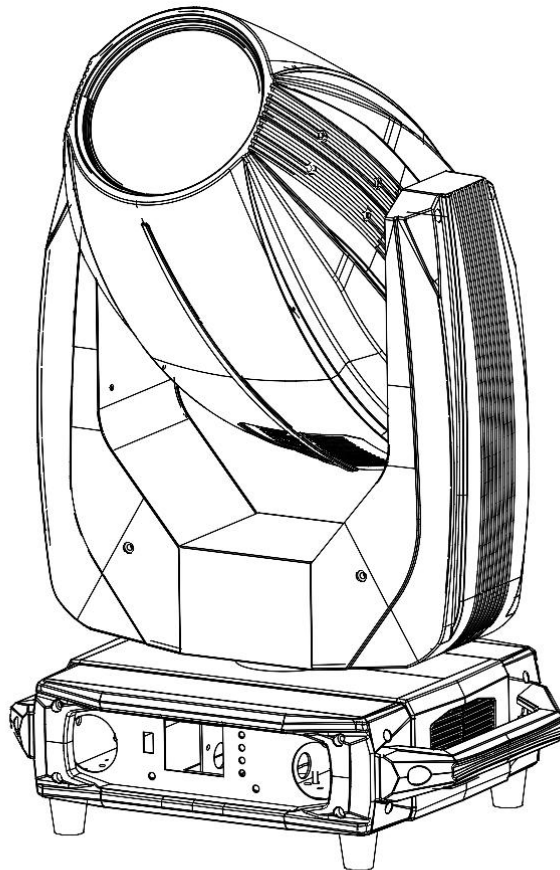


BSW 480 CMY



USER MANUAL

KEEP THIS USER MANUAL FOR FUTURE NEEDS

Thank you for your patronage!

We are confident that our excellent products and service can satisfy you.

For your own safety, please read this user manual carefully before installing the device.

In order to install, operate, and maintain the lighting safety correctly.

We suggest that the installation and operation should be done by the verified technician and follow the instruction strictly.



CAUTION!

Keep this device away from rain and moisture!



CAUTION!

Unplug mains lead before device's installation, cleaning and maintenance!

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow carefully the instructions of this manual

INTRODUCTION

Thank you for having chosen this professional moving head.

You will see you have acquired a powerful and versatile device.

Unpack the device. Inside the carton box you should find:

1. One power in cable
2. One 3 Pin DMX cable(5 Pin optional)
3. Two mounted brackets
4. One safety rope
5. One English user manual

(Flight case, Clamps/Folding clamp are optional, please contact your dealer)

Please check carefully that there is no damage caused by transportation. Should there be any questions, please consult your dealer and don't install this device.

GENERAL GUIDELINES

This device is a lighting effect for a professional use on stages, TV, in discotheques, theaters, etc., The device was designed for indoor use only.

This fixture is only allowed to be operated with the max alternating current which stated in the technical specifications in 6th page of this manual.

Lighting effects are not designed for permanent operation. Consistent operation breaks may ensure that the device will serve you for a long time without defects.

Do not shake the device. Avoid brute force when installing or operating the device.

While choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. Please don't project the beam onto combustible

substances. The minimum distance between light-output from the projector and the illuminated surface must be more than 0,5 meter.

If you use the quick lock cam in hanging up the fixture, please make sure the quick lock fasteners turned in the quick lock holes correctly.

Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation.

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

For safety reasons, please be aware that all modifications on the device are forbidden. If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to short-circuit, burns, electric shock, crash, etc.

SAFETY INSTRUCTIONS



CAUTION!

Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching wires!

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

1. In order to guarantee the product's life, please don't put it in the damp places or even the environment over 60degrees.
2. Always mount this unit in safe and stable matter.

The qualified professionals are allowed to carry out the lamp installation, operation and maintenance, but they must guarantee to operate in strict accordance with the instructions referred to.

▲ 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.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperatures.

This device falls under protection-class I . Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it.

Only handle the power cord by the plug. Never pull out the plug by tugging the power cord. During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.

