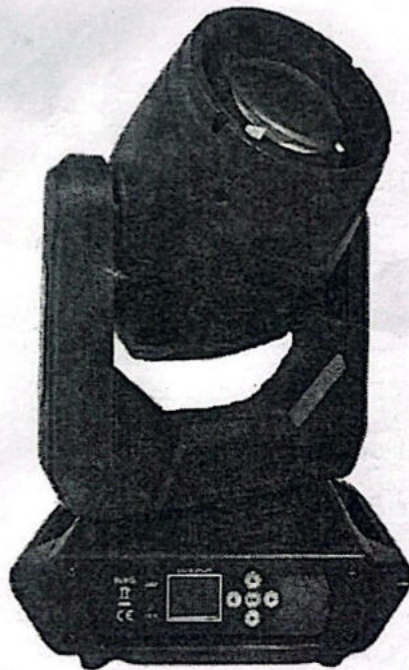# Moving Head Beam Light

BX-993

Please read the instruction manual carefully before use

Thank you for using our product. For your safe and effective use of this product, please read this manual carefully and thoroughly before using it. This manual contains: The product performance and how to install safely, as well as the use of important information, please keep it for use reference. Please follow the instructions when installing and using.

Technical Parameters:

1. Power: AC 110 V-240 V
2. FREQUENCY: 50 HZ-60 HZ
3. Total power: 450 W
4. Fuse: 6A
5. Ballast: Brand Electrical Ballast
6. Bulb Power: 295W
7. Color temperature: 8500 K
8. Average life: 2000H (bulb and Reflective Cup whole package, light effect higher service life longer)
9. Control Signal: International Standard DMX512
10. APPEARANCE: High Temperature Resistant Plastic
11. Body Color: Black
12. Protection Class: IP20
13. Net weight :16 kg

FEATURES:

1. International standard control signal: DMX512
2. Number of channels: 20CH channels
3. Liquid crystal 650,000-color touch TFT interface, easy to operate, beautiful interface, the interface can be reversed 180 degrees.
4. The X axis rotates horizontally at 540° C, and the Y axis rotates vertically at 270° C, with automatic correction and positioning.
5. The X and Y axes can be adjusted and adjusted finely, and the software has the function of correcting and positioning, with high precision!

6. Dimming: 0-100% linear adjustment.

7. Strobe: Single-chip strobe (0.5-9 times/sec), full linear dimming and variable strobe speed.

8. Color wheel: with 14 colors + blank (can create a sharp air beam effect)

9. Gobo wheel: 14 fixed gobos + blank (allowing you to quickly change the beam shape)

10. Prism: two prism discs, honeycomb prism, double prism effect, can be rotated in both directions, speed can be adjusted, so that the pattern projection effect is more abundant

11. Atomization: Soft light effect, easy to achieve soft pattern effect.

12. 7 Color: 7-color rainbow effect, easy to achieve colorful and dreamy pattern effect.

13. Focusing: groups of optical lens combination, the effect is far better than the usual beam lights, can project high-definition patterns

14. Beam angle: parallel beam angle: 0-3.8

15. Overheating intelligent protection

16. Smart bulb switch control (extend bulb life)

Safety Tip!

To ensure safe and proper use of Light, please read the following safety tips carefully before use.

1, non-professionals, do not remove the lights and lighting accessories.

2, AC POWER SUPPLY: check the location of the power supply is in line with the product voltage rating requirements.

3, This light is designed according to the type of electric shock protection. The light shall be connected to a fully grounded power supply system and the ground wire of the light shall be connected to the ground wire of the power supply system. Do not use insulated damaged power cord, and do not lap the power cord to other wires.

4, when the light is installed and positioned, the minimum distance between any point on the surface of the light and any inflammable and explosive substance is 10 meters, and the distance between the light and the light is 2.5 meters. Please do not install the light directly on the surface of the burnable substance.

5, lighting environment temperature: (- 10 degrees + 40 degrees), the maximum surface temperature of the lamp 80 degrees, the lamp to stay away from liquid substances and humid environment.

