

# ***230W BEAM MOVING HEAD***

## ***USER MANUEL***

*RDM+Touch Screen*

**Please read this user manual before you operate it**

## 1. Notes and installation

**Before any installation, maintain and clean lamp, please make sure the power is off.**

### 1. Maintenance

- This lamp should be kept dry to avoid working in a wet environment.
- Intermittent use will effectively prolong the life of this lamp.
- In order to achieve good ventilation and lighting effects, pay attention to regularly clean the fans and fan nets and lenses.
- Do not wipe the lamp shell with organic solvents such as alcohol to avoid damage.

### 2. Lighting installation

- Lamps can be placed horizontally, oblique and upside down.
- We must pay attention to the installation method when hanging in oblique and inverted hanging. As shown in Figure 2, before positioning the lamps, to ensure the stability of the installation site, in the reverse hanging installation, must ensure that the lamps do not fall off the support frame, need to use safety rope through the support frame and lamp handle for auxiliary hanging, to ensure safety. Prevent the lamps from falling and sliding.
- When the lamps are installed and tested, pedestrians are not allowed to pass below. Regularly check whether the safety rope is worn and whether the hook screws are loose.
- Our company shall not bear any responsibility for all the consequences caused by the unstable installation of the hanging and the lamp falling.

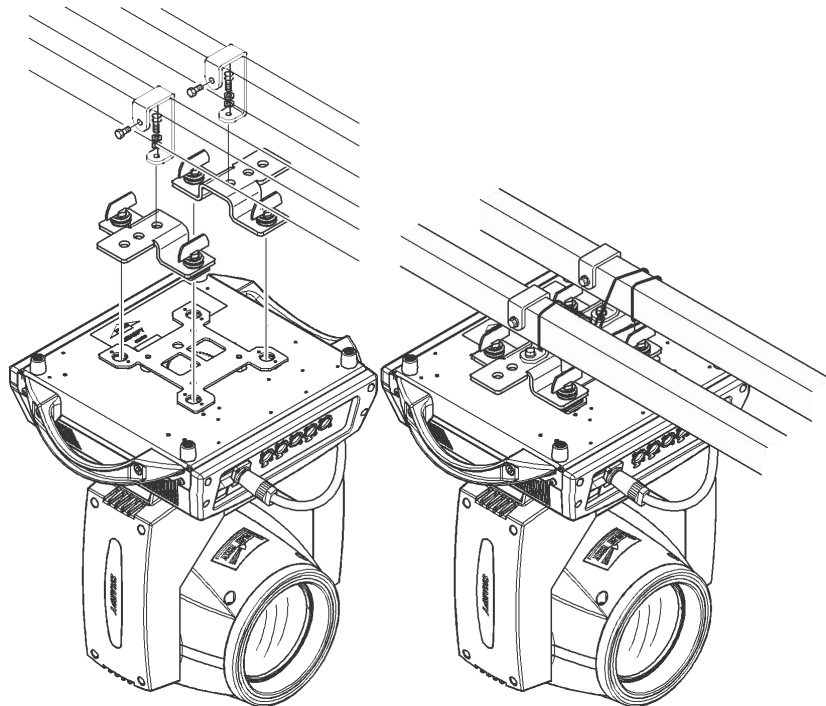


Figure 2

## 2.Operation

| touch      | wheel                             | function               |
|------------|-----------------------------------|------------------------|
| Up         | turn left                         | option/edit            |
| down       | turn right                        | option/edit            |
| OK / Enter | press the wheel                   | Executive start / exit |
| return     | when return menu ,press the wheel | return previous page   |

Set "Modify address code" as an example, tell about the using of the touch.

1. Touch button "setting" in the main interface, and then into "setting" interface.
2. The 4 touch button in the right, are "up", "ok", "down", "back".
3. Press "up" or "down" button select "DMX address".
4. Press "ok" button into editing state.
5. Press "up" button or "down" button modification address code (using the new address immediately and autosave)
6. Press "OK" button out of the editing state ( could omitted)
7. Press "back" button back to the main menu.

