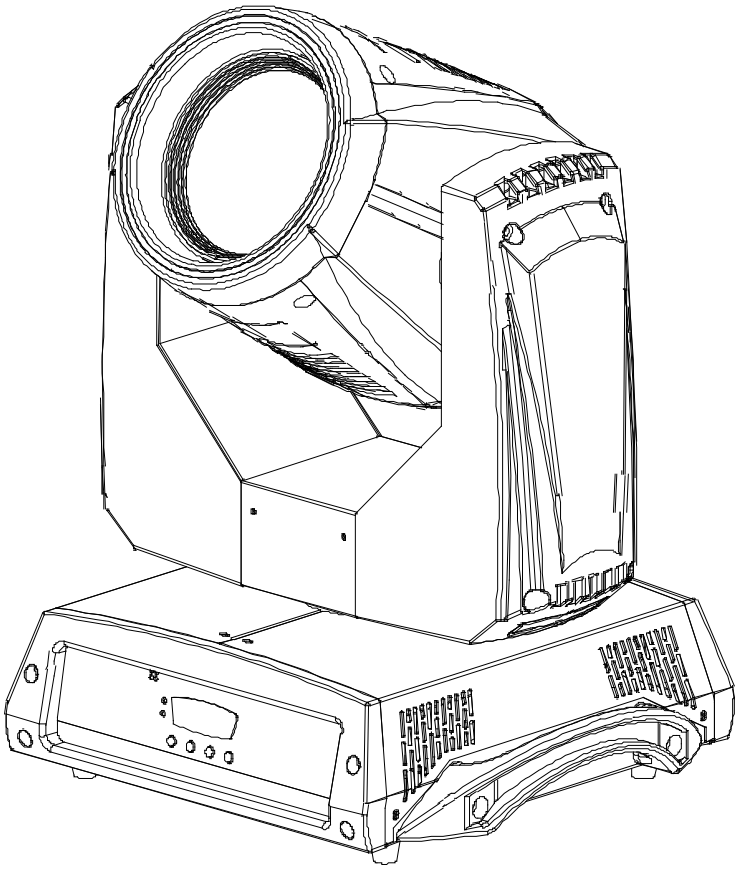
WHACK

5R BEAM



XP-5R BEAM II

User Manual

Please read the instruction carefully before use

CONTENTS

1. Safety Instruction

WARNING

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

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 50cm 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℃. 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℃. 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.

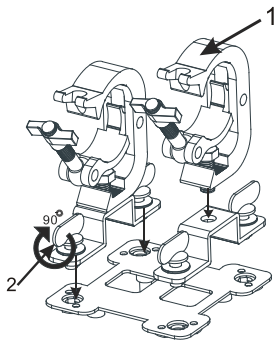
- Avoid any inflammable liquids, water or metal objects entering the unit. Once it happens, cut off the mains power immediately.
- Do not operate in dirty or dusty environment; do clean the fixture regularly.
- Do not touch any wire during operation as there might be a hazard of electric shock.
- Avoid 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.

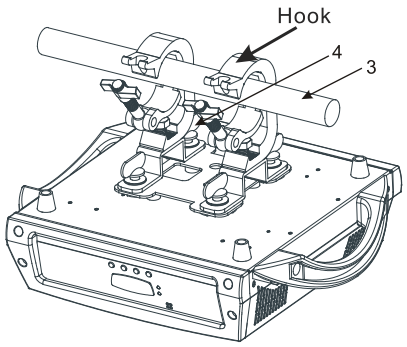
Installation:

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：

100~240V，50/60Hz

Power Consumption：

270W

Lamp：

Philips MSD Platinum 5R

Optical system

High efficient Optical system

Delivering extremely powerful output

High quality lens

Movement

Pan: 540°

Tilt: 270°

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: 14 fixed colors

Rainbow effect in both directions

Easy calibration and maintenance by magnetic home positioning

Gobo wheel:

Gobo Wheel: 17 fixed gobos, index able,

Easy calibration and maintenance by magnetic home positioning

Prism:

8-facet rotating prism Frost

Protocols:

DMX 512

Data input/output: 3 Pin XLR socket

Dimension：

500×394×325mm

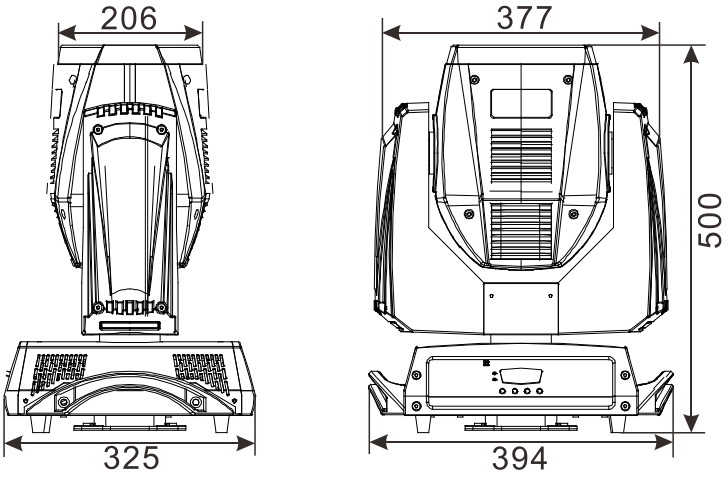
Weight：

18kg

Focus：

Electronic

Cooling：

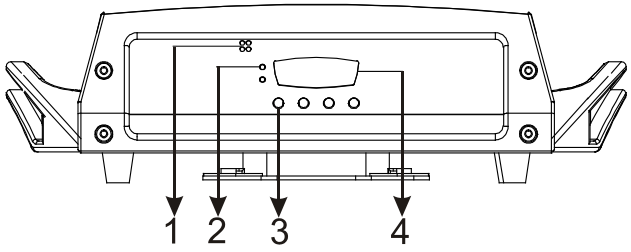


Fan Cooling

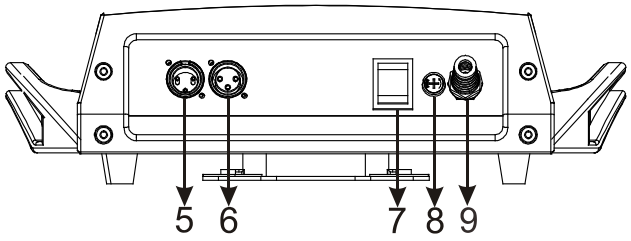
4. Fixture Description

4.1 Control Panel

Front View



Rear View



1. **Microphone：** To receive music for sound active;
2. **LED:**

POWER	On	Power On
DMX	On	DMX input present

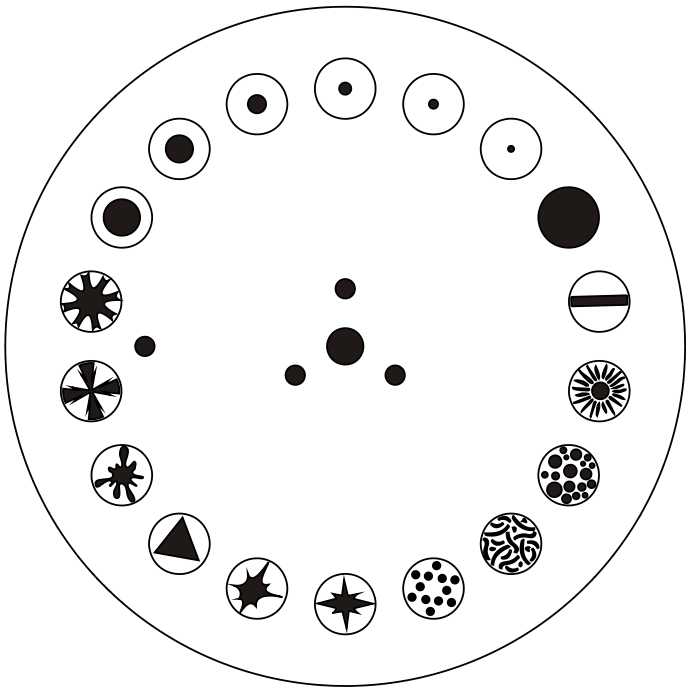
3. **Button:**

MENU	To select the programming functions
▼ **UP**	To go forward in the selected functions
▲ **DOWN**	To go backward in the selected functions
ENTER	To confirm the selected functions

4. **Function Display:** Used to show the various menus and the selected function;
5. **DMX IN:** DMX 512 link, use 3-pin XLR cable to link the unit and DMX controller;
6. **DMX OUT:** DMX 512 operation, use 3-pin XLR cable to link the next units;
7. **Power Switch:** Turns On/Off the power;
8. **FUSE** (T 6.3A)**:** Protect the unit from damage of over voltage or short circuit;
9. **Power Cable:** Water proof power cable with connectors for power input.

