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## WHACK BEAM SPOT

## XP-280 BS



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9. Safety Instruction


## Please read the instruction manual carefully which includes important information about the installation, usage and maintenance.

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

## Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully that there is no transportation damage before using the unit.
- The unit is for indoor use only. Use only in a dry location.
- Do install and operate by qualified operator.
- Do not allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.
- 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; otherwise the unit will be overheated.
- Before operating, ensure that the voltage and frequency of power supply matches the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Maximum ambient temperature TA: $40^{\circ} \mathrm{C}$. Don't operate it when the temperature is higher.
- Don't connect the device to any dimmer pack.
- During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, and it will decrease gradually within 15 minutes.
- Make sure there are no flammable materials close to the unit while operating to avoid fire hazard.
- Examine the power wires carefully; replace them immediately if there is any damage.
- Unit's surface temperature may reach up to $85^{\circ} \mathrm{C}$. Don't touch the housing bare-handed during its operation, and allow about 15 minutes for cooling the unit down before replacing bulb or maintenance as it could be very hot.
- Avoid any inflammable liquids, water or metal objects entering the unit. Once it happens, cut
off the mains power immediately.
- Do not operate in dirty or dusty environment; do clean the fixture regularly.
- Do not touch any wire during operation as there might be a hazard of electric shock.
- Avoid power wires twist other cables.
- The minimum distance between light output and the illuminated surface must be more than 12 meters.
- Disconnect mains power before fuse/lamp replacement or servicing.
- Replace fuse/lamp only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- Do not open the unit as there are no user serviceable parts inside.
- 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 if needed.
- Disconnect the mains power if the fixture is has not been used for a long time.
- Do use the original packing materials before transporting it once again.
- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- Hot lamp explosion hazard. Do not open the unit within 15 minutes after switching off.
- Do replace the bulb once it is damaged, deformed or life-expired.
- Do not look directly at the light while the bulb is on.
- Never touch bulb with bare fingers, as it is very hot after using.
- Do not start on the unit without bulb enclosure or when housing is damaged.


## Installation:

1. Bolt each clamp (1) to the Omega holder with screw and lock nut through the hole in the holder.
2. Fasten the omega holders (2) on the bottom of the base by inserting quick-lock fasteners (3) into the holes of the base and tighten fully clockwise.
3. Hang the fixture to the support (4) through clamp and fasten the screws (5). Fasten the safety cable (6) through the bottom of the base and over the support.


## Attention:

- Always ensure 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 without any harming deformation.
- Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.
- Make absolute sure that the unit is firmly fixed in way that no vibrating or slipping would occur during operation.
- The equipment must be installed beyond the areas where persons may walk by or be seated.
- The rigging has to be operated by or under the guide of a skilled person.


## 3. Technical Specification

## Power Supply:

$100 \sim 240 \mathrm{~V}, 50 / 60 \mathrm{~Hz}$

## Power Consumption:

455W
Lamp:
280W Lamp

## Optical system

High efficient Optical system
Delivering extremely powerful output

High quality lens

## Movement

Pan: $540^{\circ}$
Tilt: $270^{\circ}$
Pan/Tilt moving speed adjustable.

## Automatic Pan/Tilt correction

Easy calibration and maintenance by Pan/Tilt magnetic home positioning

## Dimmer/Shutter:

Mechanical dimmer
Mechanical shutter and adjustable speed strobe effect

## Color wheel:

Color wheel: 13 fixed colors
Rainbow effect in both directions
Easy calibration and maintenance by magnetic home positioning

## Gobo wheel:

Gobo Wheel: 9 fixed gobos
Easy calibration and maintenance by magnetic home positioning

## Protocols:

DMX 512
Data input/output: 3 Pin XLR socket

## Dimension:

$574 \times 365 \times 256 \mathrm{~mm}$

## Weight:

17 kg
Cooling:
Fan Cooling
4. Fixture Description

4.1 Control Panel


1. LED:

| POWER | On | Power On |
| :--- | :--- | :--- |
| DMX | On | DMX input present |