Please don't project the beam onto combustible substances.

If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.



CAUTION!

Never touch the device during operation!
The housing may heat up!



CAUTION!

Never look directly into the light source,
As sensitive persons may suffer an epileptic shock.

Please be aware that damages caused by manual modifications to be the device are not subject to warranty. Keep away from children and non-professionals.

CLEANING AND MAINTENANCE

1. To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
2. Do not spill water or other liquids into or on to your unit.
3. During long periods of non-use, disconnect the unit's main power.
4. It should be installed in a well-ventilated place, at a distance of 50 centimeters or more with the walls. At the same time, please check if the fan and ventilation holes are unobstructed.

The following points have to be considered during the inspection

- 1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- 2) There must not be any deformations on the housing. Fixations and installations spots(ceiling, suspension, trussing).
- 3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
- 4) The electric power supply cables must not show any damage, material fatigue or sediments. Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



CAUTION!

Disconnect from mains before starting maintenance operation!

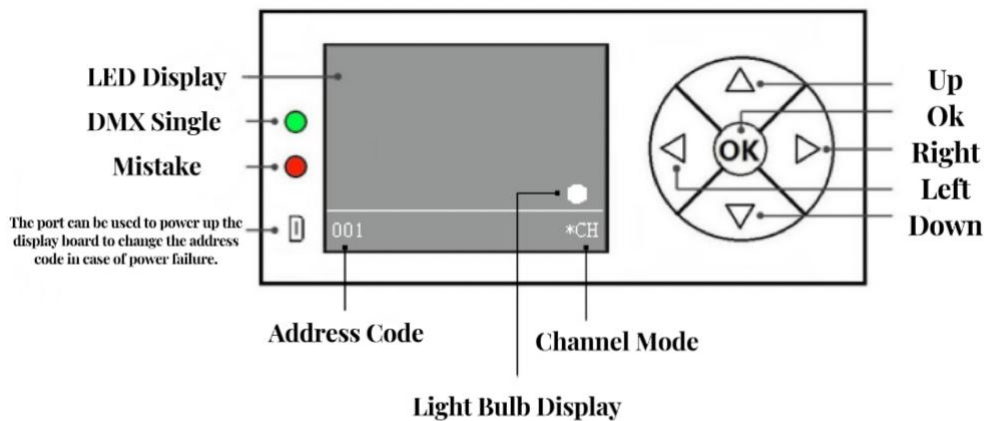
In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

- 1) Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
- 2) Clean the fan each week.
- 3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents !

CONTROL PANEL

KEY INSTRUCTION:



Schematic diagram of the panel keys

“Left”: Back

“Right”: In the main interface, Press the "right" button to flip the screen, and the other interface "right" button is useless

“Up” “Down”: Select, edit

“OK”: Execute functions, start editing, exit editing

Note: After checking the main interface, press the "OK" button to enter the menu interface, and press the "left" button to enter the address code adjustment interface.

MENU INSTRUCTION:

Homepage	Instruction
Menu	Main Menu Settings
Address	Address code adjustment
Lamp	Switch bubble
Adjust	Motor calibration
.081 ↑	Screen flip
EN/C	English/ Chinese

LANGUAGE:

Option	Instruction
English/Chinese	Press "OK" key twice to switch in Both Chinese and English

SCREEN ROTATING:

Option	Instruction
180 Degrees rotation	Press "OK" twice and rotate the screen 180 degrees

ADDRESS CODE:

Option	Instruction	
Address code	001~512	▶ Press Up and down (only change one code) . ▶ Press "right" to automatically switch to the next address code (Such as when the channel mode is 20 CH, the address code is 021, press the right button to change the address code to 041) . ▶ After adjusting to the required address code, press OK once again to save the address code and exit the address code editing interface.