If using the wheel, process like bellow :

1. In the main interface , turn the wheel, select "setting" button.
2. Press the turn wheel and then loosen, into "setting" interface.
3. In the "setting" interface, select "DMX address"
4. Press the turn wheel and then loosen, into the editing state.
5. Turn the wheel, modification address code
6. After modification, press turn wheel and then loosen, out of the editing state.
7. Turn the wheel select "back", press turn wheel and then loosen, back into the main interface.

## 3. Interface description

The schematic diagram of the lamp panel is shown in Figure 3.

The upper title shows the name of the lamp, and the lower status bar shows the signal of the current lamp, bulb status, fault (when the fault information is not viewed, "ERR" is displayed, otherwise "NOR" is displayed), etc. This lamp supports DMX / RDM protocol.

When the lamp is searched by the RDM host, three letters "RDM" will appear on the panel, indicating that the lamp is enumerated normally.

Display and operation similar to "Android operating system", with the fingertip or blunt hard objects click the corresponding item can operate. Note: Do not use sharp or sharp display to prevent damage.

### 3.1 Main Interface

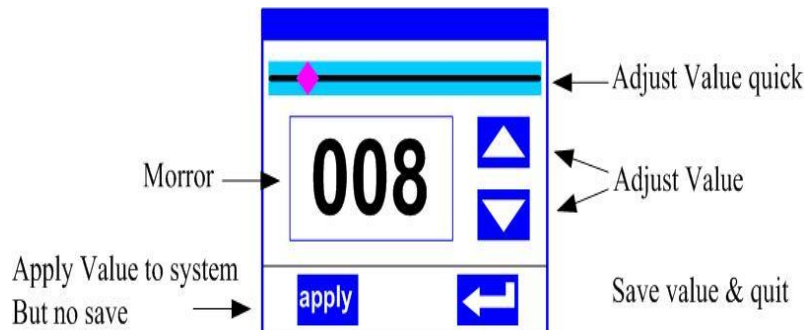


#### 1. Select the menu

- The left area is the TFT display area and touch area. Click the content of the panel with fingers or blunt surface hardware, or parameter setting or viewing status can be completed.
- The right area is the auxiliary input. If you do not use the touch function of TFT, you can use the auxiliary input to select the items to be set or viewed to complete the operation.

#### 2. Parameter numerical input

- When the selected parameter item needs to enter a numerical value, the window opens as shown in Figure 4:



- **Modify value:** Can quickly modify value via pull the slider to the desired position, or click the button of 'up' or 'down' whit finger on the right side to set the exact desired value, another way is roll encoder on the right hand side of panel.
- **Apply value:** When Value had been modified, Then press the bottom of 'apply' in the left corner to apply to the light, but hav't saved;
- **Save Value:** Any time, click on the lower right corner of the "OK" button, the setting will been saved into internal memory.

#### 2.Boolean parameter setting

- when the selected parameters is a Boolean value (such as ON or OFF), can directly modify setting by chick corresponding item, the setting will been saved right now.
- When the parameter is a key item, chick corresponding item, a dialog shown in Figure 5 will been popup ask for the confirm. Chick 'sure' to confirm.

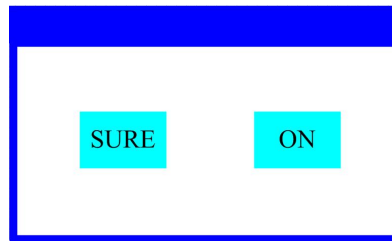


Figure 5 Dialog of confirm

### 3. Sub Menu (Parameter)

Click item of main menu, enter corresponding sub menu, shown in Figure 6, total 6 sub menu, includes class of parameter and status:

- ADDRESS: Set light DMX address.
- WORKMOD: Set light work mode, master or slave mode when in auto run mode.
- DISPLAY: Set display parameter, eg. select language.
- TEST: Used for test light, modify DMX channel data to test function, the corresponding function of reference channel function table.
- ADVANCE: Set light running parameter.
- STATUS: view light current status.



