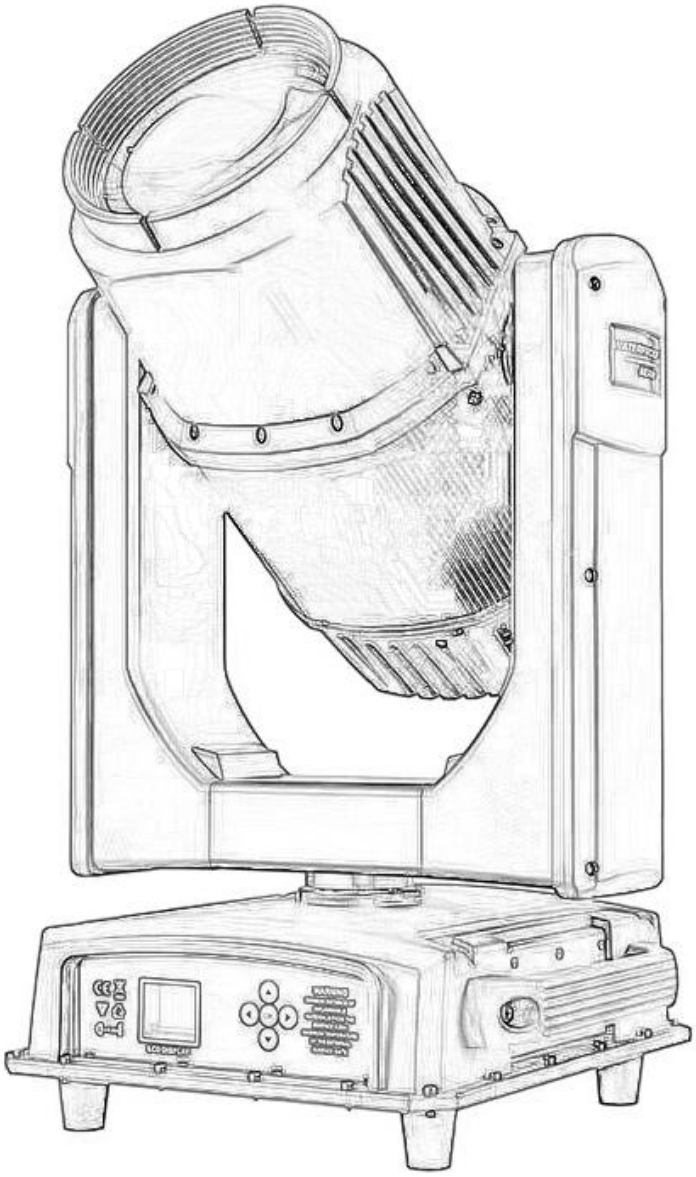
lighting PLUS

User manual



IP-BSW500

Please read the instructions carefully before use

TABLE OF CONTENTS

1. Safety Instructions……3-4

2.. Technical Specifications……4

3.. Control Menu ……5

4.. DMX Channels ……6-10

5.. Dimension ……11

6.. Trouble Shooting……12

7.. Fixture Cleaning…… ……12

STATEMENT

The product has well capability and intact packing when leave factory. All of the user should comply with warning item and manual, any misuse cause of the damages are not included in our guarantee, and also can not be responsible for any malfunction & problem owing to ignore the manual.

1.Safety Instructions

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

•Unpack and check carefully there is no transportation damage before using the unit.

•Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.

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

•The unit is for indoor use only. Use only in a dry location.

•The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.

•Disconnect main power before replacement or servicing.

•Make sure there are no flammable materials close to the unit while operating as it is fire hazard.

•Use safety cable when fixes this unit. DO NOT handle the unit by taking its head only, but always by taking its base.

•Maximum ambient temperature is Ta: 40℃. DO NOT operate it where the temperature is higher than this Unit surface temperature may reach up to 85℃. DO NOT touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.

•the event of serious operating problem, stop using the unit immediately.Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.

•DO NOT touch any wire during operation as high voltage might be causing electric shock.

Warning:

•To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.

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

Caution:

•There are no user serviceable parts inside the unit. DO NOT open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

Installation:

•The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly

fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.
•The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people.