6, Make sure the lamp is well grounded before use. Do not install or remove any parts of the lamp.

7, When installing the light, the fixing screw must be fixed, equipped with safety cable and checked regularly.

8, It is recommended that the continuous working time should not exceed 10 hours and the interval between starting lamps should not be less than 10 minutes. Otherwise the bulb will overheat and fail to trigger properly.

9, In the use process, if the lamp appears abnormal should stop using the lamp.

10, When the bulb reaches the rated service life, it should be replaced in time, otherwise it will explode.

11, The rotating parts and pasted parts of the light must be checked regularly, loosen, shake and reinforce in time to prevent accidents.

12, lamps and lanterns are cooled by strong wind, easy to accumulate dust, must be cleaned once a month, especially the cooling vent, otherwise it will be blocked by accumulated dust, resulting in poor heat dissipation, making lamps and lanterns abnormal.

Matters needing attention and installation

1. Maintenance

- This light should be kept dry to avoid working in damp environment.
- Intermittent use will effectively extend the life of the lamp.
- In order to achieve good ventilation and lighting effects, care should be taken to always clean the fan and Fan Net and Lens.
- Please do not use alcohol and other organic solvents to wipe the light Shell, so as to avoid damage.

2. Proclamations

This product comes in the factory, the performance is intact, the packing is complete. All users shall strictly abide by the warning and operating instructions stated above. Any damage caused by misuse is not guaranteed by the company, failure and problems arising from the neglect of the operation manual are also beyond the scope of the distributor' s responsibility.

This manual is subject to change without prior notice.

3. Product points to note

- In order to ensure the service life of the product, the product should not be placed in a humid or leaking place, not to mention in the temperature above 60 degrees environment work.
- Do not place this product in a place where it is easily loosened or vibrated.
- To avoid the risk of electric shock, this product maintenance request for professional maintenance.
- After the power failure, it takes 20 minutes to use the lamp to fully cool before it can be used again.
- To ensure the normal use of this product, please read the instructions carefully.

4. Signal wire connection (DMX)

This light uses DMX512 signal control mode. The control signals of each light are in parallel connection. When connecting the signals of many light, it is best to use a double-core shielded cable. When connecting, the lamps and lanterns are connected through the DMX signal Jack (kanong

seat) INPUT (INPUT) and OUTPUT (OUTPUT) . The 3-core XLRXL plug terminals connecting the signal wires of the lamps and lanterns must correspond to each other, DMX Signal Terminal is recommended. To avoid damaging the control signal due to electrical noise, the DMX signal terminal is a 120 ohm 1w resistor connected between the 2 and 3 pins of an XLR plug and connected to the OUTPUT Jack of the last light

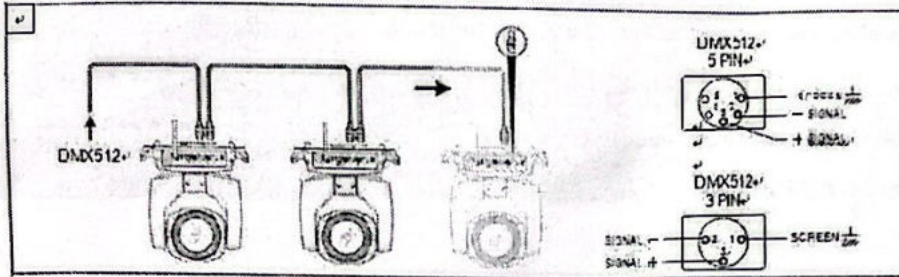Important Note: The lines can not touch each other or the metal shell contact.

Fig. 1 DMX Signal Line Connection Diagram

5.Light installation

The light can be placed horizontally, hung obliquely and hung upside down. Attention must be paid to the installation method when hanging obliquely or upside down,

As shown in figure 2, before positioning the light, to ensure the stability of the installation site, in the reverse hanging installation, you must ensure that the light does not fall off the support frame, to ensure safety, safety ropes are required to be used for auxiliary hanging through the support frame and the light handle. Prevent the lamp from falling and sliding.

