
380W Beam/Spot/Wash with CMY&CTO Moving Head

Manual Book

(Color display, touch screen)



Please read this manual carefully before your operation.

Catalogue

I	Notice and Setup.....	3
1.	Maintaining.....	3
2.	Statement.....	3
3.	Notice.....	3
4.	Parameter.....	3
5.	RDM Protocol.....	4
6.	Signal connection (DMX)	4
7.	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

- Power Consumption: 700W;
- Light Power: 380W
- Light Source: 371W OSRAM Lamp
- Light source color temperature : 7000K
- Power supply: High efficiency is upon switch power supply;
- With CMY infinite color mixing system
- RDM technology: two-way data transmission to realize remote device management
- Color wheel: one color wheel, 8 colors +open;

- Gobo wheel: one fixed gobo wheel, 12 gobos+open;
- One rotation gobo wheel, 7 rotated gobos+ open;
- One effect wheel, 5 effect gobos+open
- Prism wheel: one rotated 8 prism and one 16-facet Prism;
- Dimmer: 0-100% electric dimmer;
- Bigger adjustable range of beam angle;
- Strobe: Mechanical strobe and can adjust speed, support Macro function of strobe, 1-22 times/s
- Channel: 32/24CH
- Lens optical system, electrical focus, beam angle: 2.5° -53° linear adjustment;
- Use photo-electricity reset system, self-correction;
- Pan 540° , 8Bit/16Bit;
- Tilt 270° , 8Bit/16Bit;
- Over temperature protection;
- Control mode: DMX512/Master-slave/auto-run/Art-net;
- Intelligent monitoring system: you can check the lamp use time, lamp use time, temperature and fan speed etc.
- IP grade: IP20.

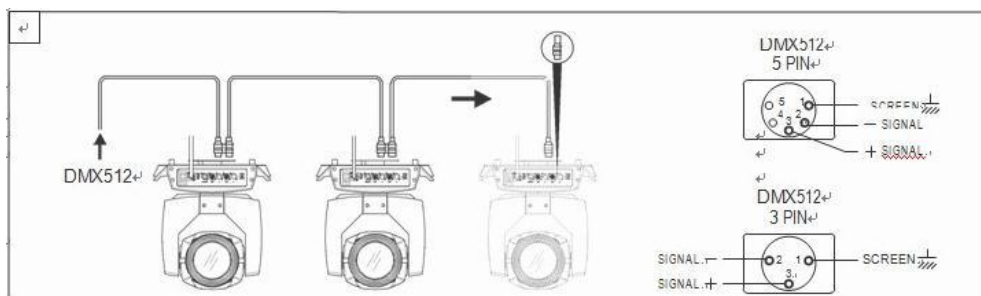
5. The fixture has RDM automatic location function, and it also support Art-net protocol

The fixture has RDM function. It can use the console to select the site, when using the console that support RDM Protocol. It also can use the controller that support RDM protocol to locate and upgrade the native program, it can also support Art-net Protocol.

6. Signal connection (DMX)

Use standard RS-485 cable: with shield, 120ohm characteristic impedance, 22-24 AWG ,low capacitive reactance. Don't use microphone cable or other characteristic cable. Use 3 or 5 XLR pin for connection. Must insert one 120ohm impedance matching resistance (lowest power is 1/4W) between 2 and 3 of terminal of end plug.

Importance reminder: Cable can't be mutual contactation or touch metal cover.