## 2. BUTTON:

| MENU | To select the programming functions |
| :--- | :--- |
| $\boldsymbol{V}$ UP | To go forward in the selected functions |
| A DOWN | To go backward in the selected functions |
| ENTER | To confirm the selected functions |

3. FUNCTION DISPLAY: Used to show the various menus and the selected function;
4. DMX IN: DMX 512 link, use 3-pin XLR cable to link the unit and DMX controller;
5. DMX OUT: DMX 512 operation, use 3-pin XLR cable to link the next units;
6. POWER SWITCH: Turns On/Off the power;
7. POWER: Connect to the mains supply;
8. FUSE (T10A): Protect the unit from damage of over voltage or short circuit.

## 5. Gobo Wheel and Lamp

### 5.1 Gobo Wheel



## DANGER!

Install/change the gobo-wheel with the device switched off only

### 5.2 Lamp

## 280W Lamp

- Because of its high internal pressure, there might be a risk that the Discharge lamp would explode during operation. The lamp emits intense UV radiation which is harmful to the eyes and skin. The high luminance of the arc can cause severe damage to the retina if you take a close look at the lamp.
- To protect the lamp, always turn off the lamp first (via control panel or DMX controller) and let the unit run at least five minutes to cool down before switching off the mains supply. Never handle the lamp or luminary when it is hot.
- Do not touch the bulb with bare hands. If this happens, clean the lamp with denatured alcohol and wipe it with a lint free cloth before installation.
- The lamp generates UV radiation. Never operate the lamp without appropriate shielding.
- When lighting up, the lamp operates at high pressure and there is a slight risk of arc tube
rupture. The risk increases with age, temperature and improper handling of the lamp. Do not use the lamp longer than its lifespan.
- Make sure the lamp is located in the center of the reflector for the best projection


### 5.3 Change The Lamp

Do not use this lamp more than 3000 hours, Using the lamp any longer than its set life could seriously damage your unit. Periodically checking the lamp running time, when the lamp reaches the 3000 hour mark, or close to it, we strongly suggest you switch the lamp out. Clear the RESET TIME after you have replaced the lamp.

1. Remove the fixture head covers using a screwdriver (Figure 1).


Figure 1
2. Lift the lamp out of its recess, disconnect the lamp and connect a new lamp that must be the same type with the old one. And then place the new lamp into the lamp recess.


Figure 2
3. Finally Place the new lamp into the lamp recess reinstall the head cover, fastening it securely before reapplying power.


Figure 3

## 6. How to set the fixture

### 6.1 Main Function

To select any of the given functions, press the MENU button up to when the required one is showing on the display. Select the function by the ENTER button and the display will blink. Use the DOWN and UP button to change the mode. Once the required mode has been selected, press the ENTER button to setup, to go back to the functions without any change press the MENU button
again. Hold and press the MENU button about one second or wait for one minute to exit the menu mode.

The main functions are showing below:


## Pdぁr DMX 512 Address

Select the Fidr, press the ENTER button to confirm, the display will show the present address. Use the UP and DOWN button to adjust the address from $\square$ I (1) to $\square$ ! ${ }^{\text {I (512), press the }}$ ENTER button to store. Press the MENU button back to the last menu or idling 30 seconds to exit menu mode.

## [hig Channel Mode

Select the Lhid, press the ENTER button to confirm, the display will show the present channel mode. Use the UP and DOWN button to adjust $\mathbf{1 5}$ ch ( $\mathbf{1 5}$ channel), or $\mathbf{2 1}$ ch ( $\mathbf{2 0}$ channel), press the ENTER button to store. Press the MENU button back to the last menu or idling 30 seconds to exit menu mode.

## 

Select the $\operatorname{di5t}$, press the ENTER button to confirm, the display will show the present channel mode. Use the UP and DOWN button to select HoLd (keep last state), or bLid (black outl), press the ENTER button to store. Press the MENU button back to the last menu or idling 30 seconds to exit menu mode.