BULB INSTRUCTION:

Main menu	I Menu	II Menu	Instruction
DMX Setting	DMX Channel	20CH	See channel table for detailed values
	DMX Signal	Keep	Continue running in the original state
		Clear	Motor return, stop running
	RDM Function	ON	RDM
		OFF	Not RDM
	DMX monitoring		Displays the channel value
Lamp test	Auto	OFF	Slave status: receiving DMX signal from the automatic control table or host
		ON	Main status: go and send DMX signal to the slave
	Manual control	1. Color wheel 000-255	Automatic enter the host state (do not receive DMX signal, send DMX signal to the bus to the slave). Press OK to enter the edit state.
		2. Blackout/Strobe 000-255	
			
		18.XY Speed 000-255	
	Lamps reset		Press OK 2 times to reset
	XY reset		
	MT reset		
System info	Temperature information	Display board	Show the board temperature
		Motor board	
	Fan information	Speed	Show the blower speed

Option	Instruction	
Lamp	OFF	Turn off
	ON	Open
Boot bright bulb	OFF	Use the menu or the console
	ON	Automatic bright
Interval time	00~20	The value adjustment range is 0-20, in "minutes", the default is 3, when the bubble is extinguished, it takes 3 minutes to light the bulb again

	System version		Displays the software version number
	System time	Total use time	Cumulative usage time (accurate to minutes)
		Current usage time	Use time since this startup time (accurate to minutes)
		Total sparkling time	Cumulative bubble time (accurate to minutes)
		Current sparkling time	This bright soaking time (accurate to minutes)
	Sensor monitoring	X Hall	0 when magnetic is detected, 1 otherwise
		Y Hall	
		Color hall	
		Gobo hall	
		Effect Gobo hall	
		GIF hall	
		Focus hall	
		Amplification hall	
		Prism 1 Hall	
		Prism 2 Hall	
		X-axis encoding state	2 digits, each bit corresponds to a photoswitch in the encoding disc
		Y-axis encoding state	
		X axis encodes step values	Go in the forward direction, the step value increases, go in the back direction, and the step value decreases. The value is equally normal every time you move to a certain point
		Y axis encodes step values	
	System mistake		If the red ERR indicator is on, indicating an error, the details can be accessed from the subinterface. Press Clear to clear the error record
Setting	Language	English	Switch between Chinese and English
		Chinese	
	Screen flip	OFF	
		ON	Set to open the interface to reverse
	Screensaver	ON	Turn off the backlight after 30 seconds of idle
		OFF	Back light forever bright

	X rollback	OFF	Open for the starting point and the end point exchange, the default is off
		ON	
	Y rollback	OFF	
		ON	
	XY exchange	OFF	
		ON	Channel channel for XY axis (including fine tuning)
	XY coder	ON	Use the encoder (optical coupling) to judge the loss and automatically correct the position
		OFF	Do not correct the position by using the encoder (optical coupling)
	color wheel changes linearly	ON	The color wheel changes linearly
		OFF	Color wheel changes nonlinearly, and the half-color changes
	Restore the default		Press OK to see the confirmation dialog box, and press OK again to restore the default settings
Factory setting (The password is "up and down". Specific operation process: press the "up" key once (the first "*" appears), and press "down" again. Key (second *), press Up again (third *) and press Down again (appear 4th "*"). Finally, press OK to verify the password.)	Motor calibration	X	The reset position of the motor can be adjusted to compensate for the errors on the hardware installation, The adjustment range is -128~ + 127, and + 0 indicates no adjustment.
		Y	
		Colour	
		Gobo	
		Focus	
		Tuning zero	
		Tuning schedule	
		Prism 1 zero point	
		Prism 1 trip	
		Prism 2 zero point	
		Prism 2 trip	
		Fog zero	
		Fog trip	
		Colorful mirror zero	
		Colorful mirror trip	
	Travel calibration	X axis itinerary	Adjust the range value 0-255, corresponding to the X-axis 0-540.
		Y axis itinerary	Adjust the range values 0-255,

			corresponding to the Y-axis 0-270.
	XY speed adjustment	X axis speed	From 000-255 speed from slow to fast From 000-255 fan speed from slow to fast
		Y axis speed	
	Fan adjustment	Open the white light blower	Adjust the range value 0-255, corresponding to the X-axis 0-540.
		Open color blower	
		Closed-light, white-light blower	
		Closed-light-color blower	