5. Gobo Wheel and Lamp

5.1 Gobo Wheel



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

5.2 Lamp

Philips MSD Platinum 5R (8000K)

- 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

Please replace the lamp after 2000 Hours, and clear the lamp running time in the menu.

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

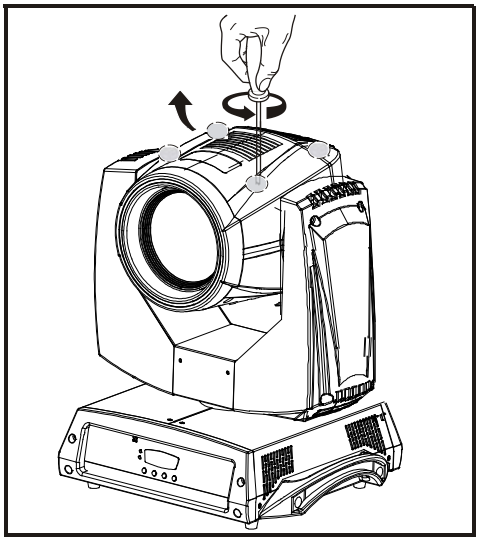


Figure 1

2. Position the head as Figure 2 and remove the lamp cooling fan at the rear of the head.

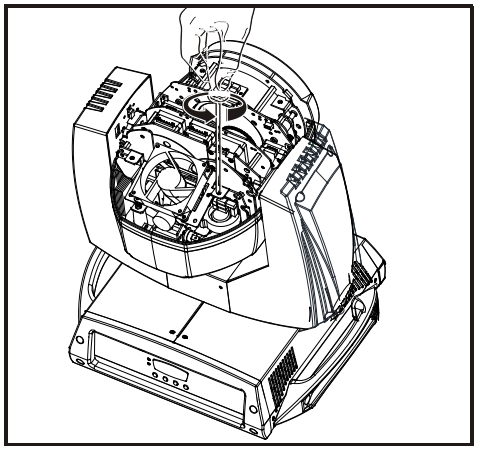


Figure 2

3. Lift the lamp out of its recess as Figure 3.

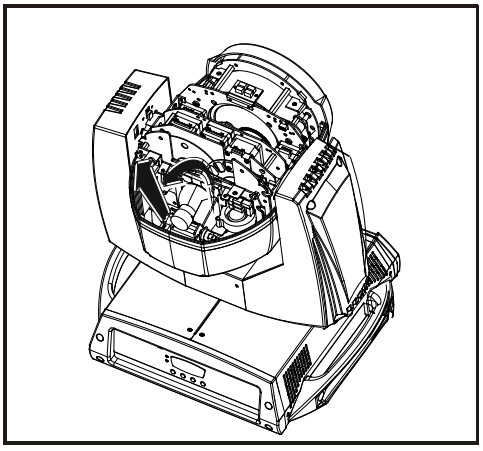


Figure 3

4. Disconnect the lamp and connect the replacement lamp (Figure 4). Place the new lamp into the lamp recess.(Figure 5)

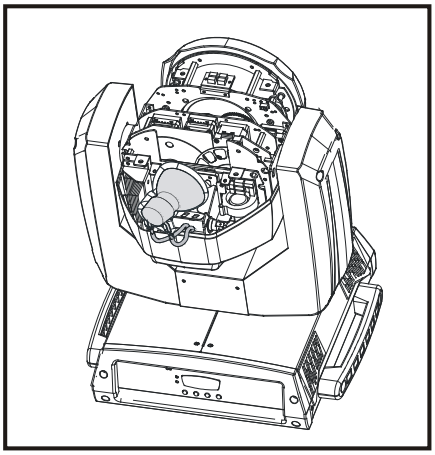


Figure 4

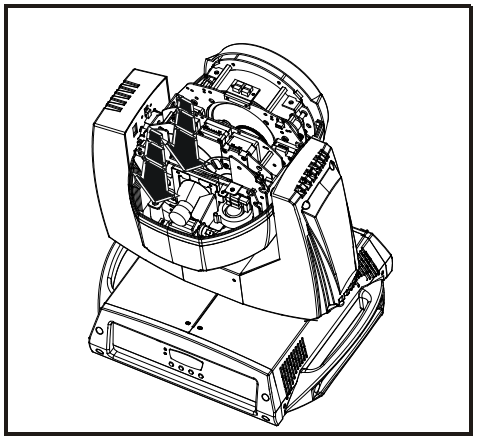


Figure 5

5. See illustration below. Adjust the lamp using a slotted (flat head) screwdriver until it is

centralized.

