

LED 350W BSW Moving Head with CMY CTO

User Manual

(Color display, touch key)



Please read this manual carefully before your operation.

Index

I	Notice and Setup.....	3
	1. Maintaining.....	3
	2. Statement.....	3
	3. Notice.....	3
	4. Parameter.....	3
	5. Signal connection (DMX)	4
	6. Item installation.....	4
II	Menu operation.....	5
	1. Summary.....	5
	2. Operation.....	6
	1. Control item by touch screen or console.....	6
	2. Value input.....	6
	3. Setup value.....	6
	4. Sbupage (parameter)	6
	3. Function operation and parameter setup.....	7
	1. Setup DMX address code.....	7
	2. Setup work mode.....	8
	3. Setup menu display.....	9
	4. Test.....	10
	5. Setup work parameter.....	10
	6. Check current status.....	11
III	Channel description.....	12
	1. Channel list.....	12
IV	Normal faulty and using attention	15
	1. Normal faulty solution.....	15
	2. Using attention.....	16

I Notice and setup

1. Maintaining

- Keep dry, don't use it in wet environment.
- Intermittent using can extend the life of item.
- Please often clean fan, fan net and lens to get better cooling and brightness effect.
- Please don't clean the cover with solvent like alcohol.

2. Statement

To be on the safe side and under the terms of the security, do not allow to restructure and modify this product. Please note that because of man-made damage caused by improper use, is beyond the scope of our warranty.

This equipment pass strict inspection before shipment, please comply with the instruction manual operation requirements, to ensure the safe operation of the product under normal conditions. Any damage caused by improper operation, will cause the cessation of the warranty claim. Manufacturer does not accept any because of improper operation products or non-compliance of the instructions of any liability for property damage and personal injury.

Please place the manual in safe place for future reference and in products for sale or lease or handling running new holder.

3. Notice

- Do not operate when temperature up to 60°
- Make sure the equipment load-bearing structures can withstand the weight of more than 10 times when above ground installation.
- Only professional technique can repair this item to avoid the dangerous of electric shock.
- The power voltage difference can't be more than 10% when the lamp works. Higher voltage can short the life of lamp and lower voltage can reduce the brightness.
- Cool down for 20 minutes before restart it again
- Please read this notice carefully before your operation.

4. Parameter

- Voltage: AC100-240V 50/60Hz
- Light source: 350W Module LED
- Rated lifetime: ≥ 20000 Hours
- Zooming angle: 4.5° -30°
- Static gobo wheel: 9 static gobos + open
- Rotating gobo wheel: 7 interchangeable gobos + open
- Color Wheel: 6 colors+open
- CTO: Color temperature can be linear adjusted (2800K-7800K)
- CMY: Independent CMY, with linear color change, limitless color mixing
- Pan/tilt: 540° /270° , 16-bit control and automatic return correction
- Prism: 8 facet prism
- Focus: High-precision glass lenses, electronic linear HD focus
- Iris: Linear 5-100%, with built-in macros

- Dimmer: 0-100% linear electronic dimming
- Strobe: 0-22Hz, synchronized, pulse effects
- Channel: 22CH
- Display: LCD display
- Software: Update software by DMX connection
- Control mode: DMX 512,RDM,Artnet(Optional),Auto-running ,Master/salve, Sound active, Built-in program
- IP class: IP20
- Net weight: 13.7KG
- Product weight: 15KG
- Packing size: 40x32.5x67CM

II Menu operation

1. Summary

Like picture 3 (it's 4 keys in this picture), left is TFT display that support touch operation; right is 4 keys or 5 keys or encoder knob, you can control light directly or setup system parameter by them.

Display and operation likes Android system. You can operate item by fingers if you choose the item with touch screen.

Note: Don' t use sharp thins to touch display.



Picture 1 Display

2. Operation

1. Control item by touch key or console



- Please press key MENU----UP----DOWN----ENTER by sequence to unlock the display.

2. Subpage (parameter)

Press primary menu to get into submenu. There are 6PCS subpage with different parameter or status as picture 6:

- ADDRESS: set the DMX add;
- WORKMODE: set the work mode, master/slave mode ;
- DISPLAY: Set the parameter on display, like language, screen protection;
- SCENE: For lighting test, simulate the value of corresponding DMX channel;
- ADVANCE: set operating parameter;
- STATUS: check current status.



Picture 2 Submenu

3 Function operation and parameter setup

Get into menu like picture 6:

- In primary menu, can get into corresponding submenu by touching 4 different button.
- Press left blue option can change to other interface fast.