If the hanging installation is not stable, resulting in the fall of the lamp and all the consequences, we do not assume any responsibility.
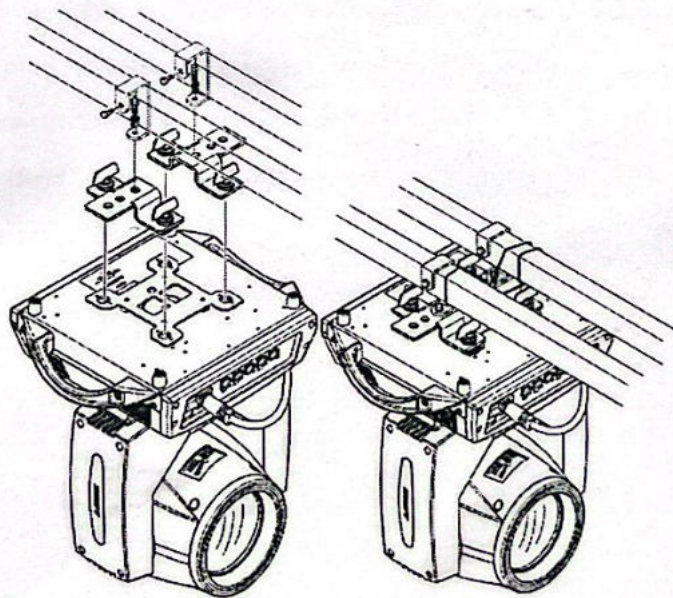

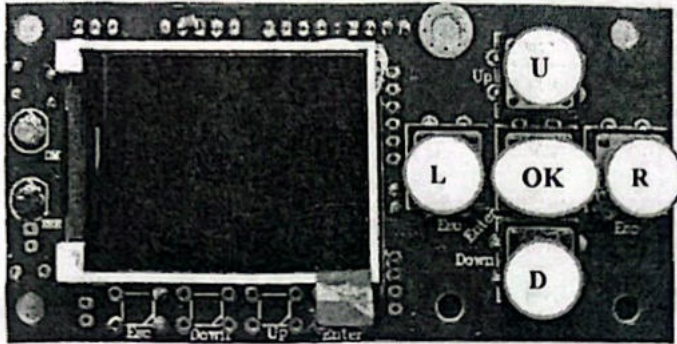Fig. 2 schematic diagram of upside-down light

6. Bulb installation

1,Remove the plastic housing of the lamp cap before installing and replacing the bulb.

2,It is recommended to use light bulbs of good quality.

3,Do not install with electricity, remove the bulb.

4,Hands should not touch the bulb ball.

5,Be sure to tighten the screws after changing the bulb.

6,Because of the extremely high temperature of the bulb and the physical nature of the gas discharge bulb, it must be completely cooled for 10 minutes after each power cut Operation, or it will lead to high-voltage discharge, short-circuit Fried Computer Control Board components.

7. How to calculate the starting address code of a light

The starting address code of the current light is equal to (the starting address code of the previous light) + (the number of passages in the light) description:

1:The starting address value of the first light is a 001.

2:The basic number of channels for the controller shall be greater than or equal to the total number of channels for lamp use.

3:Note: When using any controller, each light must have its own starting address code. If the starting address code of the first light is set to A001, the light path number is 16ch; Then the starting address code of the second lamp is set to A017; the starting address code of the third lamp is set to A033; and so on

1: Button description:

The left and right buttons do the same thing: return to the previous screen

Up" and "Down" keys: select, edit

OK Key: perform functions, start editing, and exit editing

2: Interface description:

The following is an example of the use of keystrokes:

1: If the current is not the main interface, press the "Exit" button (one or more times) can be back to the main interface

2: In the main interface, press the "Confirm" button to enter the menu settings.

