GL350BSW 3in1 Moving head

User manual

Thanks for choosing our goods please read this manual carefully before your operating

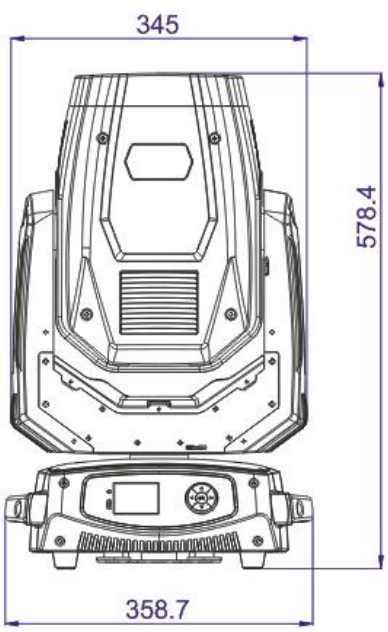
Contents

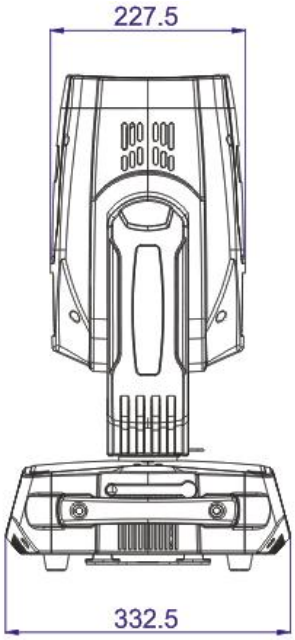
Introduction

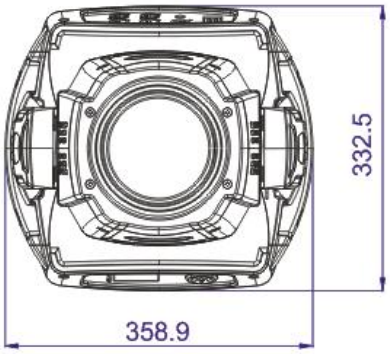
350W Beam Spot Wash 3 in 1 Moving head light

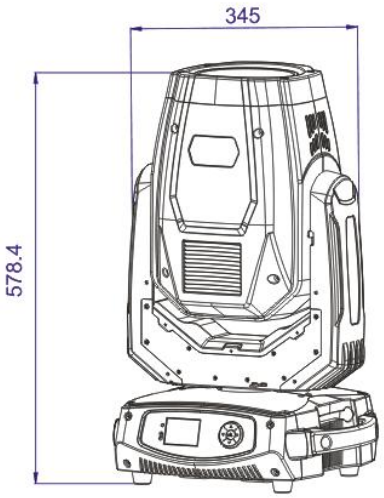
Model:GL350BSW
Voltage:AC100V-240V 50/60Hz
Power Consumption:500W
Light source:YODN R17 350W
Color Temperature:8000K
Beam Angle:1.5°- 35° linear fast zooming.
Focus:High precision optical lens,electronic linear control
Linear Dimmer:Mechanical dimmer 0-100%
Color Wheel:14 fixed color+open,half-tone effect, linear color conversion, bi-directionally rotatable at variable speeds and rainbow effect
Rotating Gobo:12 rotating gobos+White,bi-directional rotatable and gobo shaking at variable speeds
Fixed gobo: 17 interchangeable gobos +white, and bi-directionally rotatable and gobo shaking at variable speeds
Prism:12 &36facet circular prism
Dimmer:0-100% linear dimmer
Strobe:1-18/second,double lens strobe with adjustable speed
Pan and Tilt: Smoothly,automatic Pan/Tilt position correction,speed adjustable
Range:Pan540°，Tilt 280°
Effect:Color+Gobo+Prism+Strobe automatic operation function
Cooling:Fan Cooling
Control mode:Standard DMX 512, 3 pin,5 pin connector
Channel mode:16/18/24
Display Interface:LCD screen both in Chinese and English
IP rate:IP20,Built-in overheat protection,triggered high voltage protection.
Net Weight:19KG
Gross Weight:21KG(Carton)

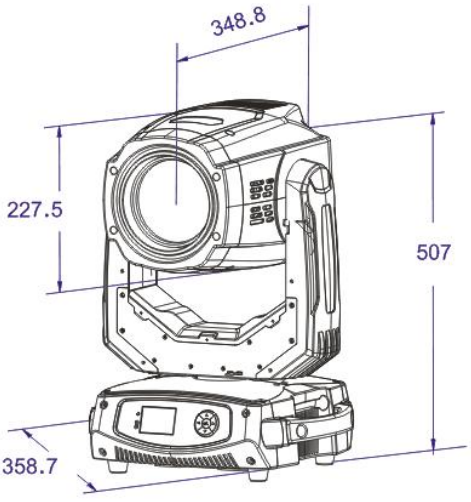
Dimensions











Safety Information

WARNING!
Read the safety precautions in this section before installing, powering, operating or servicing this product.