## 4.Operation and parameter instruction

Via following operation, enter sub menu(parameter menu) shown in Figure 6

- In main menu, click 1/6 function button into corresponding parameter menu.
- In sub menu(page), click main item on the left side of displayer, can shift to corresponding sub menu(page) quickly.

### 1. ADDR--> Address: Set DMX Address

Click and select the "ADDR", can enter the page of DMX address setting, range from 1 to 512, the address code shouldn't is not greater than (512- channels quantity), otherwise the light will not been controlled. Following is the operation:

Enter the page of DMX address, as shown in Figure 7, click the blank area in right side of display will pop-up diglog as in Fig. 4, modify value, then click 'ENTER' to confirm and save DMX address code.



Figure 7 page of DMX Address

## 2. MODE--> WorkMode: Set Light work mode

Enter the page of 'WorkMode' as shown in Figure 8 and modify setting. Can set light work mode, control lamp and DMX channel mode.

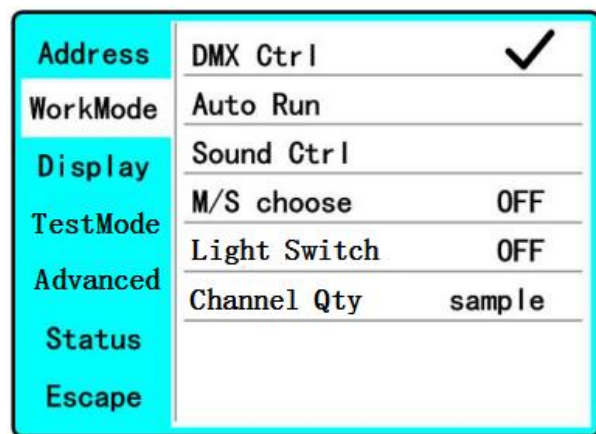


Figure 8 page of work mode

- ◆ **DMX Ctrl:** Choose to set DMX Mode,
- ◆ **Auto Run:** Choose to set Auto Mode,
- ◆ **Sound Ctrl:** Choose to set Sound Mode,
- ◆ **M/S Choose:** Available just in 'AUTO RUN' or 'SOUND Ctrl' mode.  
ON--> Master. (Data will be send to other slave lamp immediately.)  
OFF--> Slaver.(NOT send data to other lamp via DMX Cable).(Default)
- ◆ **Light Switch:**  
ON--> Turn on the light,  
OFF--> Turn off the light.
- ◆ **Channel Qty:** Light support 2 DMX Channel mode: sample or extend.  
Simple --> 16CH.(Default)  
Expand--> 20CH(or null).

## 3. DISP-->DISPLAY: Set display

Light support 2 language, rotation display, Enter page as shown in Figure9 to set parameter following:

|          |                 |         |
|----------|-----------------|---------|
| Address  | 语言              | English |
| WorkMode | Screen saver    | Mode3   |
| Display  | Screen rotation | OFF     |
| TestMode | Touch Enable    | ON      |
| Advanced | Touch Rectify   |         |
| Status   |                 |         |
| Escape   |                 |         |

Figure9 page of display

- ◆ **Language:** English / 中文.
- ◆ **Screen Saver:** when panel is idle(these is no operation in 10 second), displayer will enter saver status.
  - OFF--> No screen saver.
  - Mode1--> Power-saving mode, turn off the display.
  - Mode2--> Displays the current address.
  - Mode3--> Displays the icon and the current working mode.(Default)
- ◆ **Screen Rotion: To turning display.**
  - ON--> Normal display.(Default)
  - OFF--> 180° turning display.
- ◆ **Touch enable:** Disable or enable touch function,.
  - ON--> Enable touch function.(Default)
  - OFF--> Dosable touch function.
- ◆ **Touch adjust:** Adjust touch function. Normally, not enter this item.