Picture 1 Schematic diagram of DMX signal connection

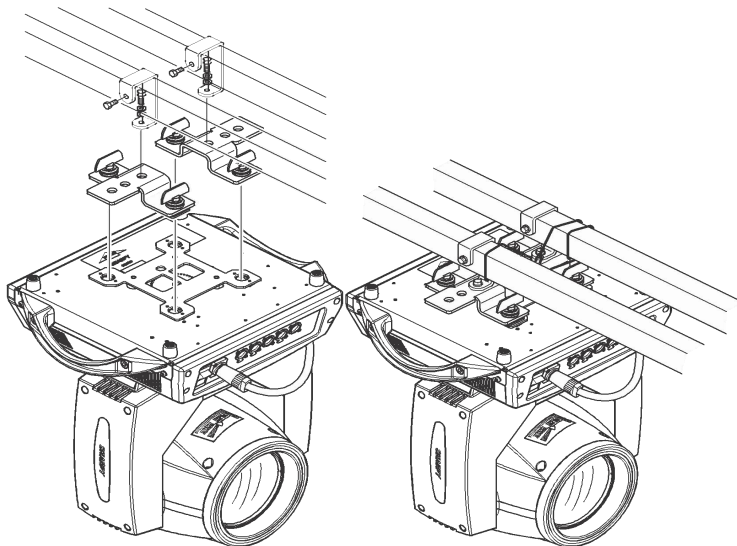
7. Installation

Light can be installed horizontal, hung and hung upside down. Please pay attention to installation method for hang and hang upside down. .

Like picture 2 , please insure the stabilization of installation site before item position, and please use clamps and safety rope for reversal hang installation.

During the installation and test, nobody can pass under light. Please regularly check if the safety rope is damaged or not and screw of clamps is loosed or not.

Our company don't respond for all the consequences because of faulty installation.



Picture 2 Reversal hang show

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 3 Display

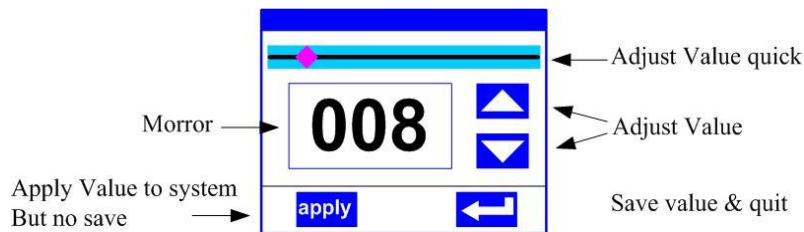
2. Operation

1. Control item by touch screen or console

- The left is TFT display and touch area. You can setup the parameter or check status by touching menu contents.
- The right is rotary encoder. Please swirl encoder to setup or check menu if you don't use TFT touch screen.

2. Value input

When the chosen parameter needs value input, the windows will be opened like picture4:

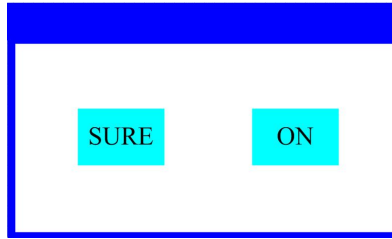


Picture 4 Value setup

- **Set value :** can move slider to set needed value fast, also can click UP or DOWN right-side or swirl the encoder to set value.
- **Use value:** After setup, please press “apply” key at left bottom, then the value is sent to light without saving.
- **Save value:** Press “Enter” at right bottom to save setup anytime.

3. Value setup

- When the value is ON or OFF, please click the corresponding item to change parameter values, and it will be saved inside storage directly. Press parameter options on right, the corresponding item will become to gray. Once release it, the item will be changed and saved. If you don't want to change parameter, please move fingers to other place on screen.
- The important boole parameter will be changed by windows like Picture 5 as following:



Picture 5 Sure input windows

4. 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;
- TEST: For lighting test, simulate the value of corresponding DMX channel;
- ADVANCE: set operating parameter;
- STATUS: check current status.



Picture 6 Submenu

3 Function operation and parameter setup

Get into menu like picture 6:

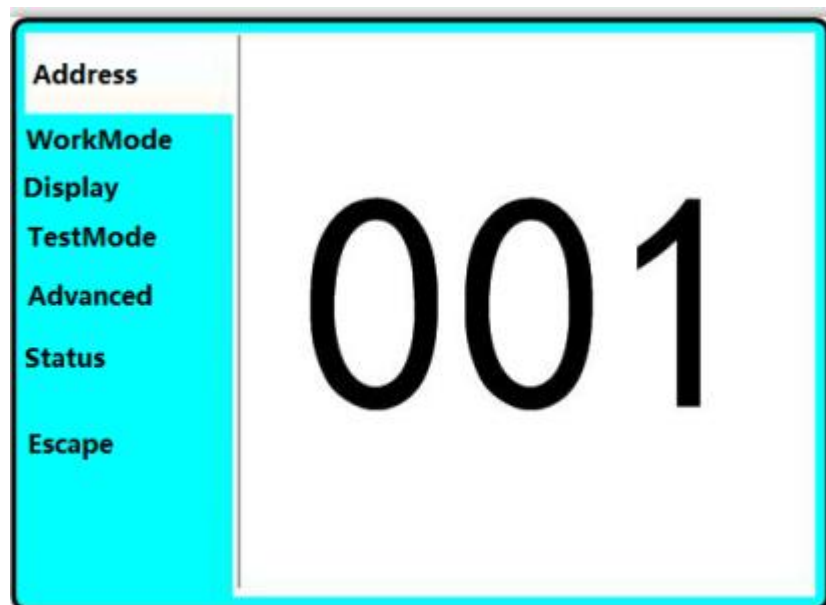
- In primary menu, can get into corresponding submenu by touching 6 different button.
- Press left blue option can change to other interface fast.

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 7 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 programme;
- **Sound active mode:** In this mode, the light is controlled by the strong sound.
- **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 reduce several motor speed channel to save the use ratio.

Address	DMX Ctrl	✓
WorkMode	Auto Run	
	Sound Ctrl	
Display	M/S Choose	OFF
TestMode	Light Switch	ON
Advanced	Channel Qty	Mode 1
Status		
Escape		

Picture 8 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 more clearer.
- **Touch screen switch:** If this is “OFF”, then you can’t use the touch screen. Only the encoder knob is useful.
- **Touch screen revise:** Press this option to adjust the precision of screen. Normally please don’t get into this option.

Address	Language	English
WorkMode	Screen Saver	Mode 3
Display	Screen Rotate	ON
TestMode	Touch Enable	ON
Advanced	Touch Rectify	
Status		
Escape		

Picture 9 Display setup

4. Test

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



Address	Pan	000
WorkMode	Pan Fine	000
Display	Tilt	000
TestMode	Tilt Fine	000
Advanced	PT Speed	000
Status	Function	000
	Colour	000
Escape	Col Fine	000

Picture 10 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.

Address	Pan Invert	OFF
WorkMode	Tilt Invert	OFF
Display	P/T Rectify	ON
TestMode	Pan Offset	010
Advanced	Tilt Offset	010
Status	Lamp when	PowerON
Escape	Data hold	OFF
	Factory Setting	

Picture 11 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;

Address	WorkMode	DMX ...
WorkMode	Address	001
Display	Version	G2.16.3.0
TestMode	Elapse	000H 01M
Advanced	Total	00000H 00M
Status	<input type="button" value="DMXClr"/> <input type="button" value="SysRst"/>	
Escape		