2.Technical Specifications

Light Sources: 400W white LED module

Max Power Consumption: 500W

Power Input: 100-240V, 50/60Hz

Beam range:4°-35°

Display: LCD display

IP level: IP65

Color Tempreture: 8000K

Operating mode: DMX512,Auto, Sound active, Master/slave，RDM

Channel mode: 22/26Channel

Pan: 540°(16bit) Electric correction

Tilt：270° (16bit) Electric correction

Color system: independent CMY+CTO color mixing system

Color wheel: 8 colors +white

Static Gobo Wheels: 12 gobo+white

rotating gobo wheel：7 gobo+white

Prism: Double prism: straight 8prism+circle 8 prism

Frost

0-100% linear dimming

Strobe: 0-25Hz/s

Dimension: 424*367*725mm,NW:27KG

3.Control Menu

Menu Operation

On the base of the control panel offers a number of features, such as setting DMX fixture address, switch the lamp, run the test program, the mode selection.

Stepper info	Display information status of all motors and signals in fixture.	
	Hall	No display, indicating that the motor has no Hall, 0 indicating that the motor leaves the correction position point, 1 indicating that the motor is in the correction position point
	Status	Display motor reset status
	PAN	Display real-time position value of PAN optocoupler feedback
	TILT	Display real-time position value of TILT optocoupler feedback
	PAN OP	Displays the PAN TILT optocoupler two signal level state, binary
Error Logging	Show the latest 8 error records when the fixture is reset and running. The error records are not saved after power failure. The current power cycle is valid.	
	Error Logging	Total number of failures detected after power on
	12：:03	The time of power failure when the fault occurs is in minutes.
	Hall error	The effective hall signal is not detected when the motor is reset
	Hall short	When the motor is reset, the hall signal of the motor is always effective
	Opti error	No effective optocoupler signal is detected when the motor is reset.
	Lose stop	The corresponding motor is out of step during its operation.
	Hit	Striking the positioning rod when the motor is reset
	Lamp error	Lamp explosion accident
	NTC error	The temperature sensor signal is abnormal
	Fan error	The main fan is not working properly.
Fixture status	Displays the critical state data of the current fixture for reference.	
	Communication prec	0~100%, Communication quality of internal data link of lamps and lanterns
	Error cnt	The number of erroneous frames was detected after power on, and the total number of erroneous frames was detected.
	Light Temperature	Show the temperature of the current light source, "---" means no detection.
	Panel Temperatrue	Displays the temperature of the current display panel or the ambient temperature.
	Sensor1 Temperatrue	Display the ambient temperature of the motherboard temperature or the motherboard installation position.
Version	Display the information and version of the current fixtrue, important reference for after sales maintenance.	
	Device	The name of the fixture is the same as the equipment information of RDM.
	Model	The type of fixture is the same as the model information of RDM.
	Panel	Firmware version and serial number of display panel
	Main Board	Firmware version and serial number of mother board 1
Light time	Record the total cumulative time of light source opening, unit minute, user manual cleaning, as a reference for regular maintenance of light source time	
Total time	The total accumulated time for recording the opening of fixture is not allowed to be removed.	

4.DMX Channels

DMX channel´s functions and values (22DMX channels)

Channel	Function	DMX Value	Function Illustration
CH1	Pan	0-255	Pan
CH2	Pan fine	0-255	Pan fine
CH3	Tilt	0-255	Tilt
CH4	Tilt fine	0-255	Tilt fine
CH5	Dimmer	0-255	0-100% linear dimming
CH6	Strobe	0-3	No function
		4-103	Pulse strobe slow to fast
		104-107	open
		108-155	Fade In strobe slow to fast
		156-207	Fade out strobe slow to fast
		208-212	open
		213-251	Rand strobe slow to fast
		252-255	open
CH7	Color wheel	0-9	White
		10-19	Color1
		20-29	Color2
		30-39	Color3
		40-49	Color4
		50-59	Color5
		60-69	Color6
		70-79	Color7
		80-89	Color8
		90-99	White+Color1
		100-109	Color1+color2
		110-119	Color2+color3
		120-129	Color3+color4
		130-139	Color4+color5
		140-149	Color5+color6
		150-159	Color6+color7
		160-169	Color7+color8
		170-179	Color8+color9
		180-215	Rotate forward (fast to slow)
		216-220	Stop
		221-255	Rotate reverse (slow to fast)
CH8	Cyan	0-255	
CH9	Magenta	0-255	
CH10	Yellow	0-255	
CH11	CTO	0-255	
CH12	Static GOBO	0-4	Gobo1
		5-9	Gobo2
		10-14	Gobo3
		15-19	Gobo4