## IPRin Pan Inverse

Select IPRin, press the ENTER button to confirm, use the UP and DOWN button to select the no (no) or $\square 12 \mathrm{~S}$ (yes), press the ENTER button to store. Press the MENU button back to the last menu or idling 30 seconds to exit menu mode.

## ILLE Tilt Reverse

Select ILLE, press the ENTER button to confirm, use the UP and DOWN button to select the no (no) or 4 (yes), press the ENTER button to store. Press the MENU button back to the last menu or idling 30 seconds to exit menu mode.

## LEG Led Display

Select Led, press the ENTER button to confirm, use the UP and DOWN button to select the
on (on) or aFF (off), press the ENTER button to store. Press the MENU button back to the last menu or idling 30 seconds to exit menu mode.

## -15P Display Inverse

Select 日i5P, press the ENTER button to confirm, use the ENTER button to select -5 IP. Press the MENU button back to the last menu or idling 30 seconds to exit menu mode.

## EE5G Auto Test

Select EESE, press the ENTER button to confirm, then the unit will test by itself. Press the MENU button back to the last menu.

## Fhr 5 Fixture Use Hours

Press the MENU button up to when the Fhrs is blinking on the display. Press the ENTER button and the display will show the number of working hours of the unit. To go back to the functions press the MENU button again.

## LRIP Lamp On/Off

Select LRAP, press the ENTER button to confirm, use the UP and DOWN button to select the OFF (Off) or an (On), press the ENTER button to store. Press the MENU button back to the last menu or idling 30 seconds to exit menu mode.

## LPME Lamp On/Off While Power On

Select LPFid, press the ENTER button to confirm, use the UP and DOWN button to select the PagF (Lamp Off while power on) or Paan (Lamp On while power on), press the ENTER button to store. Press the MENU button back to the last menu or idling 30 seconds to exit menu mode.

## uPr firmware Version

Press the MENU button up to when the $\omega \mathrm{ER}^{-}$is blinking on the display. Press the ENTER button and the display will show the version of software of the unit. To go back to the functions press the

MENU button again.

## GEF Default

Select GEF, press the ENTER button to confirm, use the UP and DOWN button to select the Ma (No) or MES (Yes), press the ENTER button to store. Press the MENU button back to the last menu or idling 30 seconds to exit menu mode.

## -5EL Reset

Press the MENU button up to when the r巨et is blinking on the display. Press the ENTER button and the fixture will reset.

### 6.2 Home Position Adjustment

Press the MENU button into menu mode, then press and hold the ENTER button for about 3 seconds into offset mode to adjust the home position. Select the function by the ENTER button. Use the UP/DOWN button to select the submenu, press the ENTER button to store and automatically return to the last menu. Press the MENU button to exit.


To select the arin，press the ENTER button to show the PAN OFFSET on the display．Use the DOWN and UP button to adjust the value from－127 to 127，press the ENTER button to store． Press the MENU button to exit．

\section*{| OL |  |
| :--- | :--- |
| $\mathbf{I}$ | L | －Tilt home position adjustment}

To select the OLI，press the ENTER button to show the TILT OFFSET on the display．Use the DOWN and UP button to adjust the value from－127 to 127，press the ENTER button to store． Press the MENU button to exit．

## ロー｜゙｜I－Dimmer home position adjustment

To select the Odin，press the ENTER button to show the PAN OFFSET on the display．Use the DOWN and UP button to adjust the value from 0 to 255 ，press the ENTER button to store．Press the MENU button to exit．


To select the DOWN and UP button to adjust the value from－ 127 to 127，press the ENTER button to store．Press the MENU button to exit．

－Gobo home position adjustment
To select the 1 ，press the ENTER button to show the Gobo 1 OFFSET on the display．Use the DOWN and UP button to adjust the value from -127 to 127，press the ENTER button to store．Press the MENU button to exit．
－にはーGobo 2home position adjustment
To select the DOWN and UP button to adjust the value from -127 to 127，press the ENTER button to store．Press
the MENU button to exit．

