# 380W Beam/Spot/Wash Moving Head

# **Manual Book**

(Color display, touch screen)



Please read this manual carefully before your operation.

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#### 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  $60^{\circ}$
- 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

- Lamp power: 380W;
- Power consumption: 500W;
- Power supply: High efficiency is upon switch power supply;
- Color wheel: one color wheel, 14 colors +open;
- Gobo wheel: one fixed gobo wheel, 11 gobos + white; one rotation gobo wheel, 7 rotated gobos + white; one effect wheel, 5 effect gobos
- Prism wheel: one rotated 6-facet linear prism and one 16-facet round rotating prism;
- Dimmer: 0-100% electric dimmer;
- Bigger adjustable range of beam angle;
- Strobe: Mechanical strobe and can adjust speed, support Macro function of strobe;
- Channel:32/24CH
- Lens optical system, electrical focus, beam angle: 3.8° 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;
- IP grade: IP20;

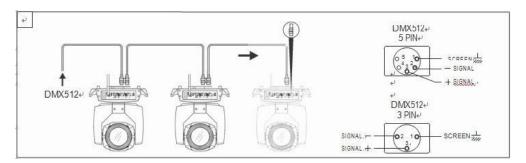
# 5. The fixture has RDM automatic location function, and it also support Art-net protocol

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-485cable: with shield, 120ohm characteristic impedance, 22-24 AWG ,low capacitive reactance. Don't use microphone care 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 contaction or touch metal cover.



Picture 1 Schematic diagram of DMX signal connection

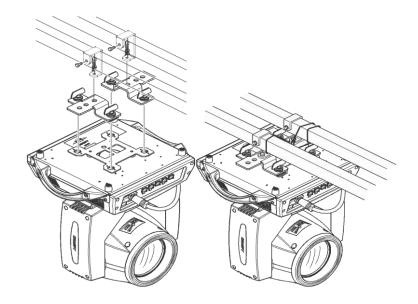
#### 7. Installation

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

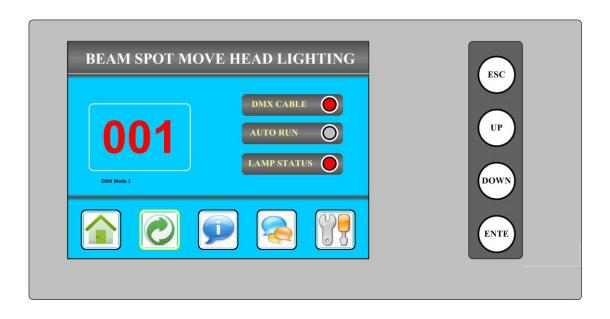
## II Menu operation

### 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.



#### 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:

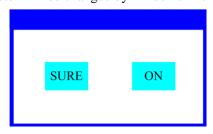


Picture 4 Value setup

- 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:



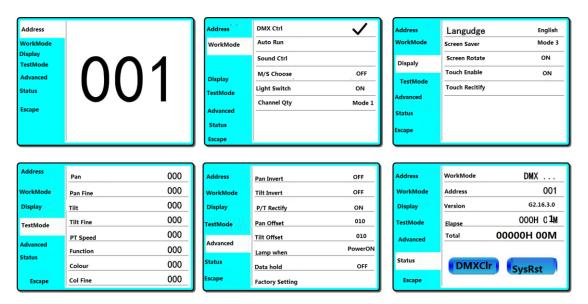
Picture 5 Sure input windows

#### 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

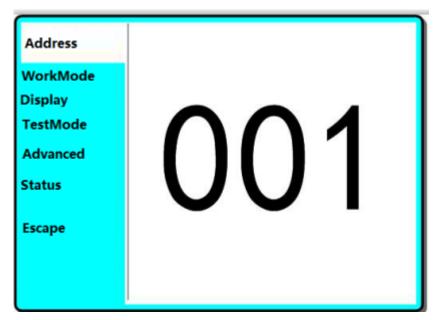
Get into menu like picture 6:

- 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.

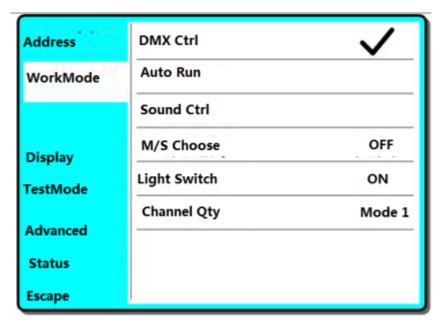


Picture 7 Add set page

#### 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.

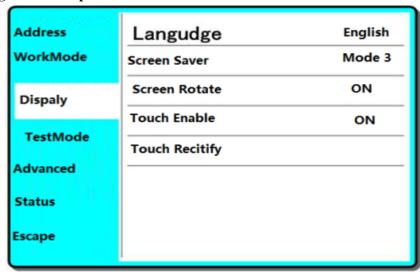


Picture 8 Run mode windows

#### 3. Set menu display

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

- Langudge: 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 Rotion: 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.