CH12	Static GOBO	20-24	Gobo5
		25-29	Gobo6
		30-34	Gobo7
		35-39	Gobo8
		40-44	Gobo9
		45-49	Gobo10
		50-54	Gobo11
		55-59	Gobo12
		60-64	White
		65-69	Shake slow to fast Gobo2
		70-74	Shake slow to fast Gobo3
		75-79	Shake slow to fast Gobo4
		80-84	Shake slow to fast Gobo5
		85-89	Shake slow to fast Gobo6
		90-94	Shake slow to fast Gobo7
		95-99	Shake slow to fast Gobo8
		100-104	Shake slow to fast Gobo9
		105-109	Shake slow to fast Gobo10
		110-114	Shake slow to fast Gobo11
		115-119	Shake slow to fast Gobo12
		120-127	White
		128-190	Rotate reverse (fast to slow)
		191-192	Stop
		193-255	Rotate forward (slow to fast)
CH13	Rot GOBO	0-9	White
		10-19	Gobo1
		20-29	Gobo2
		30-39	Gobo3
		40-49	Gobo4
		50-59	Gobo5
		60-69	Gobo6
		70-79	Gobo7
		80-89	Shake slow to fast Gobo1
		90-99	Shake slow to fast Gobo2
		100-109	Shake slow to fast Gobo3
		110-119	Shake slow to fast Gobo4
		120-129	Shake slow to fast Gobo5
		130-139	Shake slow to fast Gobo6
		140-149	Shake slow to fast Gobo7
		150-200	Rotate forward (fast to slow)
		201-205	Stop
		206-255	Rotate reverse (slow to fast)
CH14	GOBO ROT	0-127	0-360(degree)
		128-190	Rotate reverse (fast to slow)
		191-192	Stop
		193-255	Rotate forward (slow to fast)

CH15	Prism 1	0-127	None
		128-255	Inert prism1
CH16	Prism 1 Rot	0-127	0-360(degree)
		128-187	Rotate forward (fast to slow)
		188-195	Stop
		196-255	Rotate reverse (slow to fast)
CH17	Prism 2	0-127	None
		128-255	Inert prism2
CH18	Prism 2 Rot	0-127	0-360(degree)
		128-187	Rotate forward (fast to slow)
		188-195	Stop
		196-255	Rotate reverse (slow to fast)
CH19	Frost	0-127	None
		128-255	Insert frost
CH20	Zoom		Large to small
CH21	Focus		Far to near
CH22	Reset	0-209	None
		210-215	Reset XY motor over 3 second
		216-219	None
		220-235	Reset Effect motor over 3 second
		236-239	None
		240-255	Reset fxiture over 3 second

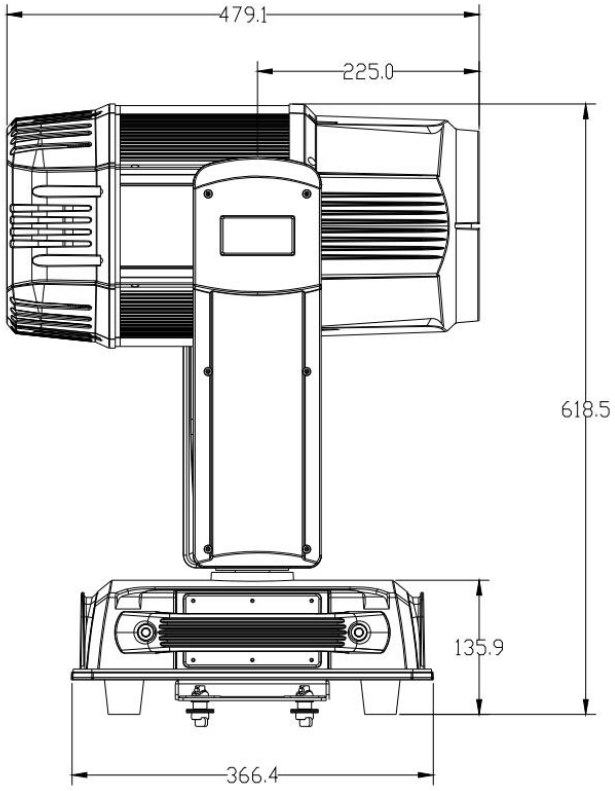
DMX channel´s functions and values (26DMX channels)