The following symbols are used to identify important safety information on the product and in this manual:

DANGER! Safety hazard. Risk of severe injury or death.

DANGER! Hazardous voltage. Risk of lethal or severe electric shock.

Protection from burn and fire.

WARNING! High brightness light source, With risk of burned eyes.

WARNING! Burn hazard. Hot surface. Do not touch.

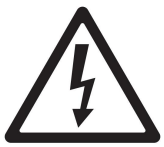
WARNING! Wear protective Eye wear.

WARNING! Refer to user manual.

Warning!
High brightness light source,don't look at the light directly so that keep the risk of burned eyes away.

This product is for professional use only. It is not for household use.
This product presents risks of severe injury or death due to fire and burn hazards, electric shock and falls.

Read this manual before installing, powering or servicing the fixture, follow the safety precautions listed below and observe all warnings in this manual and printed on the fixture.
If have any problem,please contact the supplier.



PROTECTION FROM ELECTRIC SHOCK

• Disconnect the fixture from AC power before removing or installing any cover or part and when not in use.

• Always ground (earth) the fixture electrically.

• Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault (earth-fault) protection.

• Before using the fixture, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.

• Power input and throughput cables must be rated 20 A minimum, have three conductors 1.5 mm² (16 AWG) minimum conductor size and an outer cable diameter of 5 - 15 mm (0.2 - 0.6 in.). Cables must be hard usage type (SJT or equivalent) and heat-resistant to 90° C (194° F) minimum. In the EU the Cable must be HAR approved or equivalent.

• Use only Neutrik Powercon NAC3FCA cable connectors to connect to power input sockets. Use only Neutrik Powercon NAC3FCB cable connectors to connect to power throughput sockets.

• Isolate the fixture from power immediately if the power plug or any seal, cover, cable, or other Component is damaged, defective, deformed, wet or showing signs of overheating. Do not reapply power until repairs have been completed.

• Do not expose the fixture to rain or moisture.

PROTECTION FROM BURNS AND FIRE

• Do not operate the fixture if the ambient temperature (Ta) exceeds 40° C (104° F).

• The exterior of the fixture becomes hot during use. Avoid contact by persons and materials. Allow the fixture to cool for at least 10 minutes before handling.

• Keep all combustible materials (e.g. fabric, wood, paper) at least 100 mm (3.9 in.) away from the fixture.

• Keep flammable materials well away from the fixture.

• Ensure that there is free and unobstructed airflow around the fixture.

• Do not expose the front glass to sunlight or other strong light sources from any angle.

• Do not illuminate surfaces within 200 mm (7.9 ins.) of the GL350BSW.

• Do not attempt to bypass thermostatic switches or fuses.

• Do not stick filters, masks or other materials onto any optical component.

• Do not modify the fixture in any way not described in this manual

PROTECTION FROM INJURY

•When light up the fixture,please don't look at the optical lens with eyes directly.Besides, don't use the camera light to point at the optical lens.

• Fasten the fixture securely to a fixed surface or structure when in use. The fixture is not portable when installed.

• Ensure that any supporting structure and/or hardware used can hold at least 10 times the weight of all the devices they support.

• Allow enough clearance around the head to ensure that it cannot collide with an object or another fixture when it moves.

• Check that all external covers and rigging hardware are securely fastened.

• Block access below the work area and work from a stable platform whenever installing, servicing or moving the fixture.

• Do not operate the fixture with missing or damaged covers, shields or any optical component.

Using for the first time

Important! After unpacking,please check the goods damage or not,which due to the transportation. If you find damage, please do not use this item, then contact the dealer or manufacturer as soon as possible.

•Please read the "Safety Information"before using the fixture.

• Check that the local AC mains power source is within the fixture's power voltage and frequency ranges.

•Please make sure the fixture use in "Safety Information" term.