CHANNEL FUNCTION

CHANNEL LIST:

CH	24
1	X
2	X fine turning
3	Y
4	Y fine turning
5	XY Speed
6	Dimmer
7	Strobe
8	Frost
9	Pigment C
10	Pigment M
11	Pigment Y
12	CTO
13	Color 1
14	Color 2
15	Metal Gobo plate
16	Metal effect plate
17	Glass gobo
18	Glass gobo Rotating
19	Prism 1 Prism 2
20	Prism 1 rotation
21	Prism 2 rotation

22	Amplify
23	Focus
24	Lamp control & reset

CHANNEL DESCRIPTION

24 CHANNEL MODE:

CH	FUNCTION	VALUE	EFFECT
1	X	000-255	Horizontal 540-degree scan
2	X fine-tuning	000-255	Level of a 1.2-degree fine-tuning
3	Y	000-255	Vertical 270-degree scan
4	Y fine-tuning	000-255	Vertical to 1.2 degrees of fine-tuning
5	XY velocity	000-255	Speed from fast to slow
6	Dimmer	000-255	From dark to bright
7	Strobe	000-003 004-103 104-107 108-207 208-212 213-251 252-255	Light switch is closed Flash from slow to fast Light lock open (controlled by dimming channel) Pulse strobe from slow to fast Light lock open (controlled by dimming channel) Random strobe from slow to fast Light lock open (controlled by dimming channel)
8	Frost	000-127 128-191 192-255	None, exit the uniform light and Frost Start with the even light, and exit the Frost Atomize to cut in, exit the uniform light
9	Cyan	000-255	linear modulation
10	Magenta	000-255	linear modulation
11	Yellow	000-255	linear modulation
12	CTO	000-255	linear modulation
13	Color disk 1	000-255	linear modulation
14	Color disk 2	000-255	linear modulation
15	Metal Gobo plate	000 - 004 005 - 009 010 - 014 015 - 019 020 - 024 025 - 029 030 - 034 035 - 039 040 - 044	White Fixed gobo 1 Fixed gobo 2 Fixed gobo 3 Fixed gobo 4 Fixed gobo 5 Fixed gobo 6 Fixed gobo 7 Fixed gobo 8

		045 - 049 050 - 054 055 - 059 060 - 064 065 - 069 070 - 074 075 - 079 080 - 084 085 - 089 090 - 094 095 - 099 100 - 104 105 - 109 110 - 114 115 - 119 120 - 124 125 - 189 190 - 255	Fixed gobo 9 Fixed gobo 10 Fixed gobo 11 Fixed gobo 12 Fixed gobo 1shake(from slow to fast) Fixed gobo 2shake(from slow to fast) Fixed gobo 3shake(from slow to fast) Fixed gobo 4shake(from slow to fast) Fixed gobo 5shake(from slow to fast) Fixed gobo 6shake(from slow to fast) Fixed gobo 7shake(from slow to fast) Fixed gobo 8shake(from slow to fast) Fixed gobo 9shake(from slow to fast) Fixed gobo 10shake(from slow to fast) Fixed gobo 11shake(from slow to fast) Fixed gobo 12shake(from slow to fast) Reverse flow (from fast to slow) Forward flow (from slow to fast)
16	Effect Gobo	000 - 009 010 - 019 020 - 029 030 - 039 040 - 049 050 - 089 090 - 109 110 - 039 120 - 044 130 - 049 140 - 089 150 - 200 201 - 255	White Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 (Linear Gobo) Gobo 5 (Linear Gobo)shake(from slow to fast) Gobo 1shake(from slow to fast) Gobo 2shake(from slow to fast) Gobo 3shake(from slow to fast) Gobo 4shake(from slow to fast) Forward flow (from fast to slow) Reverse flow(from slow to fast)
17	Glass gobo	000 - 009 010 - 019 020 - 029 030 - 039 040 - 049 050 - 089 060 - 069 070 - 079 080 - 089 090 - 099 100 - 109 110 - 119 120 - 129	Big white Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 1shake(from slow to fast) Gobo 2shake(from slow to fast) Gobo 3shake(from slow to fast) Gobo 4shake(from slow to fast) Gobo 5shake(from slow to fast)