－Gobo 2 Rotation home position adjustment
To select the the DOWN and UP button to adjust the value from－127 to 127，press the ENTER button to store． Press the MENU button to exit．

ローロ！ －Prism 1 home position adjustment
 the DOWN and UP button to adjust the value from 0 to 255 ，press the ENTER button to store．Press the MENU button to exit．

Qr｜－R－Prism 1 home position adjustment
To select the arPa，press the ENTER button to show the R－Prism 1 OFFSET on the display．Use the DOWN and UP button to adjust the value from－ 127 to 127，press the ENTER button to store． Press the MENU button to exit．

－Prism 2 home position adjustment
To select the arra，press the ENTER button to show the Prism 2 OFFSET on the display．Use the DOWN and UP button to adjust the value from 0 to 255 ，press the ENTER button to store．Press the MENU button to exit．

## ■ーロ－R－Prism 2 home position adjustment

To select the rean ，press the ENTER button to show the R－Prism 2 OFFSET on the display．Use the DOWN and UP button to adjust the value from－127 to 127，press the ENTER button to store． Press the MENU button to exit．
－ローロ－Frost home position adjustment

To select the GFra ，press the ENTER button to show the Frost OFFSET on the display．Use the DOWN and UP button to adjust the value from 0 to 255 ，press the ENTER button to store．Press the MENU button to exit．

## ■に』－Frost home position adjustment

To select the 日20，press the ENTER button to show the ZOOM OFFSET on the display．Use the DOWN and UP button to adjust the value from 0 to 255 ，press the ENTER button to store．Press the MENU button to exit．

## ローに－Focus home position adjustment

To select the ain ，press the ENTER button to show the Focus OFFSET on the display．Use the DOWN and UP button to adjust the value from 0 to 255 ，press the ENTER button to store．Press the MENU button to exit．

## 7．Control By Universal DMX Controller

## 7．1 DMX Connections




1. At last unit, the $D M X$ cable has to be terminated with a terminator. Solder a 120 -ohm $1 / 4 \mathrm{~W}$ resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
2. Connect the unit together in a "daisy chain" by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be branched or split to a " $Y$ " cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.
4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 0-511 (usually $0 \& 1$ are equal to 1 ).
5. The end of the DMX 512 system should be terminated to reduce signal errors.
6. 3 pin XLR connectors are more popular than 5 pins XLR.

3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)
5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

### 7.2 Channel Mode Setting

Enter menu mode, select DMX Functions, press the ENTER button to confirm, use the UP/DOWN button to select Mode, press the ENTER button to confirm, present channel mode will blink on the display, use the UP/DOWN button to select 16 Channel, 15 Channel , 19 Channel or 20 Channel Mode, and press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

### 7.3 DMX Address Setting

By using a universal DMX controller to control the units, you have to set DMX address from 1 to 512 so that the units can receive DMX signal.

Press the MENU button up to when the DMX Address is showing on the display. Pressing ENTER button and the display will blink. Use DOWN and UP button to change the DMX512 address. Once
the address has been selected, press and keep ENTER button pressed up to when the display stops blinking or storing automatically 8 seconds later. To go back to the functions without any change press the MENU button again. If you use please refer to the following diagram to address your DMX512 channel for the first 4 units :
15 CHANNEL MODE:

21 CHANNEL MODE:


### 7.4 DMX Control

15 Channels (Mode 1):

| Channel | Value | Function |
| :---: | :---: | :---: |
| 1 | 000-255 | $\begin{aligned} & \text { PAN } \\ & 0^{\circ} \rightarrow 540^{\circ} \\ & \hline \end{aligned}$ |
| 2 | 000-255 | $\begin{aligned} & \text { TILT } \\ & 0^{\circ} \rightarrow 270^{\circ} \end{aligned}$ |
| 3 | 000-255 | PAN/TILT SPEED: <br> Fast $\rightarrow$ Slow |
| 4 | $\begin{aligned} & 000-069 \\ & 070-079 \\ & 080-089 \\ & 090-099 \\ & 100-109 \\ & 110-119 \\ & 120-129 \\ & 130-139 \\ & 140-149 \\ & 150-159 \\ & 160-169 \\ & 170-179 \\ & 180-189 \\ & 190-199 \\ & 200-209 \\ & 210-219 \\ & 220-229 \\ & 230-239 \\ & 240-255 \\ & \hline \end{aligned}$ | SPECIAL FUNCTION: <br> Null <br> Blackout while pan/tilt move enable <br> Blackout while pan/tilt move disable <br> Blackout while color change enable <br> Blackout while color change disable <br> Blackout while gobo change enable <br> Blackout while gobo change disable <br> Lamp on <br> Pan/tilt reset <br> Color reset <br> Gobo reset <br> Shutter reset <br> Null <br> Prims/Focus/Zoom/Frost reset <br> Reset all <br> Blackout while pan/tilt/gobo/color change enable <br> Blackout while pan/tilt/gobo/color change disable <br> Lamp off <br> Null |
|  |  | COLOR: |



|  | $058-062$ $063-067$ $068-072$ $073-077$ $078-082$ $083-087$ $088-092$ $093-097$ $098-102$ $103-107$ $108-112$ $113-117$ $118-122$ $123-127$ $128-189$ $190-193$ $194-255$ | Gobo1 Shaking Gobo2 Shaking Gobo3 Shaking Gobo4 Shaking Gobo5 Shaking Gobo6 Shaking Gobo7 Shaking Gobo8 Shaking Gobo9 Shaking Gobo10 Shaking Gobo11 Shaking Gobo12 Shaking Gobo13 Shaking Gobo14 Shaking Rotation: Fast $\rightarrow$ Slow Stop |
| :---: | :---: | :---: |
| 7 | $000-006$ $007-012$ $013-019$ $020-025$ $026-032$ $033-038$ $039-044$ $045-051$ $052-057$ $058-064$ $065-071$ $072-078$ $079-085$ $086-092$ $093-099$ $100-106$ $107-113$ $114-120$ $121-127$ $128-189$ $190-193$ $194-255$ | GOBO 2: <br> Open <br> Gobo1 <br> Gobo2 <br> Gobo3 <br> Gobo4 <br> Gobo5 <br> Gobo6 <br> Gobo7 <br> Gobo8 <br> Gobo9 <br> Gobo1 Shaking <br> Gobo2 Shaking <br> Gobo3 Shaking <br> Gobo4 Shaking <br> Gobo5 Shaking <br> Gobo6 Shaking <br> Gobo7 Shaking <br> Gobo8 Shaking <br> Gobo9 Shaking <br> Rotation: Fast $\rightarrow$ Slow <br> Stop <br> Rotation: Slow $\rightarrow$ Fast |
| 8 | $\begin{aligned} & 000-127 \\ & 128-189 \\ & 190-193 \\ & 194-255 \end{aligned}$ | GOBO 2 ROTATION: <br> Index Rotation <br> Rotation: Fast $\rightarrow$ Slow <br> Stop <br> Rotation: Slow $\rightarrow$ Fast |
| 9 |  | PRISM: |


|  | $\begin{aligned} & \hline 000-007 \\ & 008-063 \\ & 064-255 \end{aligned}$ | No Effect Prism1 Effect Prism2 Effect |
| :---: | :---: | :---: |
| 10 | $\begin{aligned} & 000-127 \\ & 128-190 \\ & 191-192 \\ & 193-255 \end{aligned}$ | PRISM ROTATION: <br> Index Rotation <br> Rotation: Fast $\rightarrow$ Slow <br> Stop <br> Rotation: Slow $\rightarrow$ Fast |
| 11 | 000-255 | $\begin{aligned} & \hline \text { zoOM } \\ & 0 \% \rightarrow 100 \% \\ & \hline \end{aligned}$ |
| 12 | 000-255 | $\begin{aligned} & \text { FOCUS } \\ & 0 \% \rightarrow 100 \% \end{aligned}$ |
| 13 | 000-255 | $\begin{aligned} & \text { FROST } \\ & 0 \% \rightarrow 100 \% \end{aligned}$ |
| 14 | $\begin{aligned} & 000-007 \\ & 008-015 \\ & 016-131 \\ & 132-167 \\ & 168-203 \\ & 204-239 \\ & 240-247 \\ & 248-255 \end{aligned}$ | STROBE: <br> Off <br> Open <br> Shutter Slow->Fast <br> Fast Close Slow Open <br> Fast Open Slow Close <br> Shutter Slow $\rightarrow$ Fast <br> Strobe Random <br> Open |
| 15 | 000-255 | DIMMER: $0 \% \rightarrow 100 \%$ |