#### 4.TEST--> Test Mode

Enter the page as shown in Figure 10, Light will into test mode, in this mode, the light does not receive the data for DMX controller.:

|          |        |     |
|----------|--------|-----|
| Address  | PAN    | 000 |
| WorkMode | TILT   | 000 |
| Display  | FOCUS  | 000 |
| TestMode | COLOR  | 000 |
|          | GOBO   | 000 |
| Advanced | PRISM  | 000 |
| Status   | FROST  | 000 |
| Escape   | STROBE | 000 |

Figure 10 page of Test

- ◆ **PAN:** range for 0 to 255;
- ◆ **TILT:** range for 0 to 255;
- ◆ **FOCUS:** range for 0 to 255;

- ◆ **COLOR:** range for 0 to 255;
- ◆ **GOBO:** range for 0 to 255;
- ◆ **PRISM:** range for 0 to 255;
- ◆ **FROST:** range for 0 to 255;;
- ◆ **STROBE:** range for 0 to 255;

## 5. ADVA-->Advanced: Set light run parameter

Enter the page as shown in Figure 10, set the parameter of light:

|          |                 |          |
|----------|-----------------|----------|
| Address  | PAN Inset       | OFF      |
| WorkMode | TILT Inset      | OFF      |
| Display  | P/T Rectify     | ON       |
| TestMode | PAN Offset      | 010      |
|          | TILT Offset     | 010      |
| Advanced | Lamp when       | Power ON |
| Status   | Data hold       | OFF      |
| Escape   | Factory Setting |          |

Figure 11 page of run parameter

- ◆ **Pan Invert: Reverse PAN move**  
 OFF--> Pan Normal move.(Default)  
 ON--> Reverse PAN move.
- ◆ **Tilt Invert: Reverse TILT move**  
 OFF--> Tilt Normal move.(Default)  
 ON--> Reverse Tilt move.
- ◆ **P/T Rectify: Disable or enable position rectify function.**  
 OFF--> Disable P/T rectify  
 ON--> Enable P/T rectify-(Default)
- ◆ **Pan Offset:** Set PAN original position. **Default: 10**
- ◆ **Tilt Offset:** Set TILT original position. **Default: 10**
- ◆ **Lamp when:**  
 PowerON--> Turn on the lamp when power on.(Default)  
 RstDone--> Turn on the lamp after reset.  
 Manual--> Manually turn on the lamp.
- ◆ **Data hold:**  
 OFF--> When no DMX signal,return to middle position.(Default)  
 ON--> When no DMX signal,stop in the final position.
- ◆ **Factory Setting:** Restore all parameter to factory setting.



## 6. STAT-->Status: View status

Enter the page as shown in Figure 12:

|          |                                      |               |
|----------|--------------------------------------|---------------|
| Address  | Work Mode                            | DMX ...       |
| WrokMode | Address                              | 001           |
| Display  | Version                              | B5R. 1. 1 16n |
| TestMode | Elapse                               | 000H 04M      |
| Advanced | Tatol                                | 00000H 04M    |
| Status   | <div>DMX Clr</div> <div>SysRst</div> |               |
| Escape   |                                      |               |

Figure 12 page of status

- ◆ **Work Mode:** Show the current working mode.
- ◆ **Address:** Show the current address.
- ◆ **Version:** Show the version of the lamp.
- ◆ **Elapse:** Working hours after turn on.
- ◆ **Tatol:** Cumulative hours of operation



When <Data hold> set <ON>,click to clear DMX data, and make the lamp return to themiddle position.



Click to reset.