Picture 12 status page

III Channel description

1. Channel list

Channel Mode 1	Channel Mode 2	Function	Value	Description
CH1	CH1	Strobe	0-3	Off
			4-103	Pulse strobe from slow to fast
			104-107	ON
			108-207	Gradually strobe from slow to fast
			208-212	ON
			213-251	Random strobe from slow to fast
			252-255	ON
CH2	CH2	Dimmer	0-255	0-100% dimmer
CH3		Dimmer fine	0-255	
CH4	CH3	C	0-127	ON
			128-255	linear insert
CH5	CH4	M	0-127	ON
			128-255	linear insert
CH6	CH5	Y	0-127	ON
			128-255	linear insert
CH7	CH6	CTO	0-1	ON
			2-255	linear insert
CH8	CH7	Color	0-127	Linear color mixing
			128-134	Color 1
			135-139	Color 2
			140-145	Color 3
			146-151	Color 4
			152-158	Color 5
			159-164	Color 6
			165-170	Color 7
			171-176	Color 8
			177-182	Color 9
			183-189	Color 10
			190-220	Forward water effect from fast to slow
			221-224	Stop
			225-255	Reverse water effect from slow to fast
CH9	CH8	Fixed gobo	0-4	Open
			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
			65-69	Gobo 1 shaking from slow to fast
			70-74	Gobo 2 shaking from slow to fast
			75-79	Gobo 3 shaking from slow to fast
			80-84	Gobo 4 shaking from slow to fast
			85-89	Gobo 5 shaking from slow to fast
			90-94	Gobo 6 shaking from slow to fast
			95-99	Gobo 7 shaking from slow to fast
			100-104	Gobo 8 shaking from slow to fast
			105-109	Gobo 9 shaking from slow to fast
			110-114	Gobo 10 shaking from slow to fast
			115-127	Gobo 11 shaking from slow to fast
			128-190	Forward water effect from fast to slow
			191-192	Stop
			193-255	Reverse water effect from slow to fast
CH10	CH9	Rotated gobo	0-4	Open
			5-9	Gobo
			10-19	Gobo 1
			20-29	Gobo 2
			30-39	Gobo 3
			40-49	Gobo 4
			50-59	Gobo 5
			60-69	Gobo 6
			70-79	Gobo 7
			80-89	Gobo 1 shaking from slow to fast
			90-99	Gobo 2 shaking from slow to fast
			100-109	Gobo 3 shaking from slow to fast
			110-119	Gobo 4 shaking from slow to fast
			120-129	Gobo 5 shaking from slow to fast
			130-139	Gobo 6 shaking from slow to fast
			140-149	Gobo 7 shaking from slow to fast
			150-199	Forward water effect from fast to slow
CH11	CH10	Gobo rotation	200-255	Reverse water effect from slow to fast
			0-127	0-360 degree

			128-187	Forward water effect from fast to slow
			188-195	Stop
			196-255	Reverse water effect from slow to fast
CH12		Rotation fine	0-255	
CH13	CH11	Effect gobo	0-4	Open
			5-14	Gobo
			15-29	Gobo 1
			30-44	Gobo 2
			45-59	Gobo 3
			60-74	Gobo 4
			75-89	Gobo 1 shaking from slow to fast
			90-104	Gobo 2 shaking from slow to fast
			104-114	Gobo 3 shaking from slow to fast
			115-127	Gobo 4 shaking from slow to fast
			128-255	Circulate water effect from slow to fast
CH14	CH12	Focus	0-255	From far to near
CH15		Focus fine	0-255	From far to near
CH16	CH13	Zoom	0-255	From small to big
CH17		Auto Focus	0-31	ON
			32-63	5m
			64-127	7.5M
			128-191	10M
			192-255	15M
CH18	CH14	Prism 1	0-127	ON
			128-255	Insert 16 prism
CH19	CH15	Prism 1 rotation	0-127	0-360 degree
			128-187	Forward water effect from fast to slow
			188-195	Stop
			196-255	Reverse water effect from slow to fast
CH20	CH16	Prism 2	0-127	ON
			128-255	Insert 8 prism
CH21	CH17	Prism 2 rotation	0-127	0-360 degree
			128-187	Forward water effect from fast to slow
			188-195	Stop
			196-255	Reverse water effect from slow to fast
CH22	CH18	Frost	0-127	ON
			128-191	Wash mode
CH23	CH19	Pan	0-255	0-540 degree
CH24	CH20	Pan fine	0-255	0-2 degree
CH25	CH21	Tilt	0-255	0-270 degree
CH26	CH22	Tilt fine	0-255	0-1 degree
CH27	CH23	XY speed	0-255	From fast to slow
	CH24	Reset	100-105	Lamp off after 3 seconds

			200-205	Lamp on after 3 seconds
			240-255	Reset after 3 seconds
CH28		Color fine	0-255	
CH29		Macro	0-31	No function
			32-255	Macro
CH30		Color2	0-31	No function
			32-63	Color 1
			64-95	Color2
			96-127	Color3
			128-159	Color4
			160-191	Color5
			192-223	Color6
			224-255	Color7
CH31		Reset	0-239	No function
			240-255	Reset
CH32		Lamp	0-25	No function
			26-100	Off
			101-255	On

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.