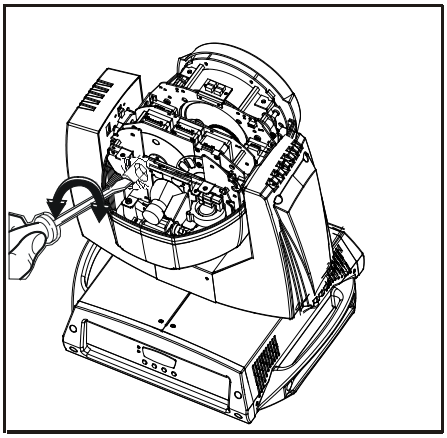


Figure 6

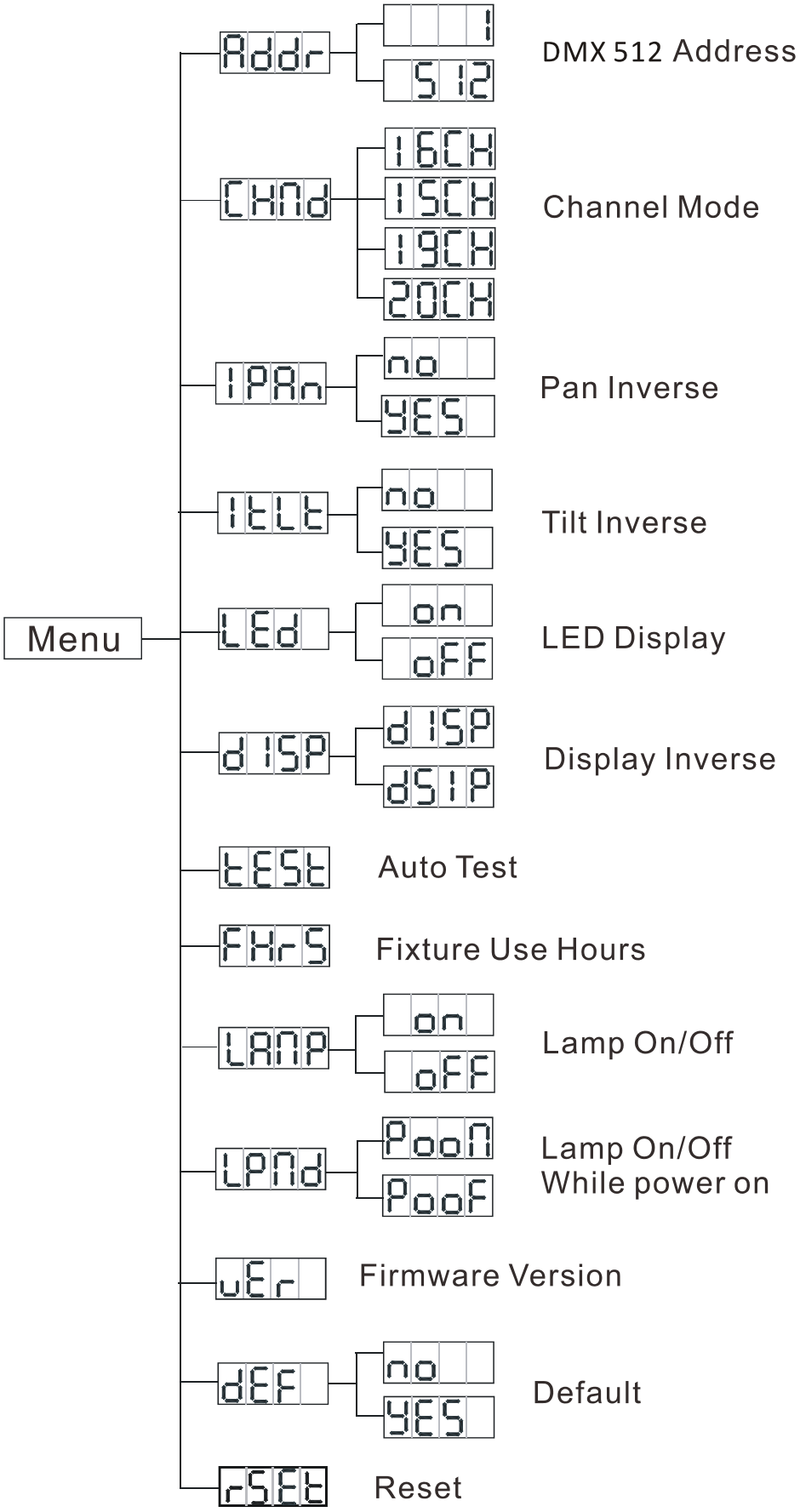
6. Reinstall the fan and secure it, then replace and secure the head covers before reapplying power.