AC power

Warning! Read "Safety Information" starting on page 5 before connecting the GL350BSW to AC mains power.
Warning! For protection from electric shock, the GL350BSW must be grounded (earthed). The power distribution circuit must be equipped with a fuse or circuit breaker and ground-fault (earth-fault) protection.
Warning! Socket outlets or external power switches used to supply the GL350BSW with power must be located near the fixture and easily accessible so that the fixtures can easily be disconnected from power.

Important! Do not insert or remove live Neutrik PowerCon connectors to apply or cut power, as this may cause arcing at the terminals and damage the connectors.
Important! Do not use an external dimming system to supply power to the 350BSW as this may cause damage to the fixture that is not covered by the product warranty.

Power voltage

Warning! Check that the voltage range specified on the fixture's serial number label matches the local AC mains power voltage before applying power to the fixture.
GL350BSW fixtures accept AC mains power at 100-240 V nominal, 50/60 Hz. Do not apply AC mains power to the fixture at any other voltage than that specified on the fixture's serial number label.

Data link

A DMX 512 data link is required in order to control a 350BSW via DMX.
The GL350BSW has 5-pin XLR connectors for DMX data input and output. The pin-out on all connectors is pin 1 = shield, pin 2 = cold (-), and pin 3 = hot (+). Pins 4 and 5 in the 5-pin XLR connectors are not used in the GL350BSW but are available for possible additional data signals as required by the DMX512-A standard.
Standard pin-out is pin 4 = data 2 cold (-) and pin 5 = data 2 hot (+).

The number of fixtures is either limited to 256 or limited by the number of DMX channels required by the fixtures in relation to the maximum 512 channels available in one DMX universe, whichever limit is lower. Note that if independent control of a fixture is required, it must have its own DMX channels. Fixtures that are required to behave identically can share the same DMX channels.
To add more fixtures or groups

Connecting the data link

Connecting the data link

To connect the GL350BSW to data:
1. Connect the DMX data output from the controller to the closest GL350BSW male 5/3-pin XLR DMX input connector.
2. Connect the DMX output of the fixture closest to the controller to the DMX input of the next fixture and
continue connecting fixtures output to input.
3. Terminate the last fixture on the link with a 120 Ohm resistor.

When the GL350BSW turned on , the display screen and key button get flash in every second once the fixture without the DMX signal.When insert DMX signal,the display screen and key button stop flashing, it stand for run into the DMX control mode. 20 seconds later,the display will be in power save mode and the the key button indicator turn off.

Setup

Control panel and menu navigation

GL350BSW control center to set the DMX.

When you choose a menu press 

,  or  view menus.

After finding your menu, Press  to enter 

,quit 

After out of menu,press  to see the working condition.

Menu chart：

Main Menu	Sub Menu	Setting
Signal	Address	000-512
	Velocity	000-255
	Quality	000% - 100%
	Start up	000-255
	Static ID	0000-9999
	Return	►
Special	Chun Mode	16CH
		18CH
		24CH
		Defe
	Run Mode	DMX
		Musc
		Auto
	Dmx Lamp	Off
		Open
	Lamp Default	Off
		Open
	Lamp Control	Off
		Open
	Sig Clear	Off
		Open
	Dmx Rest	Off
		Open
	Execute Rst	Annu(cancel)
		Execute
	X reverse	Off
		Open
	Y reverse	Off
		Open
	XY Speed	Fast
		NORM
		Slow
	XY Fback	Off
		Open
	DMX Setup	Open
		Off

	Return	►
InfoSee	Work Hour	0000-9999
	Curr Hour	0000-9999
	Lamp Hour	0000-9999
	Limit Hour	0000-9999
	Work Times	0000-9999
	TFT Verion	V0.XX
	Motr Verion	V0.XX
	Fan Rev	V0.XX
	Pan Back	Natu
		Err
	Tilt Back	Natu
		Err
	Color Hell	Natu
		Err
	Gobo Hell	Natu
		Err
	Focus Hell	Natu
		Err
		►
Channel Control	Pan Rotating	000-255
	Pan Fine	000-255
	Tilt rotating	000-255
	Tilt Fine	000-255
	XY Speed	000-255
	Reset Lamp	000-255
	Color wheel rotating	000-255
	Color wheel Fine	000-255
	Effect SP	000-255
	Static GB	000-255
	Rot Gobo	000-255
	Gobo1Rot	000-255
	Gb Rot Fin	000-255
	Prism Int	000-255
	Prism Rot	000-255
	Frost	000-255
	Zoom	000-255
	Zoom Fine	000-255
	Focus	000-255