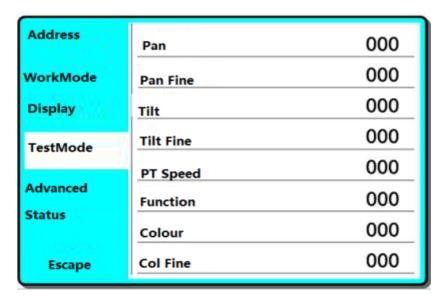


Picture 9 Display setup

#### 4. Test

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  $(0\sim255)$ ;
- Tilt motor: Value  $(0\sim255)$ ;
- FOCUS motor: Value  $(0\sim255)$ ;
- COLOR: Value  $(0\sim255)$ ;
- GOBO: Value (0~255);
- PRISM: Value  $(0\sim255)$ , when the prism is inserted, the prism rotation is on;
- FROST: Value  $(0\sim255)$ ;
- STROBE: Value (0~255).

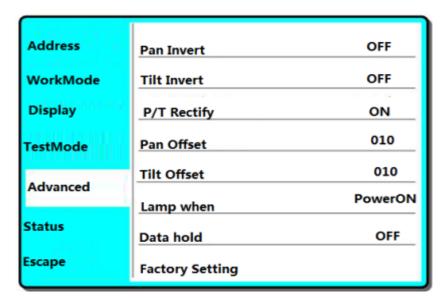


Picture 10 Test Mode

#### 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.

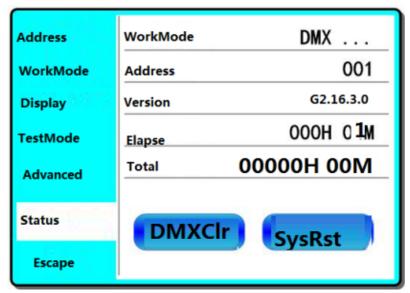


Picture 11 advance page

#### 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;



Picture 12 status page

## III Channel description

## 1. Channel list

Channel Mode 1	Channel Mode 2	Function	Value	Description
			0-3	Off
			4-103	Pulse strobe from slow to fast
	СН1	Strobe	104-107	ON
CH1			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
СНЗ		Dimmer fine	0-255	
CH4	СНЗ	С	0-127	ON
CII4	CHO	C	128-255	linear interpolation
СН5	CH4	M	0-127	ON
CHO	CH4	1/1	128-255	linear interpolation
СН6	СН5	Y	0-127	ON
CHO	CHO		128-255	linear interpolation
CH7	СН6	СТО	0-1	ON
CIII	CHO	CIO	2-255	linear interpolation
			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
CHS	CH8 CH7 Color	Color	159-164	Color 6
CHO			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	
	СН8	Fixed gobo	0-9	Open
СН9			10-14	Gobo 1
OH			15-19	Gobo 2
			20-24	Gobo 3

			25-29	Gobo 4
			30-34	Gobo 5
			35-39	Gobo 6
			40-44	Gobo 7
			45-49	Gobo 8
			50-54	Gobo 9
			55-59	Gobo 10
			60-64	Gobo 11
			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
			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
CH10	СН9	Rotated gobo	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
			200-255	Reverse water effect from slow to fast
			0-127	0-360 degree
CH11	CH10	Gobo rotation	128-187	Forward water effect from fast to slow
1		I	,	

			188-195	Stop
			196-255	Reverse water effect from slow to fast
CH12		Rotation fine	0-255	
			0-4	Open
			5-14	Gobo
		Effect gobo	15-29	Gobo 1
			30-44	Gobo 2
	CH11		45-59	Gobo 3
CH13			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
			0-31	ON
		Auto Focus	32-63	5m
CH17			64-127	7.5M
			128-191	10M
			192-255	15M
GTT 0	CH114	Prism 1	0-127	ON
CH18			128-255	Insert 6 prism
	CH15	Prism 1 rotation	0-127	0-360 degree
OH10			128-187	Forward water effect from fast to slow
CH19			188-195	Stop
			196-255	Reverse water effect from slow to fast
OHOO	OII1 C	D : 0	0-127	ON
CH20	CH16	Prism 2	128-255	Insert 16 prism
			0-127	0-360 degree
CHO1	CH17	Prism 2 rotation	128-187	Forward water effect from fast to slow
CH21			188-195	Stop
			196-255	Reverse water effect from slow to fast
CHOO	OII10		0-127	OFF
CH22	CH18	atomization	128-191	ON
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
CH28		Color fine	0-255	Fine adjustment
CH29		Macro	0-31	No function

			32-255	Macro
		Color2	0-31	No function
			32-63	Color 1
			64-95	Color2
CH30			96-127	Color3
Споо			128-159	Color4
			160-191	Color5
			192-223	Color6
			224-255	Color7
CH31	CH24	Reset	0-239	No function
Спэт			240-255	Reset
		Lamp	0-24	No function
CH32			25-100	Off
			101-200	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.
  - 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.