21 Channels (Mode 2):

| Channel | Value | Function |
| :---: | :---: | :--- | :--- |
| $\mathbf{1}$ | $000-255$ | PAN <br> $0^{\circ} \rightarrow 540^{\circ}$ |
| $\mathbf{2}$ | $000-255$ | PAN FINE |
| $\mathbf{3}$ | $000-255$ | TILT <br> $0^{\circ} \rightarrow 270^{\circ}$ |
| $\mathbf{4}$ | $000-255$ | TILT FINE |
| $\mathbf{5}$ | $000-255$ | PAN/TILT SPEED: <br> Fast $\rightarrow$ Slow |
| $\mathbf{6}$ | $000-069$ | SPECIAL FUNCTION: <br> Null |


|  | $070-079$ $080-089$ $090-099$ $100-109$ $110-119$ $120-129$ $130-139$ $140-149$ $150-159$ $160-169$ $170-179$ $180-189$ $190-199$ $200-209$ $210-219$ $220-229$ $230-239$ $240-255$ | Blackout while pan/tilt move enable <br> Blackout while pan/tilt move disable <br> Blackout while color change enable <br> Blackout while color change disable <br> Blackout while gobo change enable <br> Blackout while gobo change disable <br> Lamp on <br> Pan/tilt reset <br> Color reset <br> Gobo reset <br> Shutter reset <br> Null <br> Prims/Focus/Zoom/Frost reset <br> Reset all <br> Blackout while pan/tilt/gobo/color change enable <br> Blackout while pan/tilt/gobo/color change disable <br> Lamp off <br> Null |
| :---: | :---: | :---: |
| 7 | $000-007$ $008-015$ $016-023$ $024-031$ $032-039$ $040-047$ $048-055$ $056-063$ $064-071$ $072-079$ $080-087$ $088-095$ $096-103$ $104-111$ $112-119$ $120-127$ $128-135$ $136-143$ $144-151$ $152-159$ $160-167$ $168-175$ $176-183$ $184-191$ $192-199$ $200-207$ $208-215$ $216-223$ | PAN/TILT MACRO: <br> Off <br> Macro 1 <br> Macro 2 <br> Macro 3 <br> Macro 4 <br> Macro 5 <br> Macro 6 <br> Macro 7 <br> Macro 8 <br> Macro 9 <br> Macro 10 <br> Macro 11 <br> Macro 12 <br> Macro 13 <br> Macro 14 <br> Macro 15 <br> Macro 16 <br> Macro 17 <br> Macro 18 <br> Macro 19 <br> Macro 20 <br> Macro 21 <br> Macro 22 <br> Macro 23 <br> Macro 24 <br> Macro 25 <br> Macro 26 <br> Macro 27 |


