User manual

280 LED BSW

Please read the instructions carefully before use

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STATEMENT

The product has well capability and intact packing when leave factory. All of the user should comply with warning item and manual, any misuse cause of the damages are not included in our guarantee, and also can not be responsible for any malfunction & problem owing to ignore the manual.

1.Safety Instructions

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.

•Unpack and check carefully there is no transportation damage before using the unit.

•Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.

•It's important to ground the yellow/green conductor to earth in order to avoid electric shock.

•The unit is for indoor use only. Use only in a dry location.

•The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.

•Disconnect main power before replacement or servicing.

•Make sure there are no flammable materials close to the unit while operating as it is fire hazard.

•Use safety cable when fixes this unit. DO NOT handle the unit by taking its head only, but always by taking its base.

•Maximum ambient temperature is Ta: 40℃. DO NOT operate it where the temperature is higher than this Unit surface temperature may reach up to 85℃. DO NOT touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.

•the event of serious operating problem, stop using the unit immediately.Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.

•DO NOT touch any wire during operation as high voltage might be causing electric shock.

Warning:

•To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.

•The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

Caution:

•There are no user serviceable parts inside the unit. DO NOT open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

Installation:

•The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

•The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people.

2.Technical Specifications

280W LED BSW 3-in-1 moving head

Optics:

Light Source:280W white LED

beam angle:6°-28°

power:380W

LED color temperature: 8000K

Input voltage:AC100-240V 50-60HZ

Pan movement:540° (16bit precision scan) electronic error correction

Tilt movement:270°(16bit precision scan) electronic error correction

Color: 9 colors + Open，Split Color ,continue bi-directional rotating

Fixed patterns: 12 fixed patterns + white light

Static gobo wheel： 9Gobo+Open and gobo shake , gobo continue bi-directional rotating

rotating gobo wheel: 7 gobo + open ,and gobo shake , gobo continue bi-directional rotating

Prism: 8 facet and   6-faced linear facet rotatable prisms

  Frost filter for wash effect

fan cooling(fan speed up as per temperature change)

Dimming system: 0-100% linear adjustment

Display mode:2.4inch 180°Reversible color display screen

Features:

Appearance material: high temperature resistant plastic

DMX Channels:20 channels

Control: DMX 512/ master-slave/self-propelled/console reset/RDM

Dimension: 320×236×538 mm, NW:18 kg

3.Control Menu

Configuring the Starting Address

Each fixture requires a starting address from 1~512. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the starting address. For example, a fixture that uses seven DMX channels and is addressed to start on DMX channel 100, will read data from channels: 100, 101, 102, 103, 104, 105 and 106. Choose the starting addresses for each fixture so that the channels used do not overlap. In addition, you should note the starting address selected for future reference.

Control Panel Functions

The Control Panel shows the current state of the unit. It is used to select the operating mode, as well as the sub-features. For a detailed layout of the control panel functions, please see the "menu map" section on the following page.
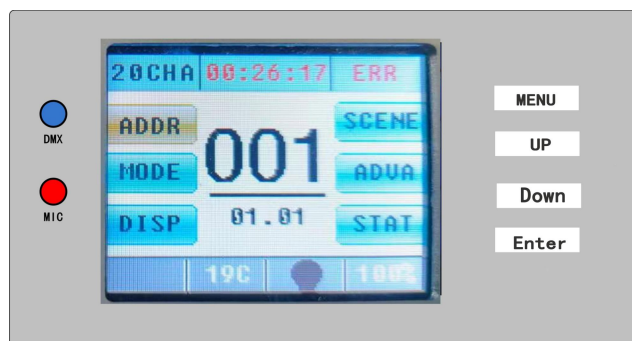
[BACK] menu selection or return to previous menu.

[UP] press [UP] through the menu list to increase/change the value of the current function.

[DOWN] press [DOWN] through the menu list to decrease/change the value of the current function.

[RIGHT] press [RIGHT] through the menu list to increase/change the value of the current function.

[OK] confirm & quit out current function setting.