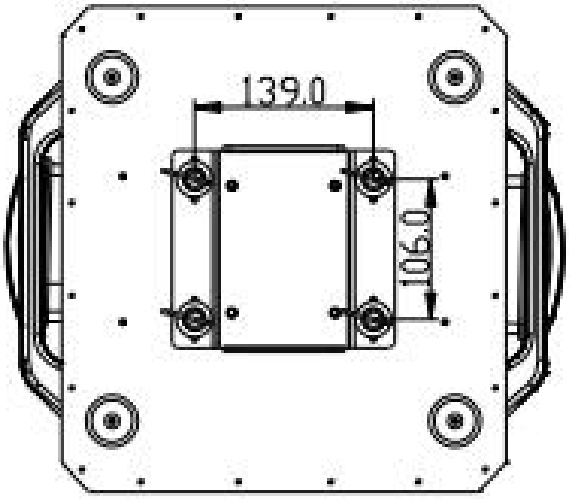
Channel	Function	DMX Value	Function Illustration
CH1	Pan	0-255	Pan
CH2	Pan fine	0-255	Pan fine
CH3	Tilt	0-255	Tilt
CH4	Tilt fine	0-255	Tilt fine
CH5	Pan/Tilt Speed	0-255	From slow to fast
CH6	Dimmer	0-255	0-100% linear dimming
CH7	Strobe	0-3	No function
		4-103	Pulse strobe slow to fast
		104-107	open
		108-155	Fade In strobe slow to fast
		156-207	Fade out strobe slow to fast
		208-212	open
		213-251	Rand strobe slow to fast
		252-255	open
CH8	Color wheel	0-9	White
		10-19	Color1
		20-29	Color2
		30-39	Color3
		40-49	Color4
		50-59	Color5
		60-69	Color6
		70-79	Color7

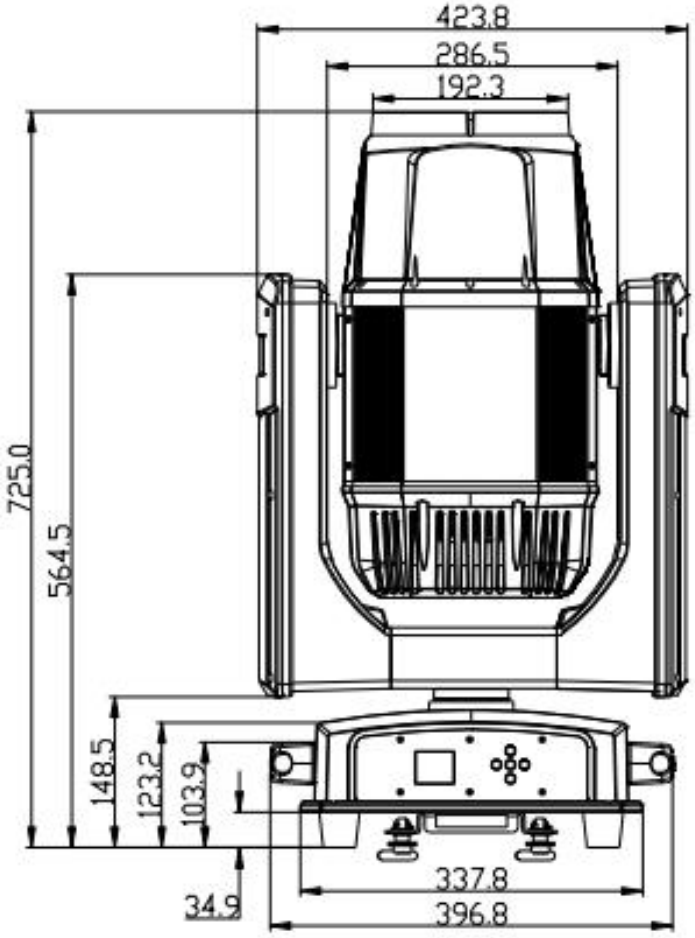
CH8	Color wheel	80-89	Color8
		90-99	White+Color1
		100-109	Color1+color2
		110-119	Color2+color3
		120-129	Color3+color4
		130-139	Color4+color5
		140-149	Color5+color6
		150-159	Color6+color7
		160-169	Color7+color8
		170-179	Color8+color9
		180-215	Rotate forward (fast to slow)
		216-220	Stop
		221-255	Rotate reverse (slow to fast)
CH9	Cyan	0-255	
CH10	Magenta	0-255	
CH11	Yellow	0-255	
CH12	CTO	0-255	
CH13	Static GOBO	0-4	Gobo1
		5-9	Gobo2
		10-14	Gobo3
		15-19	Gobo4
		20-24	Gobo5
		25-29	Gobo6
		30-34	Gobo7
		35-39	Gobo8
		40-44	Gobo9
		45-49	Gobo10
		50-54	Gobo11
		55-59	Gobo12
		60-64	White
		65-69	Shake slow to fast Gobo2
		70-74	Shake slow to fast Gobo3
		75-79	Shake slow to fast Gobo4
		80-84	Shake slow to fast Gobo5
		85-89	Shake slow to fast Gobo6
		90-94	Shake slow to fast Gobo7
		95-99	Shake slow to fast Gobo8
		100-104	Shake slow to fast Gobo9
		105-109	Shake slow to fast Gobo10
		110-114	Shake slow to fast Gobo11
		115-119	Shake slow to fast Gobo12
		120-127	White
		128-190	Rotate reverse (fast to slow)
		191-192	Stop
		193-255	Rotate forward (slow to fast)
CH14	Rot GOBO	0-9	White