3: On the first level menu page, press "Up" or "Down" to select "System settings"

4: Press "OK" to enter "System settings"

5: Press "Up" or "Down" to select "DMX address"

6: Press "OK" to enter "DMX address"

7: Press "Up" or "Down" to modify address Code

8: Press "OK" to confirm address code

9: Press "Exit" to return to the home page

3: Set up the interface

Model options	Function options		Function description
System settings	1.DMX address	1-512	Press the "OK" key to enter the editing state At this time, select the hundreds and press up and down Key to change the address code Press "OK" again to select the ten digit edit Press again Click "OK" to select a bit for editing Press again to exit the editing state
	2.encoder	Turn on	Use encoder (optocoupler) to judge out of step and automatically correct the position
		Turn off	The encoder (optocoupler) is not used to correct the position
	3.X reversal	on-off	
	4.Y reversal	on-off	
	5.No signal	keep	Continue to run according to the original state
		Zero out	The motor returns and stops running
	6. Power on bright bubble	on	When the lamp is started, the bulb lights up automatically
		off	When starting the lamp, the bulb does not light up
	7.return		Return to previous menu
Operation mode	1.Operation mode	DMX	Slave status: receive DMX signal from console or host
		Automatic	Host status: it runs automatically and sends DMX signal to the slave
		Sound	Receive external sound or vibration and run the built-in program effect
	2.Channel mode	20	
	3.return		Return to previous menu
manual control	1.reset		Press the "OK" key to see the confirmation dialog box. Press the "OK" key again to enter the carry back interface and reset all motors
	2.Bulb control	on-off	
	3.Color wheel	0-255	Press "OK" to enter the editing state. When it is selected, press up and down to change the channel value, and then press OK to exit the editing state
	4.Cut/strobe	0-255	
	5.Dimming	0-255	
	6.Pattern wheel	0-255	
	7.Prism	0-255	
	8.Prism rotate	0-255	
	9.Prism focus	0-255	
	10.Atomize	0-255	
	11.Focus	0-255	
	12.X	0-255	

	13.X Fine tuning	0-255	
	14.Y	0-255	
	15.Y Fine tuning	0-255	
	16.Function	0-255	
	17.XY Speed	0-255	
	18.Color wheel speed	0-255	
	19.Adjustable fog speed	0-255	
	20.Pattern disc speed	0-255	
	Return		Return to previous menu
Display settings	1.Language selection	Chinese	Press "OK" to switch the interface to Chinese mode.
		EN	Press "OK" to switch the interface to English mode.
	2.Inverted setting	on-off	Press the "OK" key, and the interface can be displayed in reverse 180 degrees.
	3.Screensaver settings	on	Turn off the backlight after idle for 40 seconds
		off	The backlight is always on
	4.Return		Return to previous menu
Factory settings			Please enter the password: XXXXXX; Specific operation process: press the up and down keys to select a number once (a * appears). After the password is completely entered, finally press the "OK" key to verify the password.
	X Axis calibration	0-255	
	Y Axis calibration	0-255	
	Dimming calibration	0-255	
	Color wheel calibration	0-255	Press "OK" to enter the editing state. When it is selected, press up and down to change the channel value, and then press OK to exit the editing state.
	Pattern disk calibration	0-255	
	Focusing calibration	0-255	
	Prism calibration	0-255	
	Fog mirror calibration	0-255	
	LOGO Choose		
	Return		Return to previous menu
Return			Return to the main interface (display the currently set address code)