## 5. Channel List

| CH             | NAME | Function | Value   | BRIEF                                           |
|----------------|------|----------|---------|-------------------------------------------------|
| Sample<br>16CH | CH1  | COLOR    |         | Select color or mode--(See details: 4-2. COLOR) |
|                | CH2  | STROBE   | 0~3     | Dark                                            |
|                |      |          | 4~103   | Strobe from slow to fast                        |
|                |      |          | 104~107 | White                                           |
|                |      |          | 108~207 | Pulse strobe from slow to fast                  |
|                |      |          | 208~212 | White                                           |
|                |      |          | 213~251 | Random strobe from slow to fast                 |

|                        |      |                 |         |                                       |
|------------------------|------|-----------------|---------|---------------------------------------|
|                        |      |                 | 252~255 | White                                 |
|                        | CH3  | DIMMING         | 000-255 | dimming 0~100%                        |
|                        | CH4  | <b>GOBO</b>     |         | Select gobo--(See details: 4-3. GOBO) |
|                        | CH5  | PRISM           | 0~127   | Remove prism                          |
|                        |      |                 | 128~255 | Insert prism                          |
|                        | CH6  | ROTATE<br>PRISM | 0~127   | Angle 0~400                           |
|                        |      |                 | 128~190 | Rotate forward (Fast -- slow)         |
|                        |      |                 | 191~192 | Stop                                  |
|                        |      |                 | 193~255 | Rotate reverse (Slow -- fast)         |
|                        | CH7  | NULL            |         |                                       |
|                        | CH8  | FROST           | 0~127   | No frost                              |
|                        |      |                 | 128~255 | Insert frost                          |
|                        | CH9  | DIMMING         | 000-255 | dimming 0~100%                        |
|                        | CH10 | PAN             | 000-255 | 0~540°                                |
|                        | CH11 | PAN FINE        | 000-255 |                                       |
|                        | CH12 | TILT            | 000-255 | 0~270°                                |
|                        | CH13 | TILT FINE       | 000-255 |                                       |
|                        | CH14 | EMPTY           |         |                                       |
| <b>Extend<br/>20CH</b> | CH15 | RESET           | 0~127   | none                                  |
|                        |      |                 | 128~255 | Reset light (stay over 3 second)      |
|                        | CH16 | LAMP            | 0~25    | none                                  |
|                        |      |                 | 26~100  | Turn off lamp (stay over 3 second)    |
|                        |      |                 | 101~255 | Turn on lamp (stay over 3 second)     |
|                        | CH17 | P/T SPEED       | 0~255   | PAN & TILT SCAN SPEED FAST TO SLOW    |
|                        | CH18 | COLOR SPEED     | 0~255   | COLOR SPEED FAST TO SLOW              |
|                        | CH19 | FOCUS SPEED     | 0~255   | FOCUS SPEED FAST TO SLOW              |
|                        | CH20 | GOBO SPEED      | 0~255   | GOBO SPEED FAST TO SLOW               |

## COLOR

| CH NO. | NAME  | VALUE | FUNCTION        |
|--------|-------|-------|-----------------|
| CH1    | COLOR | 0-4   | WHITE           |
|        |       | 5-9   | WHITE+COLOR1    |
|        |       | 10-14 | COLOR1          |
|        |       | 15-19 | COLOR1 + COLOR2 |
|        |       | 20-24 | COLOR2          |
|        |       | 25-29 | COLOR2 + COLOR3 |
|        |       | 30-34 | COLOR3          |
|        |       | 35-39 | COLOR3 + COLOR4 |
|        |       | 40-44 | COLOR4          |
|        |       | 45-49 | COLOR4 + COLOR5 |
|        |       | 50-54 | COLOR5          |
|        |       | 55-59 | COLOR5 + COLOR6 |
|        |       | 60-64 | COLOR6          |
|        |       | 65-69 | COLOR6 + COLOR7 |