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:


Menu
Addr
1
512
DMX 512 Address
CHNd
16CH
15CH
19CH
20CH
Channel Mode
IPAn
no
YES
Pan Inverse
ItLt
no
YES
Tilt Inverse
LEd
on
oFF
LED Display
dISP
dISP
dSIP
Display Inverse
tESt
Auto Test
FHrS
Fixture Use Hours
LAMP
on
oFF
Lamp On/Off
LPNd
PooN
PooF
Lamp On/Off
While power on
vEr
Firmware Version
dEF
no
YES
Default
rSEt
Reset

Addr ***DMX Address***

Select the Addr, press the **ENTER** button to confirm, the display will show the present address. Use the **UP** and **DOWN** button to adjust the address from 001 (**1**) to 512 (**512**)**,** press the **ENTER** button to store. Press the **MENU** button back to the last menu or idling 30 seconds to exit menu mode.

ChNd ***Channel Mode***

Select the ChNd, press the **ENTER** button to confirm, the display will show the present channel mode. Use the **UP** and **DOWN** button to adjust 16Ch **(16 channel),** 15CH **(15 channel),** 19Ch **(19 channel)** or 20CH **(20 channel),** press the **ENTER** button to store. Press the **MENU** button back to the last menu or idling 30 seconds to exit menu mode.

IPAn ***Pan Inverse***

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

ItLt ***Tilt Reverse***

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

Led ***Led Display***

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

dISP ***DISP***

Select dISP, press the **ENTER** button to confirm, use the **ENTER** button to select dS IP. Press

the **MENU** button back to the last menu or idling 30 seconds to exit menu mode.

tESt *Auto Test*

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

FhrS *Fixture 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.

LAMP *Lamp On/Off*

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

LPnd *Lamp On/Off While Power On*

Select LPnd, press the **ENTER** button to confirm, use the **UP** and **DOWN** button to select the PooF **(Lamp Off while power on)** or PooN **(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.

uEr *Firmware Version*

Press the **MENU** button up to when the uEr 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.

dEF *Default*

Select dEF, press the **ENTER** button to confirm, use the **UP** and **DOWN** button to select the

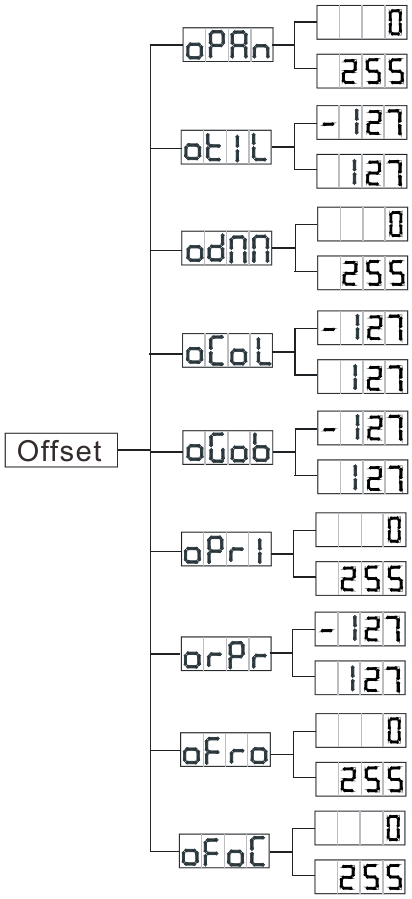
no **(No)** or YES **(Yes)**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or idling 30 seconds to exit menu mode.

rSEt ***Reset***

Press the **MENU** button up to when the rSEt 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.