4. Channel control instructions:

Channel	Function	Numerical value	
1	Color wheel	0-255	Color effect
2	Flash	0-255	Strobe effect
3	Dimming	0-255	Dimming effect
4	Gobo	0-255	Pattern effect
5	Prism 1	0-255	Prism 1
6	Prism rotate	0-255	Prism rotate
7	Prism 2	0-255	Prism 2
8	Frost Colorful	0-63 64-127 128-255	White Frost Colorful
9	Focus	0-255	The pattern is clear from far to near
10	X	0-255	Horizontal 540-degree scan
11	X Fine-tuning	0-255	Level 1.2 degrees
12	Y	0-255	270-degree vertical scan
13	Y Fine-tuning	0-255	Vertical 1.2 degree adjustment
14	XY Speed macro function	0-255	Speed macro function
15	Reset	0-239 240-255	No effect Light reset
16	Lamp	100-105 200-205	Off bulb On bulb
17	LED lamp Dimming	0-255	LED lamp Dimming
18	LED lamp Flash	0-255	LED lamp Flash
19	LED lamp Marco	0-255	LED lamp Marco
20	LED lamp Marco Speed	0-255	LED lamp Marco Speed

5. 20 Channel description (full version):

1	Color Wheel	0-4	WHITE
		5-9	WHITE + RED
		10-14	RED
		15-19	RED + ORANGE
		20-24	ORANGE
		25-29	ORANGE + AQUAMARINE
		30-34	AQUAMARINE
		35-39	AQUAMARINE + GREEN
		40-44	GREEN
		45-49	GREEN+COLD WHITE
		50-54	COLD WHITE
		55-59	COLD WHITE +YELLOW
		60-64	YELLOW
		65-69	YELLOW+ORANGE RED
		70-74	ORANGE RED
		75-79	ORANGE RED+DARK BLUE
		80-84	DARK BLUE
		85-89	DARK BLUE+WARM WHITE
		90-94	WARM WHITE
		95-99	WARM WHITE+CYAN
		100-104	CYAN
		105-109	CYAN+YELLOW GREEN
		110-114	YELLOW GREEN
		115-119	YELLOW GREEN+ROSE RED
		120-124	ROSE RED
		125-129	ROSE RED+LIGHT BROWN
		130-134	LIGHT BROWN
		135-139	LIGHT BROWN+BLUE
		140-144	BLUE
		145-149	BLUE+WHITE
		150-203	SLOW ROTATION FORWARD
		204-255	FAST ROTATION BACKWARD
2	Flash	0-5	Full off
		6-11	Full on
		12 -107	Strobe from slow to fast
		108-149	Pulse effect opening,increasing
		150-191	Pulse effect closing,increasing
		192-251	Random strobe with decreasing speed
		252-255	Full on
3	Dimmer	0-255	Dark → bright
4	Gobo	0-6	WHITE
		7-13	Gobo1
		14-20	Gobo2

		21-27	Gobo3
		28-34	Gobo4
		35-41	Gobo5
		42-47	Gobo6
		48-53	Gobo7
		54-59	Gobo8
		60-65	Gobo9
		66-71	Gobo10
		72-77	Gobo11
		78-83	Gobo12
		84-89	Gobo13
		90-94	Gobo1 shake (slow to quick)
		95	Gobo1 stop
		96-100	Gobo2 Shake (slow to quick)
		101-105	Gobo3 Shake(slow to quick)
		106-110	Gobo4 Shake(slow to quick)
		111-115	Gobo5 Shake(slow to quick)
		116-120	Gobo6 Shake(slow to quick)
		121-125	Gobo7 Shake(slow to quick)
		126-130	Gobo8 Shake(slow to quick)
		131-135	Gobo9 Shake(slow to quick)
		136-140	Gobo10Shake(slow to quick)
		141-145	Gobo11 Shake(slow to quick)
		146-150	Gobo12 Shake(slow to quick)
		151-155	Gobo13 Shake(slow to quick)
		156-160	White
		161-205	Rotation forward from fast to slow
		206-210	White
		211-255	Rotation backward from slow to fast
5	Prism 1	0-255	Prism 1
6	Prism rotation	0-127	Stop
		128-191	Prismrotation, forward
		192-255	Prismrotation, backward
7	Prism 2	0-255	Prism 2
8	Frost Colorful	0-63	White
		64-127	Frost
		128-255	Colorful
9	Focus	0-255	Linear adjustment
10	Pan	0-255	0-540°
11	Pan fine	0-255	1.2° fine
12	Tilt	0-255	0-270°
13	Tilt fine	0-255	1.2° fine
14	XY Speed macro function	0-11	UNUSED RANGE
		12-24	PAN/TILT FUNCTION.(FAST)
		25-37	NORMAL
		38-50	CONVENTIONAL