	Focus Fine	**000-255**
	Auto Focus	**000-255**
	Shutter	**000-255**
	Dimmer	**000-255**
	Dimm Fine	**000-255**
	Return	**►**
DMX Level	**Pan rotating**	**000-255**
	Pan Fine	**000-255**
	Tilt rotating	**000-255**
	Tilt Fine	**000-255**
	XY Speed	**000-255**
	Reset Lamp	**000-255**
	Color wheel rotating	**000-255**
	Color wheel Fine	**000-255**
	Effect SP	**000-255**
	Static GB	**000-255**
	Rot Gobo	**000-255**
	Gobo1Rot	**000-255**
	Gb Rot Fin	**000-255**
	Prism Int	**000-255**
	Prism Rot	**000-255**
	Frost	**000-255**
	Zoom	**000-255**
	Zoom Fine	**000-255**
	Focus	**000-255**
	Focus Fine	**000-255**
	Auto Focus	**000-255**
	Shutter	**000-255**
	Dimmer	**000-255**
	Dimm Fine	**000-255**
	Return	**►**
Display	**Show Reve**	**Natu**
		Revl
	Language	**Chin**
		Engh
	Brig Sett	**10% - 100%**
	Back ligh	**90S**
		Ligh
	Menu Back	**90S**

		Off
	Return	►
HelpTool	Check Code	000 - 255
	Clean Time	Ilum
		►
	Clean Count	Ilum
		►
	Clean Lamp	Ilum
		►
	Pan	000 - 255
	Tilt	000 - 255
	Rot Gobos	000 - 255
	Gobo Rot	000 - 255
	Fixe Gobo	000 - 255
	Color	000 - 255
	Focus	000 - 255
	Zoom	000 - 255
	Shutter	000 - 255
	Prism	000 - 255
	Beam	000 - 255
	Prism Rot	000 - 255
	Beam Rot	000 - 255
	Frost	000 - 255
	Return	►

DMX Protocol

16Channel	18 Channel	24Channel	DMX Value	Function
Channel 1	Channel 1	Channel 1		**Pan**
			0 - 255	Pan
*	Channel 2	Channel 2		**Pan fine**
			0 - 255	Pan fine
Channel 2	Channel 3	Channel 3		**Tilt**
			0 - 255	Tilt
*	Channel 4	Channel 4		**Tilt fine**
			0 - 255	Tilt fine
Channel 3	Channel 5	Channel 5		**Pan - Tilt - (Pan fine - Tilt fine) Speed**
			0-255	0 → 100% Pan - Tilt - (Pan fine - Tilt fine) Speed fast to slow
Channel 4	Channel 6	Channel 6		**Power/Special functions**
			0 – 19	Reserved
			20 - 24	Half Power
			25 - 129	Reserved
			130 – 139	Lamp On
			140 – 159	Reserved
			160 - 169	Motors reset
			170 - 199	Reserved
			200 – 209	Total reset
			210 – 229	Reserved
			230 – 239	Lamp Off
			240 – 255	Reserved
Channel 5	Channel 7	Channel 7		**Color wheel**
			0	White
			1 - 5	Color 1
			6 - 10	Color 2
			11 - 15	Color 3
			16 - 20	Color 4
			21 - 25	Color 5
			26 - 30	Color 6
			31 - 35	Color 7
			36 - 40	Color 8
			41 - 45	Color 9
			46 - 50	Color 10
			51 - 55	Color 11

			56 - 60	Color 12
			61 - 65	Color 13
			66 - 70	Color 14
			71 - 75	Color 15
			76 - 80	Color 16
			81 - 85	Color 17
			86 - 90	Color 18
			91 - 95	Color 19
			96 - 100	Color 20
			101 - 105	Color 21
			106 - 110	Color 22
			111 - 115	Color 23
			116 - 120	Color 24
			121 - 125	Color 25
			126 - 130	Color 26
			131 - 135	Color 27
			136 - 140	Color 28
			141 - 145	Stop
			146 - 155	Color 29
			156 - 201	Forwards rainbow effect from fast to slow
			202- 209	No rotation (Stop)
			210-255	backwards rainbow effect from slow to fast
*	*	Channel 8		**Color wheel - fine positioning**
			0- 255	Fine positioning
Channel 6	Channel 8	Channel 9		**Speed of Rot. Gobo selection from max. to min.**
			245 - 255	Speed of Rot. Gobo selection from max. to min.
Channel 7	Channel 9	Channel 10		**Static gobo wheel**
			0 - 4	WHITE
			5 - 9	GOBO1
			10 - 14	GOBO2
			15 - 19	GOBO3
			20 - 24	GOBO4
			25 - 29	GOBO5
			30 - 34	GOBO6
			35 - 39	GOBO7
			40 - 44	GOBO8
			45 - 49	GOBO9
			50 - 54	GOBO10