1. Set DMX address code

Press and choose “ADDR ” to get into the set page. The range of address code is 1-512, the code can't be bigger than 512, otherwise, the light can't be controlled. The detail is as following:

Get into the DMX interface like picture 7, click the right white area, then the parameter set windows is opened like picture 4. Please pull the red blocks of progress bar to set DMX address code, or set code by touch “UP” and “DOWN” keys; then press ENTER to save code.



Picture 3 Add set page

2. Set work mode

Please set the work mode, control lamp and channel mode like picture. The light has four mode-DMX mode, auto run mode, sound active mode and master/slave mode. The detail parameter is as following:

- **DMX Mode:** In this mode, the light can receive the data from controller and run according to it (Common mode) ;
- **Auto run mode:** In this mode, the light will run according to the inner program;
- **Sound active mode:** In this mode, the light is controlled by the strong sound.
- **Scene Mode:** Inner scene run by manual control
- **Master/slave mode:** The master/slave choice only can be used in auto run mode or sound active mode. When this mode is closed, the inner date can't be transferred to other lights by DMX signal line; when it is on, the inner data of master item will be sent to slave item, then slave item will follow the master item.
- **Lamp ON/OFF:** This function can control the lamp's ON/OFF. The frequency ON/OFF can reduce the life of lamp. The defined time interval is 30 seconds.
- **Channel mode:** There are two channel mode-simple and extend mode. The simple mode reduces several motor speed channels to save the use ratio.



Picture 4 Run mode windows

3. Set menu display

There are two language-Chinese and English like picture 9.

- **Language:** Choose Chinese or English language
- **Screen Saver:** If there is no change in 10 seconds, the light will be screen saver. When light is in “Mode 1”, the screen is closed (black screen); when item is in “Mode 2”, the screen will show DMX address code (DMX mode) or show icon(auto run or sound active mode); when screen is “OFF), there is no screen saver, just show main menu.
- **Screen Rotation:** When the light was hung upside down, please choose this option to make menu clearer.
- **DMX Indicate**
- **Screen switch :** If this is “OFF”, then you need to press key MENU---UP---DOWN---ENTER by sequence to make screen on.
- **Lock screen:** Press this option to adjust the precision of screen. Normally please don't get into this option.



Picture 5 Display setup

4. Testing

The light is on test mode like picture 10. The lights don't receive the DMX controller's date.

The parameter on menu is related to the DMX channels value and you can control the light run by changing value. The detail value is as following:

- Pan motor: Value (0~255) ;
- Tilt motor: Value (0~255) ;
- FOCUS motor: Value (0~255) ;
- COLOR: Value (0~255) ;
- GOBO: Value (0~255) ;
- PRISM: Value (0~255) , when the prism is inserted, the prism rotation is on;
- FROST: Value (0~255) ;
- STROBE: Value (0~255) .



Picture 6 Test Mode

5. Setup work parameter

Get into page like picture 11, can adjust the scene parameter to make easier installation.

- Pan Invert: exchange the initial position and final position of Pan motor ;
- Tilt Invert: exchange the initial position and final position of Tilt motor ;
- Optocoupler correction: If you choose this function, the Pan or tilt motor will self-correct if there is off normal;
- Pan Offset: set deviation angle of X motor initial position;
- Tilt Offset: set deviation angle of Y motor initial position;
- Lamp up when: Set on-off state of lamp when power is on;
- Factory setting: Set all parameter to be factory value.



Picture 7 advance page

6. Check current status

Get into page like picture 12:

- In this page, can check the current status and version information of light;
- DMXClr: Make the DMX date be zero;
- SysRst: motor reset;



Picture 8 status page

III Channel description

1. Channel list

Channel	Function	Value	Description
[CH1]	Pan	0-255	0-540(degree)
[CH2]	Pan Fine	0-255	0-2(degree)
[CH3]	Tilt	0-255	0-270(degree)
[CH4]	Tilt Fine	0-255	0-1(degree)
[CH5]	PT Spd	0-255	Fast to slow
[CH6]	Dimmer	0-255	0-100% dimmer
[CH7]	Strobe	0-3	Dark
		4-99	Pluse strobe slow to fast
		100-149	FadeIn strobe slow to fast
		150-199	FadeOut strobe slow to fast
		200-249	Rand strobe slow to fast
		250-255	Open
[CH8]	Colour	0-9	White
		10-19	Red
		20-29	Green
		30-39	Blue
		40-49	Yellow
		50-59	Orange
		60-69	Rose Red
		70-79	White+Red
		80-89	Red+Green
		90-99	Green+Blue
		100-109	Blue+Yellow
		110-119	Yellow+Orange
		120-129	Orange+Rose Red
		130-255	Rotate reverse (slow to fast)
[CH9]	Cyan	0-255	
[CH10]	Magenta	0-255	
[CH11]	Yellow	0-255	
[CH12]	CTO	0-255	
[CH13]	Gobo	0-9	Gobo1
		10-19	Gobo2
		20-29	Gobo3
		30-39	Gobo4
		40-49	Gobo5

