

230 SPOT
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 50 cm 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 $\mathrm{Ta}: 40^{\circ} \mathrm{C}$. DO NOT operate it where the temperature is higher than this Unit surface temperature may reach up to $85^{\circ} \mathrm{C}$. 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

Input Voltage: $100-240 \mathrm{~V}, 50 / 60 \mathrm{~Hz}$
Power consumption: 250W
Beam angle: $15^{\circ}, 8^{\circ}, 3^{\circ}$ in optional
Light source: Advanced 230w white led
Led life: 60.000 hours
Luminous Flux: 16200 lumen .
Pan: $540^{\circ}$ (16bit) Electric correction
Tilt: $270^{\circ}$ (16bit) Electric correction
Gobos:
Outside $\$ 25.8 \mathrm{~mm}$, inside $\$ 21.5 \mathrm{~mm}$
6+ open custom interchangeable rotating gobo. indexable and gobo Shaking

8+ open fixed gobos•

Prism: 6-faced linear , 8-facet prism , frost
Motorized auto focus
Full range 0-100\% dimmer
Frost effect

Dimming:0-100\% linear adjustment
DMX Channels:16 channels
Control mode:DMX512,Auto, Sound active, Master/slave
Dimension:275*245*353 mm; NW: 12KGS;GW:14KGS

## 3.Control Menu


[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] to return to previous menu.
[OK] confirm \& quit out current function setting.

| set up |  | function |
| :---: | :---: | :---: |
| Address | $1-512$ | Set address code |
| Channel | 16 CH | Set channel |
| Run Mode | DMX, Sound, <br> Master/Slave, <br> Auto | Set Run mode |
| Address Auto | ON/OFF | The address code is automatically calculated. For example, the current <br> address code is 1 and the channel mode is 16CH. After the address code is <br> turned on automatically, press the set address code to automatically add 16, <br> that is, the address code becomes 17 |
| Signal hold | ON/OFF | After opening, the original action will be maintained if there is no signal |
| Pan Tilt Swap | ON/OFF | X and Y channel exchange |
| PanREV | ON/OFF | X-axis reversal |
| TiltREV | ON/OFF | Y-axis reversal |
| Encoder | ON/OFF | Encoder error correction |
| Hall | ON/OFF | Hall error correction |
| Restore settings | Yes / no | Restore factory settings (but do not restore trim data) |

## 4.DMX Channels

## CH16

| 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 | 0-2 degree |
| CH5 | Pan/Tilt speed | 0-255 | From fast to slow |
| CH6 | Dimmer | 0-255 | Dimmer 0-100\% |
| CH7 | Strobe | 0-3 | No function |
|  |  | 4-100 | Strobe at linearly variable frequency from slow to fast |
|  |  | 101-150 | Pulsation at linearly variable speed |
|  |  | 151-200 | Pulsation at linearly variable speed |
|  |  | 201-250 | Random strobe |
|  |  | 251-255 | No function |
| CH8 | Color | 0-9 | Open/White |
|  |  | 10-19 | Half color White + Red |
|  |  | 20-29 | Color 1 Red |
|  |  | 30-39 | Half color Red + Green |
|  |  | 40-49 | Color 2 Green |
|  |  | 50-59 | Half color Green + Blue |
|  |  | 60-69 | Color 3 Blue |
|  |  | 70-79 | Half color Blue + yellow |
|  |  | 80-89 | Color 4 Yellow |
|  |  | 90-99 | Half color Yellow + Orange |
|  |  | 100-109 | Color 5 Orange |
|  |  | 110-119 | Half color Orange + Magenta |
|  |  | 120-129 | Color 6 Magenta |
|  |  | 130-139 | Half color Magenta + Warm White |
|  |  | 140-149 | Color 7 Warm White |
|  |  | 150-159 | Half color Warm White + White |
|  |  | 160-204 | Forwards rainbow effect from fast to slow |
|  |  | 205-210 | Stop |
|  |  | 211-255 | Backwards rainbow effect from slow to fast |
| CH9 | Focus | 0-255 |  |
|  |  | 0-9 | Open |
|  |  | 10-19 | Gobo 1 |
|  |  | 20-29 | Gobo 2 |
|  |  | 30-39 | Gobo 3 |


| CH10 | Gobo 1 | 40-49 | Gobo 4 |
| :---: | :---: | :---: | :---: |
|  |  | 50-59 | Gobo 5 |
|  | Gobo 1 | 60-69 | Gobo 6 |
|  |  | 70-79 | Gobo 1 shake from slow to fast |
|  |  | 80-89 | Gobo 2 shake from slow to fast |
|  |  | 90-99 | Gobo 3 shake from slow to fast |
| CH10 |  | 100-109 | Gobo 4 shake from slow to fast |
|  |  | 110-119 | Gobo 5 shake from slow to fast |
|  |  | 120-129 | Gobo 6 shake from slow to fast |
|  |  | 130-190 | forwards gobo rotation from slow to fast |
|  |  | 191-194 | Stop |
|  |  | 195-255 | Backwards gobo rotation from slow to fast |
| CH11 | $\begin{gathered} \text { Gobo } 1 \\ \text { Rot } \end{gathered}$ | 0-127 | Index |
|  |  | 128-189 | Forwards gobo rotation from fast to slow |
|  |  | 190-193 | Stop |
|  |  | 194-255 | Backwards gobo rotation from slow to fast |
| CH12 | Indexing fine | 0-255 |  |
| CH13 | Gobo 2 | 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 8 |
|  |  | 90-99 | Gobo 1 shake from slow to fast |
|  |  | 100-109 | Gobo 2 shake from slow to fast |
|  |  | 110-119 | Gobo 3 shake from slow to fast |
|  |  | 120-129 | Gobo 4 shake from slow to fast |
|  |  | 130-139 | Gobo 5 shake from slow to fast |
|  |  | 140-149 | Gobo 6 shake from slow to fast |
|  |  | 150-159 | Gobo 7 shake from slow to fast |
|  |  | 160-169 | Gobo 8 shake from slow to fast |
|  |  | 170-210 | forwards gobo rotation from slow to fast |
|  |  | 211-214 | Stop |
|  |  | 215-255 | Backwards gobo rotation from slow to fast |
| CH14 | prism | 0-66 | No function |
|  |  | 67-128 | Prism 1 |
|  |  | 129-191 | Prism 2 |
|  |  | 192-255 | Frost |
| CH15 | Prism rot | 0-127 | Index |
|  |  | 128-188 | Forwards rotation from fast to slow |
|  |  | 189-194 | Stop |
|  |  | 196-255 | Backwards rotation from slow to fast |


| CH 16 | $0-25$ | No function |
| :--- | :--- | :--- | :--- |
|  | $26-76$ | Reset Small motors |
|  | $77-127$ | Reset Pan/Tilt |
|  | $128-255$ | Reset all motors |

## 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
4. $D M X$ LED should be on. If not, check $D M X$ connectors, cables to see if link properly.
5. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
6. If you have intermittent $D M X$ signal problems, check the pins on connectors or on PCB of the unit or the previous one.
7. Try to use another DMX controller.
8. 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
9. The stepper motor might be damaged or the cable connected to the PCB is broken.
10. The motors 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.
$\square$ Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