|  | $\begin{aligned} & 224-231 \\ & 232-239 \\ & 240-247 \\ & 248-255 \end{aligned}$ | Macro 28 <br> Macro 29 <br> Macro 30 <br> Macro 31 |
| :---: | :---: | :---: |
| 8 | 000-255 | PAN/TILT MACRO SPEED: <br> Fast $\rightarrow$ Slow |
| 9 | 000-002 <br> 003-004 <br> 005-006 <br> 007-009 <br> 010-011 <br> 012-013 <br> 014-015 <br> 016-018 <br> 019-020 <br> 021-022 <br> 023-024 <br> 025-027 <br> 028-029 <br> 030-031 <br> 032-033 <br> 034-036 <br> 037-038 <br> 039-040 <br> 041-042 <br> 043-045 <br> 046-047 <br> 048-049 <br> 050-051 <br> 052-054 <br> 055-056 <br> 057-058 <br> 059-060 <br> 061-063 <br> 064-127 <br> 128-189 <br> 190-193 <br> 194-255 | COLOR: <br> White <br> Color1 <br> Color2 <br> Color3 <br> Color4 <br> Color5 <br> Color6 <br> Color7 <br> Color8 <br> Color9 <br> Color10 <br> Color11 <br> Color12 <br> Color13 <br> Color14 <br> Color15 <br> Color16 <br> Color17 <br> Color18 <br> Color19 <br> Color20 <br> Color21 <br> Color22 <br> Color23 <br> Color24 <br> Color25 <br> Color26 <br> Color27 <br> Index <br> Rotation: Fast $\rightarrow$ Slow <br> Stop <br> Rotation: Slow $\rightarrow$ Fast |
| 10 | $\begin{aligned} & 000-004 \\ & 005-008 \\ & 009-012 \\ & 013-016 \\ & 017-020 \\ & 021-024 \end{aligned}$ | GOBO 1: <br> Gobo1 <br> Gobo2 <br> Gobo3 <br> Gobo4 <br> Gobo5 <br> Gobo6 |


|  | 025-028 <br> 029-032 <br> 033-036 <br> 037-040 <br> 041-044 <br> 045-048 <br> 049-052 <br> 053-057 <br> 058-062 <br> 063-067 <br> 068-072 <br> 073-077 <br> 078-082 <br> 083-087 <br> 088-092 <br> 093-097 <br> 098-102 <br> 103-107 <br> 108-112 <br> 113-117 <br> 118-122 <br> 123-127 <br> 128-189 <br> 190-193 <br> 194-255 | Gobo7 <br> Gobo8 <br> Gobo9 <br> Gobo10 <br> Gobo11 <br> Gobo12 <br> Gobo13 <br> Gobo14 <br> Gobo1 Shaking <br> Gobo2 Shaking <br> Gobo3 Shaking <br> Gobo4 Shaking <br> Gobo5 Shaking <br> Gobo6 Shaking <br> Gobo7 Shaking <br> Gobo8 Shaking <br> Gobo9 Shaking <br> Gobo10 Shaking <br> Gobo11 Shaking <br> Gobo12 Shaking <br> Gobo13 Shaking <br> Gobo14 Shaking <br> Rotation: Fast $\rightarrow$ Slow <br> Stop <br> Rotation: Slow $\rightarrow$ Fast |
| :---: | :---: | :---: |
| 11 | 000-006 <br> 007-012 <br> 013-019 <br> 020-025 <br> 026-032 <br> 033-038 <br> 039-044 <br> 045-051 <br> 052-057 <br> 058-064 <br> 065-071 <br> 072-078 <br> 079-085 <br> 086-092 <br> 093-099 <br> 100-106 <br> 107-113 <br> 114-120 <br> 121-127 <br> 128-189 <br> 190-193 | GOBO 2: <br> Open <br> Gobo1 <br> Gobo2 <br> Gobo3 <br> Gobo4 <br> Gobo5 <br> Gobo6 <br> Gobo7 <br> Gobo8 <br> Gobo9 <br> Gobo1 Shaking <br> Gobo2 Shaking <br> Gobo3 Shaking <br> Gobo4 Shaking <br> Gobo5 Shaking <br> Gobo6 Shaking <br> Gobo7 Shaking <br> Gobo8 Shaking <br> Gobo9 Shaking <br> Rotation: Fast $\rightarrow$ Slow <br> Stop |