		50-59	Gobo6
		60-69	Gobo7
		70-79	Gobo8
		80-89	Gobo9
		90-99	White
		100-109	Shake slow to fast Gobo1
		110-119	Shake slow to fast Gobo2
		120-129	Shake slow to fast Gobo3
		130-139	Shake slow to fast Gobo4
		140-149	Shake slow to fast Gobo5
		150-159	Shake slow to fast Gobo6
		160-169	Shake slow to fast Gobo7
		170-179	Shake slow to fast Gobo8
		180-189	Shake slow to fast Gobo9
		190-223	Rotate reverse (fast to slow)
		224-255	Rotate forward (slow to fast)
[CH14]	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)
		201-255	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]	Prism1	0-127	None
		128-255	Inert prism1
[CH17]	Prism1.R	0-127	0-360(degree)
		128-187	Rotate forward (fast to slow)
		188-195	Stop
		196-255	Rotate reverse (slow to fast)

[CH18]	Frost	0-127	None
		128-255	Insert frost
[CH19]	Focus	0-255	Far to near
[CH20]	Zoom	0-255	Large to small
[CH21]	Auto Focus	0-255	Need to be used with zoom function together
[CH22]	Reset	0-100	None
		101-150	Reset Effect motor over 3 second
		151-200	Reset XY motor over 3 second
		201-255	Reset fixture over 3 second

IV Normal faulty and using attention

1) Normal faulty solution

There are professional parts like mainboard, power supply in lights. Non-professionals mustn't disassemble item and parts without authorization.

1. Lamp is not on.

Possible reason: lamps don't cool down; lamps is out of life. Solution is as following:

- The lamp doesn't cool down because of improper operation. The lamp need 10 minutes to be cooling, and then you can restart it after this;
- Check if the lamp is out of life or not, change new lamp;
- Check the if there is electric leakage, off and poor contact between lamp and ignitor ;
- Change new ignitor.

2. Beam seems dim

Possible reason: service time of lamp is long or light patch is not clean, the solution is as following:

- Check if the lamp is out of life or not, change new lamp;
- Check if the optical part and lamp is clean or not. Please clean the lamp and other parts regularly.

3. Gobo is not clear

- Check if the channel value of focus is suitable the current projection distance or not.

4. Light works intermittently.

Possible reason: The internal wiring is in protection state. The solution is as following:

- Check if the fan works or is dirty;
- Check the switch of temperature control is on or off;
- Check if the lamp is out of life or not, change new lamp

5. The light can't be controlled after reset.

Possible reason: problem signal line or the value of channel is wrong, the solution is as following:

- Check the initial address code and connection state of DMX signal line(the signal line is good or not, the XLR is loose or not);
- Add signal amplifier, and 120 ohm terminal resistance;

6. Light can't be started

Possible reason: power circuit is poor , solution is as following:

- Check if the fuse is broken or not, change new fuse;
- Check if there is the poor connection because of long transportation;
- Check the input power supply, mainboard and other parts.

2) Using attention

- Check if the local power is suitable for the rated voltage or not, leakage protector and over-current protector is suitable for the electrical load or not ;
- Don't use the power line with damaged insulating layer, don't connect the power line with other guide wire;
- Please clean the fans and parts every month. Otherwise the bad cooling system will cause some problem;
- In installation, the fixed screw must be fastening and there is must with safety rope with regular check;
- Easily flammable materials, e.g. decoration material and other surfaces and objects, must maintain a minimum distance of 3m to the housing! walls must maintain a minimum distance of 50cm to the housing! The device must be installed on a fireproof surface only (no carpet)! Always ensure a proper circulation of air;
- The continuous working hours should not be more than 10 hour and the interval time should be more than 10 minutes before restarting, otherwise the lamp will not be on because of over temperature protection;
- If you want the shutter for a long time, please use controller to close lamp;
- In order to make many lights follow scene effect, the light shouldn't stay in unfinished scene for more than 3 minutes, then many lights can work on same step.
- Please stop it if there is abnormal during usage.