|  |  |         |                               |
|--|--|---------|-------------------------------|
|  |  | 70-74   | COLOR7                        |
|  |  | 75-79   | COLOR7 + COLOR8               |
|  |  | 80-84   | COLOR8                        |
|  |  | 85-89   | COLOR8 + COLOR9               |
|  |  | 90-94   | COLOR9                        |
|  |  | 95-99   | COLOR9 + COLOR10              |
|  |  | 100-104 | COLOR10                       |
|  |  | 105-109 | COLOR10 + COLOR11             |
|  |  | 110-114 | COLOR11                       |
|  |  | 115-119 | COLOR11 + COLOR12             |
|  |  | 120-124 | COLOR12                       |
|  |  | 125-129 | COLOR12 + COLOR13             |
|  |  | 130-134 | COLOR13                       |
|  |  | 135-139 | COLOR13 + COLOR14             |
|  |  | 140-144 | COLOR14                       |
|  |  | 145-149 | COLOR14 + WHITE               |
|  |  | 150-255 | Rotate forward (Fast -- slow) |

## GOBO

| CH NO. | NAME | VALUE  | FUNCTION                      |
|--------|------|--------|-------------------------------|
| CH4    | GOBO | 0-4    | WHITE                         |
|        |      | 5-9    | Gobo1                         |
|        |      | 10-14  | Gobo2                         |
|        |      | 15-19  | Gobo3                         |
|        |      | 20-24  | Gobo4                         |
|        |      | 25-29  | Gobo5                         |
|        |      | 30-34  | Gobo6                         |
|        |      | 35-39  | Gobo7                         |
|        |      | 40-44  | Gobo8                         |
|        |      | 45-49  | Gobo9                         |
|        |      | 50-54  | Gobo10                        |
|        |      | 55-59  | Gobo11                        |
|        |      | 60-64  | Gobo12                        |
|        |      | 65-69  | Gobo13                        |
|        |      | 70-74  | Gobo14                        |
|        |      | 75-79  | Gobo15                        |
|        |      | 80-84  | Gobo16                        |
|        |      | 85-89  | Gobo17                        |
|        |      | 90-129 | Rotate forward (Fast -- slow) |

|  |  |         |                               |
|--|--|---------|-------------------------------|
|  |  | 130-134 | stop (white)                  |
|  |  | 135-170 | Rotate reverse (Slow -- fast) |
|  |  | 171-175 | Gobo1,shaking slow to fast    |
|  |  | 176-180 | Gobo2,shaking slow to fast    |
|  |  | 181-185 | Gobo3,shaking slow to fast    |
|  |  | 186-190 | Gobo4,shaking slow to fast    |
|  |  | 191-195 | Gobo5,shaking slow to fast    |
|  |  | 196-200 | Gobo6,shaking slow to fast    |
|  |  | 201-205 | Gobo7,shaking slow to fast    |
|  |  | 206-210 | Gobo8,shaking slow to fast    |
|  |  | 211-215 | Gobo9,shaking slow to fast    |
|  |  | 216-220 | Gobo10,shaking slow to fast   |
|  |  | 221-225 | Gobo11,shaking slow to fast   |
|  |  | 226-230 | Gobo12,shaking slow to fast   |
|  |  | 231-235 | Gobo13,shaking slow to fast   |
|  |  | 236-240 | Gobo14,shaking slow to fast   |
|  |  | 241-245 | Gobo15,shaking slow to fast   |
|  |  | 246-250 | Gobo16,shaking slow to fast   |
|  |  | 251-255 | Gobo17,shaking slow to fast   |

## 6. Maintenance

- a. If the light's lens damaged or broken, and should need change the new lens, if the bulb damaged or have any deformation, make the light dim, it says that the bulb had run out of it's life., should change in time. There are 3 thermal protection device, using for cut off the lights power when it is heating. If the thermal protection device set up, and then need to check whether the fan is normal.
- b. It need Periodically to clean the out and in optical lens and the reflector's. Out put for the optimization lighting effect, clean time need to see the lights operating frequency and the using of the surrounding environment, using the soft cloth or general glass cleaning products to clean. Suggest clean the external optical system every 20 day, at least clean the internal optical system every 60 days.
- c. Please don't to use the alcohol etc organic solvent clean the out shell, in case it is damaged.