			55 - 59	GOBO11
			60 - 64	GOBO12
			65 - 69	GOBO13
			70 - 74	GOBO14
			75 - 79	GOBO15
			80 - 84	GOBO16
			85 - 89	GOBO17
			90 - 129	Forwards gobo wheel rotation from fast to slow
			130 - 134	No rotation (Stop)
			135 - 170	Backwards gobo wheel rotation from slow to fast
			171 - 175	GOBO1 Shake,Slow → Fast
			176 - 180	GOBO2 Shake,Slow → Fast
			181 - 185	GOBO3 Shake,Slow → Fast
			186 - 190	GOBO4 Shake,Slow → Fast
			191 - 195	GOBO5 Shake,Slow → Fast
			196 - 200	GOBO6 Shake,Slow → Fast
			201 - 205	GOBO7 Shake,Slow → Fast
			206 - 210	GOBO8 Shake,Slow → Fast
			211 - 215	GOBO9 Shake,Slow → Fast
			216 - 220	GOBO10 Shake,Slow → Fast
			221 - 225	GOBO11 Shake,Slow → Fast
			226 - 230	GOBO12 Shake,Slow → Fast
			231 - 235	GOBO13 Shake,Slow → Fast
			236 - 240	GOBO14 Shake,Slow → Fast
			241 - 245	GOBO15 Shake,Slow → Fast
			246 - 250	GOBO16 Shake,Slow → Fast
			251 - 255	GOBO17 Shake,Slow → Fast
Channel 8	Channel 10	Channel 11		**Rotating gobo wheel**
			0	Open/Hole (default)
			1 – 4	Open/Hole (default)
				Index - set indexing on channel 9/11/12
			5– 9	GOBO 1
			10 – 14	GOBO 2
			15 – 19	GOBO 3
			20 – 24	GOBO 4
			25 – 29	GOBO 5
			30 – 34	GOBO 6
			35 – 39	GOBO 7
			40 – 44	GOBO 8

			45 – 49	GOBO 9
			50 – 54	GOBO 10
			55 – 59	GOBO 11
			60 – 64	GOBO 12
				Index - set indexing on channel 9/11/12
				Shaking gobos from slow to fast
			65 – 74	GOBO 1 Shake,Slow → Fast
			75 – 84	GOBO 2 Shake,Slow → Fast
			85 – 94	GOBO 3 Shake,Slow → Fast
			95 – 104	GOBO 4 Shake,Slow → Fast
			105 – 114	GOBO 5 Shake,Slow → Fast
			115 – 124	GOBO 6 Shake,Slow → Fast
			125 – 134	GOBO 7 Shake,Slow → Fast
			135 – 144	GOBO 8 Shake,Slow → Fast
			145– 154	GOBO 9 Shake,Slow → Fast
			155– 164	GOBO 10 Shake,Slow → Fast
			165– 174	GOBO 11 Shake,Slow → Fast
			175– 184	GOBO 12 Shake,Slow → Fast
			185 – 190	Open/Hole (default)
			191 – 216	Forwards gobo wheel rotation from fast to slow
			217 – 243	Backwards gobo wheel rotation from fast to slow
			244 - 249	Random color selection by audio control
			250 - 255	Auto random color selection from fast to slow
Channel 9	Channel 11	Channel 12		**Rot. gobo indexing and rotation**
			0	No rotation
			1 - 127	linear rotating prism- rotation
			128 - 189	Forwards gobo rotation from fast to slow
			190 - 194	No rotation (Stop）
			195 -255	Backwards gobo rotation from slow to fast
*	*	Channel 13		**Rot. gobo indexing and rotation - fine**
			0 - 255	Fine indexing (rotation)
Channel 10	Channel 12	Channel 14		**Prism**
			0 - 19	Open position (hole)
			20 - 75	facet linear rotating prism -indexing
			76 - 127	facet linear rotating prism- rotation
			128 - 255	prism macro