1. Sub Menu（Parameter）

Chick item of main menu, enter corresponding sub menu, shown in figure3, 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.
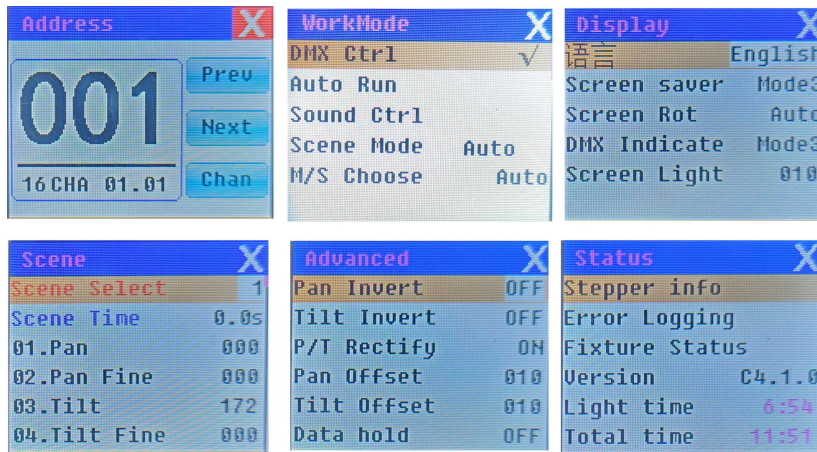
2 Operation and parameter instruction

Via following operation, enter sub menu(parameter menu) shown in figure3

- In main menu, click [UP] [DOWN] [RIGHT] [OK] button into corresponding parameter menu.

3   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 Figure4, click [UP] OR [DOWN] chose the address code area,click [OK] key confirm and then click [UP] and [DOWN] again to modify value, then click 'ENTER' to confirm and save DMX address code.


4   Set Light work mode

Enter the page of 'WORK MOD' as shown in figure5 and modify setting. Can set light work mode, control lamp and DMX channel mode..

Light includes 3 work mode: DMX MODE, AUTO RUN and SOUND MODE, Parameter definition as following:
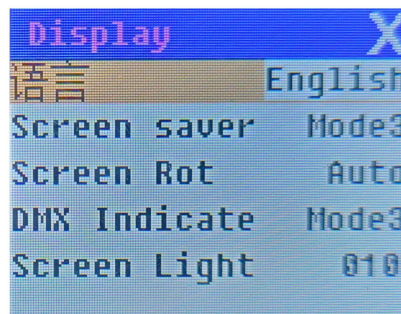
- **DMX Mode**：Under this mode, the light receive data from the DMX controller and move.
- **AUTO RUN**：Under this mode, light will run with inside code(data), ignore data from DMX controller.
- **SOUND Ctrl**：Under this mode, light ignore data from DMX controller., When there is a strong sound in stage, the light will run a scene, otherwise it will keep the last scene.
- **M/S Choose**：'M/S Choose' is available when light just in 'AUTO RUN' or 'SOUND Ctrl' mode. If this item is set as 'OFF', the light don't send data to other light via DMX Cable. When 'ON', the data will send to other slave light immediately.
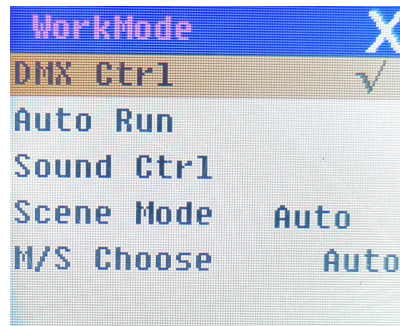
5 Set display

Light support 2 language, rotation display，Enter page as shown in figure 6 to set parameter following:

- **Language**：Select display as simplified Chinese or English.
- **Screen Saver**：when panel is idle(these is no operation in 10 second), displayer will enter saver status. When set as 'mode 1'，saver status is close display, as 'mode 2' saver status will display DMX address code(DMX MODE) or display LOGO(AUTO RUN or SOUND CTRL). As 'OFF', keep light up displayer and show main menu。
- **Screen Rotation**：rotate displayer.
- **Touch enable** ：Disable or enable touch function, when disable, use encoder to operate light and set parameter.
- **Touch adjust**：adjust touch function, normally, not enter this item.