		130 - 139 140 - 149 150 - 200 201 - 255	Gobo 6shake(from slow to fast) Gobo 7shake(from slow to fast) Forward flow (from fast to slow) Reverse flow (from slow to fast)
18	Glass gobo rotation	000-127 128-189 190-194 195-255	Angle adjust Reverse fast rotation to slow rotation Stop Forward slow rotation to fast rotation
19	Prism 1 and prism 2	000-019 020-075 076-127 128-255	None Prism 1 insert Prism 2 insert Prism superposition
20	Prism 1 rotation	000-127 128-190 191-192 193-255	Prism-1 angle regulation Reverse rotation (from fast to slow) Stop Forward rotation (from slow to fast)
21	Prism 2 rotation	000-127 128-190 191-192 193-255	Prism 2-angle regulation Reverse rotation (from fast to slow) Stop Forward rotation (from slow to fast)
22	Amplify	000-255	Gobo clarity goes from far to near
23	Focus	000-255	Gobo clarity goes from far to near
24	Bulb control & reset	000-099 100-105 200-205 250-255	Invalid area Put out the bulb Light up the bulb Full motor reset

COMMON FAULT:

For some common faults, the corresponding solutions are proposed. Any problems that cannot be resolved should be handled by the professionals. Disconnect the power supply before maintaining the lamp.

Description	Analyse	Dispose
No action after being energized	Check that the power switch is turned on	open
	Check that the fuse is burnt out	renewal
	Check whether the output end of the switch power supply is normal	Detection voltage
	Check the internal wiring for poor contact	Reconnection
Light fixtures are not controlled	Check whether the DMX signal line is correctly connected (if no signal input green signal indicator is not on)	Reconnect or replace
	Check whether the address code is correct and whether	reconfirm

	the DMX mode of the lamp is consistent with the console settings	
	The display board is damaged	renewal
Lamp is not Bright	Aging or damaged light bulbs	renewal
	Power board failure	Check/replace
	Line is loose or in poor contact	Reconnection
	Flip-flop failure	Renewal
	Electrical ballast failure	Renewal
Automatically turn off the bulb	Light bulb aging	Renewal
	Scattered heat fan is damaged or has abnormal wind speed	Renewal
	Check the power output of the power circuit board fan	Check / replace
	Temperature control switch is damaged	Renewal
Gobo disk dislocation or abnormal control	Poor contact with the motor wire	Reconnection
	Corresponding motor drive plate failure	Retighten
	The magnet is mislabeled or damaged with the Positioning magnet	Adjust / replace
	Motor failure	Renewal
Light efficiency is weak and the light spot is uneven	Light bulb aging	renewal
	The light bulb is not in the middle	Adjust the bulb
	The optical mirror has a dust deposit or stain	Cleaning
	The optical mirror is damaged	Renewal
Color not pure	Light effect is weak	Renewal
	The color film has accumulated dust or stain	Cleaning
	The color film is shed or damaged	Renewal
Dim design	The optical mirror has a dust deposit or stain	Cleaning
	The optical mirror is damaged	Renewal
Note! The above analysis is only for abnormal reference, non-professionals do not dismantle the machine maintenance		

REMARK

The product has perfect performance and integrity packing. All users should be strictly comply with the warning

and operating instructions as stated. Or we aren't in charge of any result by misusing.

Any damage resulting by misuse is not within the Company's warranty.

Any fault or problem caused by neglecting the manual is also not in the charge of dealers.

Errors and omissions for every information given in this manual excepted.

All information is subject to change without prior notice.

Thank you again for your patronage!

We will be offering sincere service as always, wish you have a good lighting journey!

Innovation, Quality, Performance