 — Pan home position adjustment

To select the  , 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.

 —Tilt home position adjustment

To select the  , 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.

 —Dimmer home position adjustment

To select the  , 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.

 —Color home position adjustment

To select the  , press the **ENTER** button to show the **Color 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.

 —Gobo home position adjustment

To select the  , press the **ENTER** button to show the **Gobo 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 home position adjustment

To select the  , press the **ENTER** button to show the **Prism 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.

orPr —R-Prism home position adjustment

To select the orPr, press the **ENTER** button to show the **R-Prism 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.

oFro —Frost home position adjustment

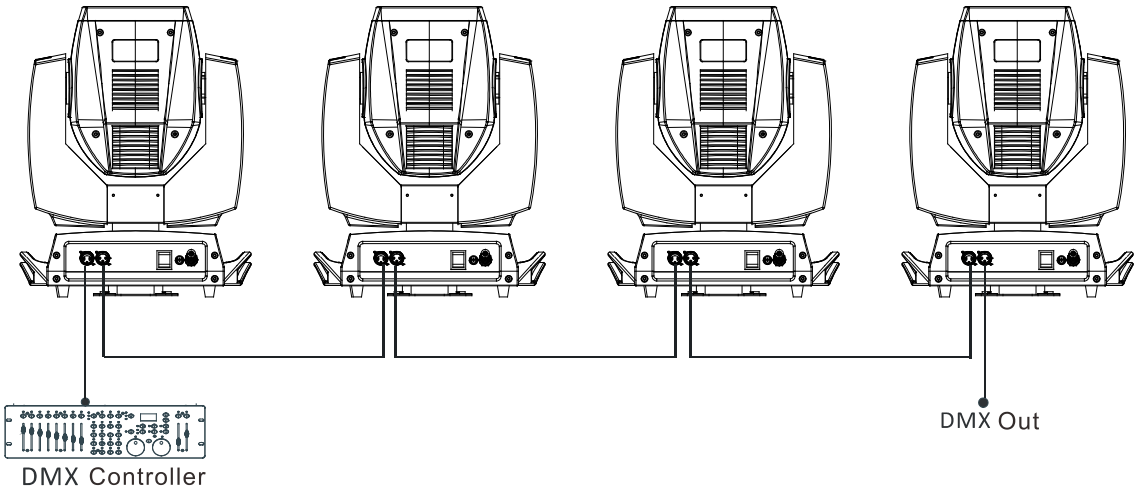
To select the oPrI, press the **ENTER** button to show the **Frost OFFSET** on the display. Use the **DOWN** and **UP** button to adjust the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

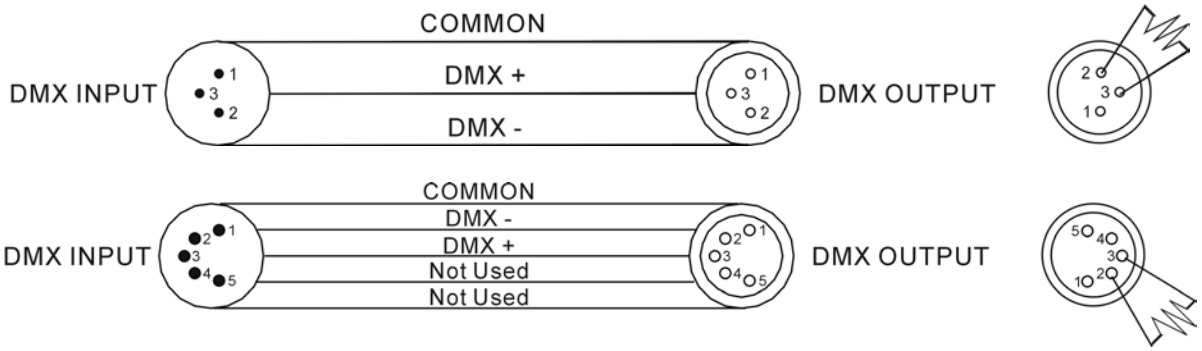
oFoC —Focus home position adjustment

To select the oFoC, 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 DMX cable has to be terminated with a terminator. Solder a 120-ohm 1⁄4W 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.