6 Test light

Enter the page as shown in figure 7, Light will into test mode, in this mode, the light does not receive the data for DMX controller.:

- 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;。
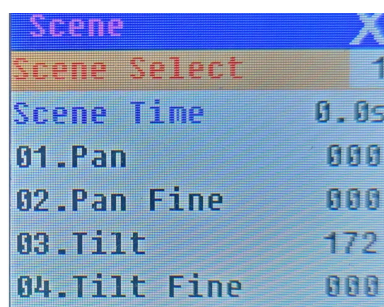

7 Set light run parameter

Enter the page as shown in fugure 8 , set the parameter of light:

- Pan Invert: Reverse PAN move.
- Tilt Invert: Reverse TILT mover.
- Rectify enable：set as 'OFF', PAN or TILT will disable position rectify function. As 'ON', when PAN or TILT lose steps, light will rectify auto.
- Pan Offset: Set PAN original position.
- Tilt Offset: Set TILT original position.

- Lamp up when: Select lamp on mode, includes 3 mode: power on, after reset done and manual；
- Factory setting: restore all parameter to factory setting.
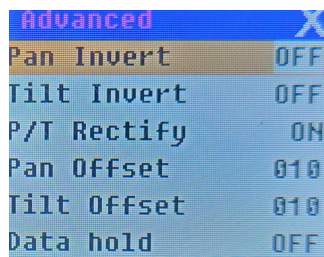
8   View status

Enter the page as shown in figure 3 ,

- View light current status, version；
- DMXClr: Click to clear all DMX data to '0'.
- SysRst：Click to reset light.

4.DMX Channels

DMX channel´s functions and values (20DMX channels)

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	Pan/Tilt speed	0-255	From fast to slow
CH6	Dimmer	0-255	Dimmer 0-100%
CH7	**Strobe**	0-3	No function
		4-127	Strobe at linearly variable frequency from slow to fast
		128-191	Pulsation at linearly variable speed
		192-251	Random strobe
		252-255	No function
CH8	**Color**	0-127	Open/White
		128-134	white
		135-140	Color 1
		141-145	Color 2
		146-150	Color 3
		151-155	Color 4
		156-160	Color 5
		161-165	Color 6
		166-170	Color 7
		171-175	Color 8
		176-180	Color 9
		181-216	Color auto changing from fast to slow
		217-220	stop
		221-255	Forwards rainbow effect from fast to slow
		201-255	Backwards rainbow effect from slow to fast
CH9	**Color fine**	0-255	

		0-9	Open
CH10	Fix 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	Gobo8
		90-99	Gobo 9
		100-109	Gobo 1 shake from slow to fast
		110-119	Gobo 2 shake from slow to fast
		120-129	Gobo 3 shake from slow to fast
		130-139	Gobo 4 shake from slow to fast
		140-149	Gobo 5 shake from slow to fast
		150-159	Gobo 6 shake from slow to fast
		160-169	Gobo 7 shake from slow to fast
		170-179	Gobo 8 shake from slow to fast
		180-189	Gobo 9 shake from slow to fast
		190-221	forwards gobo rotation from slow to fast
		222-223	stop
		224-255	Backwards gobo rotation from slow to fast
CH11	Rot Gobo	0-9	Open
		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 shake from slow to fast
		90-99	Gobo 2 shake from slow to fast
		100-109	Gobo 3 shake from slow to fast
		110-119	Gobo 4 shake from slow to fast
		120-129	Gobo 5 shake from slow to fast
		130-139	Gobo 6 shake from slow to fast
		140-149	Gobo 7 shake from slow to fast
		150-200	Forwards gobo rotation from slow to fast
		201-204	STOP
		205-255	Backwards gobo rotation from slow to fast
CH12	Gobo Rot	0-127	Rotation from 0-400degree
		128-190	Forwards gobo rotation from fast to slow
		191-192	Stop
		193-255	Backwards gobo rotation from slow to fast
CH13	Gobo rot fine	0-255	
CH14	Prism	0-127	No function

CH14	prism	128-187	Prism 1
		188-195	Prism 2
CH15	Prism rot	0-127	Rotation from 0-400 degree
		128-187	Forwards rotation from fast to slow
		188-195	Stop
		196-255	Backwards rotation from slow to fast
CH16	Frost	0-127	No function
		128-255	Frost
CH17	Zoom	0-255	
CH18	Focus	0-255	
CH19	Focus fine	0-255	
CH20		0-49	No function
	Auto	50-127	Auto
	Reset	128-255	Reset after 6 second