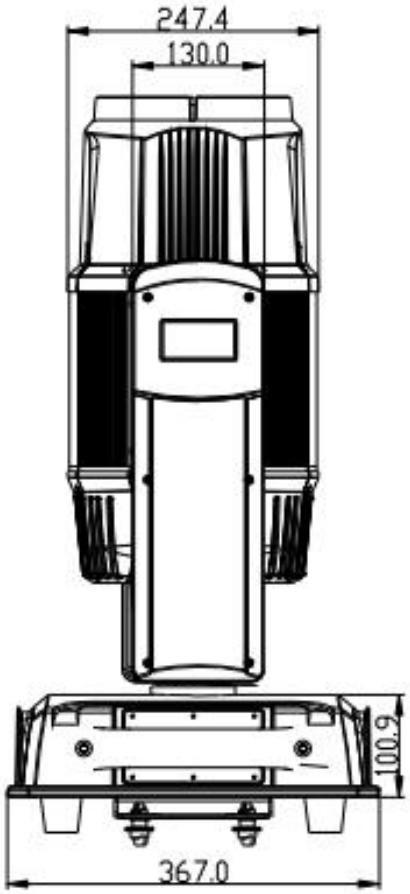
CH14	Rot GOBO	10-19	Gobo1
		20-29	Gobo2
		30-39	Gobo3
		40-49	Gobo4
		50-59	Gobo5
		60-69	Gobo6
		70-79	Gobo7
		80-89	Shake slow to fast Gobo1
		90-99	Shake slow to fast Gobo2
		100-109	Shake slow to fast Gobo3
		110-119	Shake slow to fast Gobo4
		120-129	Shake slow to fast Gobo5
		130-139	Shake slow to fast Gobo6
		140-149	Shake slow to fast Gobo7
		150-200	Rotate forward (fast to slow)
		201-205	Stop
		206-255	Rotate reverse (slow to fast)
CH15	GOBO ROT	0-127	0-360(degree)
		128-190	Rotate reverse (fast to slow)
		191-192	Stop
		193-255	Rotate forward (slow to fast)
CH16	GOBO.Rot Fine	0-255	
CH17	Prism 1	0-127	None
		128-255	Inert prism1
CH18	Prism 1 Rot	0-127	0-360(degree)
		128-187	Rotate forward (fast to slow)
		188-195	Stop
		196-255	Rotate reverse (slow to fast)
CH19	Prism 2	0-127	None
		128-255	Inert prism2
CH20	Prism 2 Rot	0-127	0-360(degree)
		128-187	Rotate forward (fast to slow)
		188-195	Stop
		196-255	Rotate reverse (slow to fast)
CH21	Frost	0-127	None
		128-255	Insert frost
CH22	Macro	0-255	
CH23	Zoom		Large to small
CH24	Focus		Far to near
CH25	Focus Fine		
CH26	Reset	0-209	None
		210-215	Reset XY motor over 3 second
		216-219	None
		220-235	Reset Effect motor over 3 second
		236-239	None
		240-255	Reset fxiture over 3 second

5.Dimension


479.1
225.0
618.5
135.9
366.4


139.0
106.0


423.8
286.5
192.3
725.0
564.5
148.5
123.2
103.9
34.9
337.8
396.8


247.4
130.0
100.9
367.0

6.Trouble Shooting

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 connection of power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if link 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 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 motors drive IC on the PCB might be out of condition

7.Fixture Cleaning

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

Clean with soft cloth using normal glass cleaning fluid.

Always dry the parts carefully.

Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.