
		45-53	Fixed gobo 5
		54-62	Fixed gobo 6
		63-127	Fixed gobo 7
		128-191	Anti-clockwise eotic from fast to slow
		192-255	Clockwise eotic from slow to fast
CH10	Gobo2	0-15	White
		16-31	Fixed gobo 1
		32-47	Fixed gobo 2
		48-63	Fixed gobo 3
		64-79	Fixed gobo 4
		80-95	Fixed gobo 5
		96-111	Fixed gobo 6
		97-127	Fixed gobo 7
		128-191	Anti-clockwise eotic from fast to slow
		192-255	Clockwise eotic from slow to fast
CH11	Gobo2 Rot	0-255	Gobo shake from slow to fast
CH12	Focus	0-255	Near to far
CH13	Zoom	0-255	Near to far
CH14	Prism	0-31	No prism
		32-255	8 facet prism
CH15	Prism rotate	0-127	angle
		128-191	Clockwise rotate from fast to slow

		171-213	Anti-clockwise rotate from slow to fast
		214-255	Clockwise and anti-clockwise rotate from slow to fast
CH16	Frost	0-31	No function
		32-255	Frost
CH17	Automatic rotation	0-63	No function
		64-127	Automatic Pan
		128-191	Automatic Tilt
		192-255	Automatic Pan+Tilt
CH18	Automatic amplification	0-5	No function
		6-10	Fast-slow
CH19	resetting	0-255	resetting

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.	nspect 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.