5.Dimension
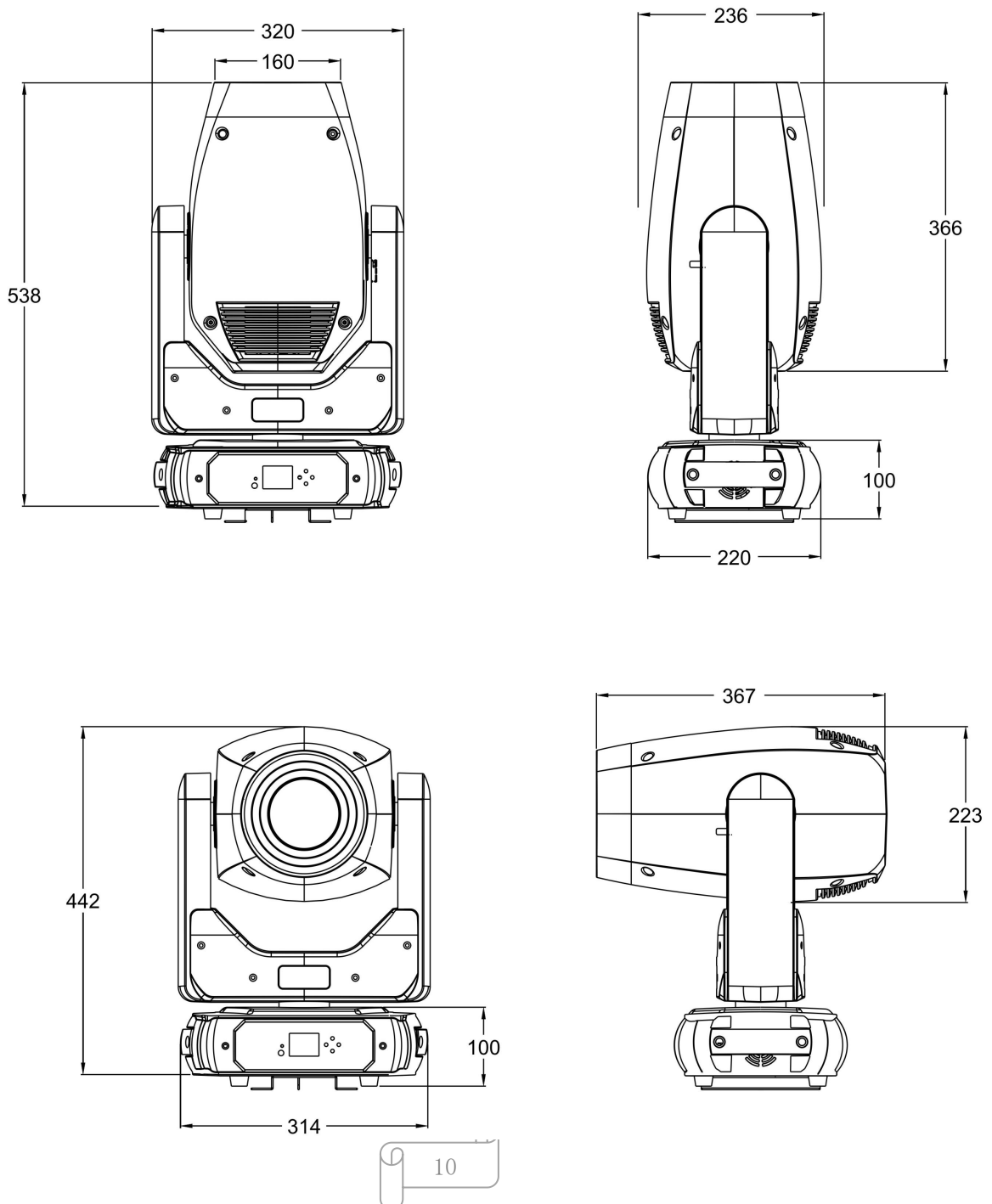
6.Trouble Shooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work, no light and the fan does not work
1. Check the connection of power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED.

B. Not responding to DMX controller
1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.

2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.

3. If you have intermittent DMX signal problems, check the pins on connectors or on

PCB of the unit or the previous one.

4. Try to use another DMX controller.

5. Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or

   interference to DMX interface circuit.

C. One of the channels is not working well
1. The stepper motor might be damaged or the cable connected to the PCB is broken.

2. The motor's drive IC on the PCB might be out of condition

7.Fixture Cleaning

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to

optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp,

smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

Clean with soft cloth using normal glass cleaning fluid.

Always dry the parts carefully.

Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.