Channel 11	Channel 13	Channel 15		**Prism rotation and indexing**
				Prism indexing - set position on channel 10/12/14
			0 - 255	Prism indexing
				Prism rotation - set position on channel 10/12/14
			0	No rotation
			1- 127	Forwards prism rotation from fast to slow
			128 - 129	No rotation (Stop)
			130 - 255	Backwards prism rotation from slow to fast
Channel 12	Channel 14	Channel 16		**Frost**
			0-179	**Frost from0%-100%**
			180-189	**100% frost**
			190-211	**Pulse closing from slow to fast**
			212-233	**Pulse opening from fast to slow**
			234-255	**Ramping from fast to slow**
Channel 13	Channel 15	Channel 17		**ZOOM**
			0 - 255	Zoom from max. to min.beam angle
*	*	Channel 18		**Zoom - fine**
			0 - 255	Fine zooming
Channel 14	Channel 16	Channel 19		**Focus**
			0 - 255	Continuous adjustment from far to near
*	*	Channel 20		**Focus - fine**
			0 - 255	Fine focusing
*	*	Channel 21		Reserved
Channel 15	Channel 17	Channel 22		**Shutter/ strobe**
			0 - 31	Shutter closed (Lamp power reduced to 230 W)
			32 - 63	Shutter open, Full lamp power
			64 - 95	Strobe-effect from slow to fast
			96 - 127	Shutter open
			128 - 143	Opening pulse in sequences from slow to fast
			144 - 159	Closing pulse in sequences from fast to slow
			160 - 191	Shutter open
			192 - 223	Random strobe-effect from slow to fast
			224 - 255	Shutter open, Full lamp power
Channel 16	Channel 18	Channel 23		**Dimmer intensity**
			0 - 255	Dimmer intensity from 0% to 100%
*	*	Channel 24	0 - 255	Reserved

Gobo replacement

Identification of gobo wheel

To replace a gobo:

• Disconnect the fixture from power and allow to cool.

• Position the head and apply the tilt lock.

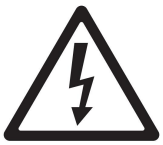
• Remove the rear head cover located on the same side as the pan lock (A). See figure below.

• Remove the gobo wheel cover for access to the gobo wheel.

• Turn the gobo wheel until the gobo you want to replace is accessible.

• Unhook the end of the spring and turn it upwards. Pull the gobo holder out of the gobo wheel.

Service and maintenance



Warning! Read "Safety Information" on page 5 before servicing the GL350BSW.

Warning! Disconnect the fixture from AC mains power and allow to cool for at least 10 minutes before handling. Do not view the light output from less than 4 meters without shade 4-5 welding goggles. Be prepared for the fixture to light suddenly if connected to power.

Warning! Refer any service operation not described in this user manual to a qualified service technician.

Important! Excessive dust, smoke fluid, and particle buildup degrades performance, causes overheating and will damage the fixture. Damage caused by inadequate cleaning or maintenance is not covered by the product warranty.

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work, no light and the fan does not work

1. Check the connect power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED to see if it can be light up or not.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if they are linked properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check to see if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.

C. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

D. The lamp is cutting out intermittently

1. The lamp is not working well. Check the mains voltage either too high or too low.
2. Internal temperature may be too high. Check if replacement of fan is needed on the head.

Cleaning

Cleaning schedules for lighting fixtures vary greatly depending on the operating environment. 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).
• Presence of cigarette smoke.
• 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 100 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. If have any question,please contact dealer.
Use gentle pressure only when cleaning, and work in a clean, well-lit area. Do not use any product that contains solvents or abrasives, as these can cause surface damage.

Warning! Disconnect from power and allow to cool before cleaning.
To clean the fixture:
1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
2. Vacuum or gently blow away dust and loose particles from the outside of the fixture and the air vents at
the back and sides of the head and in the base with low-pressure compressed air.

3.Please use the professional cloth to clean the optical lens and soak with low concentration detergent liquid.
Do not rub the surface hard: lift particles off with a soft repeated press. Dry with a soft, clean, lint-free cloth or low-pressure compressed air. Remove stuck particles with an unscented tissue or cotton swab moistened with glass cleaner or distilled water.
4. Check that the fixture is dry before reapplying power.

Specifications subject to change without notice.

If have questions,please contact the dealer.