|  | 194-255 | Rotation: Slow $\rightarrow$ Fast |
| :---: | :---: | :---: |
| 12 | $\begin{aligned} & 000-127 \\ & 128-189 \\ & 190-193 \\ & 194-255 \end{aligned}$ | GOBO 2 ROTATION: <br> Index Rotation <br> Rotation: Fast $\rightarrow$ Slow <br> Stop <br> Rotation: Slow $\rightarrow$ Fast |
| 13 | 000-007 008-063 064-255 | PRISM: <br> No Effect Prism1 Effect Prism2 Effect |
| 14 | $\begin{aligned} & 000-127 \\ & 128-190 \\ & 191-192 \\ & 193-255 \end{aligned}$ | PRISM ROTATION: <br> Index Rotation <br> Rotation: Fast $\rightarrow$ Slow <br> Stop <br> Rotation: Slow $\rightarrow$ Fast |
| 15 | 000-255 | $\begin{aligned} & \text { ZOOM } \\ & 0 \% \rightarrow 100 \% \end{aligned}$ |
| 16 | 000-255 | ZOOM FINE <br> 0\% $\rightarrow$ 100\% |
| 17 | 000-255 | FOCUS $0 \% \rightarrow 100 \%$ |
| 18 | 000-255 | FOCUS FINE $0 \% \rightarrow 100 \%$ |
| 19 | 000-255 | $\begin{aligned} & \text { FROST } \\ & 0 \% \rightarrow 100 \% \\ & \hline \end{aligned}$ |
| 20 | $\begin{aligned} & 000-007 \\ & 008-015 \\ & 016-131 \\ & 132-167 \\ & 168-203 \\ & 204-239 \\ & 240-247 \\ & 248-255 \\ & \hline \end{aligned}$ | STROBE: <br> Off <br> Open <br> Shutter Slow->Fast <br> Fast Close Slow Open <br> Fast Open Slow Close <br> Shutter Slow $\rightarrow$ Fast <br> Strobe Random <br> Open |
| 21 | 000-255 | DIMMER: $0 \% \rightarrow 100 \%$ |

## 8. Troubleshooting

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 connect power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED to see if it can be light up or not.

## B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if they are linked 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 to see if the DMX cables run near or run alongside high voltage cables that may cause damage or interference to DMX interface circuit.
C. One of the channels is not working well
6. The stepper motor might be damaged or the cable connected to the PCB is broken.
7. The motor's drive IC on the PCB might be out of condition.

## D. The lamp is cutting out intermittently

1. The lamp is not working well. Check the mains voltage either too high or too low.
2. Internal temperature may be too high. Check if replacement of fan is needed on the head.

## E. If The pan belt is broken

1. Turn off the mains power.
2. Loosen the screws (A), open the cover (B).
3. Loosen the screws (C).
4. Unplug all the connect wires over the belt.
5. Change a new belt (D), put the belt around the axis gear and motor gear.
6. Plug all the connect wires back upon the belt.

7. Tighten all the screws.

## F. If The tilt belt is broken

1. Turn off the mains power.
2. Loosen all the screws (A) that fix the bridge(B).
3. Change a new belt (C). Please adjust the tension of the belt properly. Note: do not fix the belt too tight as it is can easily rupture.
4. Tight all the screws.


## 9. Check and Cleaning

## Check:



## Ballast

A. Do check the fixtures every two months and make sure that all the screws and terminals have been locked firmly to make sure the normal performance of the fixtures. Negligence of check would cause malfunction of the fixture.
B. As the pictures shown above, please replace the cable or cable joints immediately once they've aged and turned easy to break.

## 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 and use normal glass to clean liquid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.


## Declaration of Conformity

We declare that our products (lighting equipment) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 89/336/EEC.

EN55103-1: 2009 ; EN55103-2: 2009; EN62471: 2008;
EN61000-3-2: 2006 + A1:2009 + A2:2009; EN61000-3-3: 2008.
\&

## Harmonized Standard

EN 60598-1:2015; EN 60598-2-17:1989 + A2:1991;
EN 62471:2008; EN 62493: 2010
Safety of household and similar electrical appliances
Part 1: General requirements

## Innovation, Quality, Performance