		51-62	LINEAR
		63-255	UNUSED RANGE
15	Reset	0-239	No effect
		240-255	Light reset
16	Lamp	100-105	Off bulb
		200-205	On bulb
17	LED lamp Dimming	0-255	LED lamp Dimming
18	LED lamp Flash	0-255	LED lamp Flash
19	LED lamp Marco	0-255	LED lamp Marco
20	LED lamp Marco Speed	0-255	LED lamp Marco Speed

Troubleshooting:

The following list of lamp failure and treatment, other maintenance work by professional qualified maintenance personnel to handle.

1,Bulb doesn't work

1.1.If the bulb is not completely cooled due to abnormal operation, the lamp should be cooled for more than 10 minutes so that the internal bulb can be fully restored to its normal state and the power supply can be restarted.

1.2.To check that the bulb has reached its useful life, replace it with a new one.

1.3.Check the line of Bulb and light bulb for leakage, shedding or poor contact.

1.4.Replace the new ballast.

2,The beam appeared dim

2.1.Check that the bulb has reached its useful life and replace it with a new one.

2.2.Check whether the optical components or light bulbs are clean, there is dust on the optical components, such as light bulbs, etc. .

3,The projected image is blurred

3.1. Check whether the electron focus channel value is suitable for the present projection distance.

4,The computer lamp works intermittently

4.1. Check whether the fan is working properly and whether it is dirty.

4.2. Check whether the internal temperature control switch is closed.

4.3. Check that the bulb has reached its useful life and replace it with a new one.

5, Although it glows, the computer light is no longer controlled by the controller

5.1. Check the starting address code and check the connection of the communication line (1 ground 2 minus 3 plus)

5.2. Add amplifier

5.3. When the bulb was not completely cooled, there was an abnormal start-up operation, and the instantaneous ultra-high voltage produced by the bubble starter leaked, which caused the CPU of the Circuit Board Channel Chip to burn out.

6, The lights won't start

6.1. Check whether the fuse on the power input socket is fused

6.2. The vibration of light in long-distance transportation leads to bad contact of circuit

6.3. Check the input power supply, computer board and other plug-in devices

7, Some functions are not controlled by the controller after self-checking

1.1. Check if the function is powered on or if the chip is fried by other high-voltage impact.

8, When the power is on, the X and Y axes are restored to 0 bits in other data, and abnormal noise appears

8.1. In abnormal start-up, high bubble voltage leakage led to the burning of the X, y Axis photoelectric induction circuit board (Optical Lotus)

8.2. Restart the computer light according to normal procedure

8.3. Push all channel values of the controller to 0 and reset the light remotely..

Maintenance and service :

Power-off operation: Each power-off before the first 10 minutes to turn off the light bulb. Let the radiator fan to the lamp inside the use of the heat, rapid discharge, so as to extend the lamp accessories, especially the Lamp Bulb Life! In order to ensure that the lamp can operate stably, it is important to keep it clean. Make sure the power supply is disconnected before removing the lamp for repair or starting maintenance. It is very important to keep the lamp clean and clean. Please clean it regularly, it can not only keep the maximum brightness output, but also prolong the lamp's service life. It is recommended to use high quality glass cleaner and clean with clean soft cloth.

ATTENTION TO AFTER-SALES SERVICE!

Lamp Factory, are strict quality inspection, packaging are intact, please operate according to the manual.

1. Machine failure due to human error is not covered by the warranty.

2. The company provides the technical consultation for the customer throughout the life.

3. If the product is out of order, please show the qualified certificate and fill in the relevant information truthfully. At the same time, we also hope that customers in time to product problems feedback to us, to facilitate our first time to improve the product.