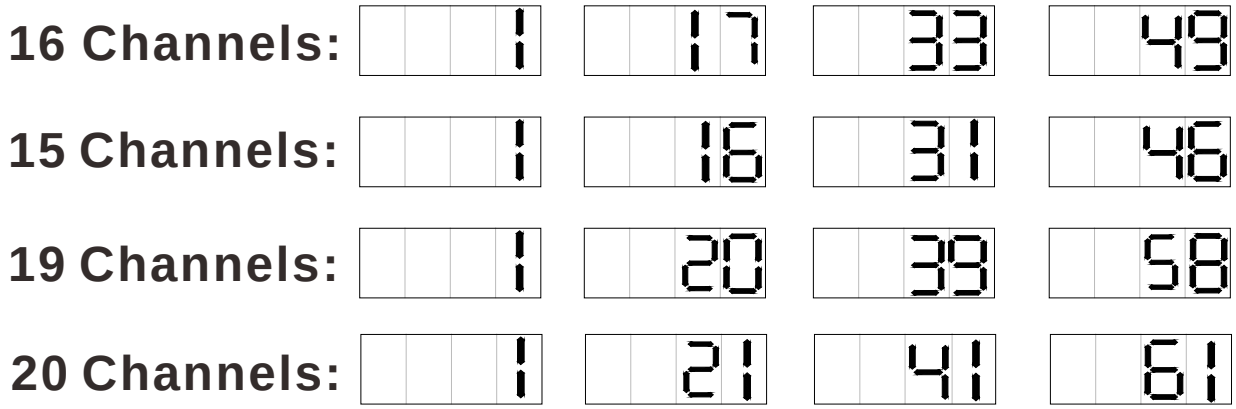
7.2 Channel Mode Setting

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** or **19 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：



7.4 DMX Control

16 Channels (Mode 1):

Channel	Value	Function
1	0 - 255	**Pan** 0 ° → 540°
2	0 - 255	**Pan Fine**
3	0 - 255	**Tilt** 0 ° → 270°
4	0 - 255	**Tilt Fine**
5	0 - 255	**Pan/Tilt Speed：** Fast → Slow
6	000 - 049 050 - 059	**Special Function** Null Pan/Tilt fast mode

	060 - 069	Pan/Tilt normal mode
	070 - 079	Blackout while pan/tilt move enable
	080 - 089	Blackout while pan/tilt move disable
	090 - 099	Blackout while color change enable
	100 - 109	Blackout while color change disable
	110 - 119	Blackout while gobo change enable
	120 - 129	Blackout while gobo change disable
	130 - 139	Lamp on
	140 - 149	Pan/tilt reset
	150 - 159	Color reset
	160 - 169	Gobo reset
	170 - 179	Shutter/prism/r-prism/frost/focus reset
	180 –199	Null
	200 –209	Reset all
	210 - 219	Blackout while pan/tilt/gobo/color change enable
	220 - 229	Blackout while pan/tilt/gobo/color change disable
	230 - 239	Lamp off
	240 - 255	Null
7		**Pan/Tilt Macro：**
	000 - 007	Off
	008 - 015	Macro 1
	016 - 023	Macro 2
	024 - 031	Macro 3
	032 - 039	Macro 4
	040 - 047	Macro 5
	048 - 055	Macro 6
	056 - 063	Macro 7
	064 - 071	Macro 8
	072 - 079	Macro 9
	080 - 087	Macro 10
	088 - 095	Macro 11
	096 - 103	Macro 12
	104 - 111	Macro 13
	112 - 119	Macro 14
	120 - 127	Macro 15
	128 - 135	Macro 16
	136 - 143	Macro 17
	144– 151	Macro 18
	152 - 159	Macro 19
	160 - 167	Macro 20
	168 - 175	Macro 21
	176 - 183	Macro 22
	184 –191	Macro 23
	192 –199	Macro 24
	200 - 207	Macro 25
	208 - 215	Macro 26

	216 - 223	Macro 27
	224 - 231	Macro 28
	232 –239	Macro 29
	240 - 247	Macro 30
	248 - 255	Macro 31
8	0 - 255	**Pan/Tilt Macro Speed：** Fast → Slow
9		**Color：**
	000 - 002	White
	003 - 004	White+Color1
	005 - 006	Color1
	007 - 008	Color1+Color2
	009 - 010	Color2
	011 - 012	Color2+Color3
	013 - 014	Color3
	015 - 016	Color3+Color4
	017 - 018	Color4
	019 - 021	Color4+Color5
	022 - 023	Color5
	024 - 025	Color5+Color6
	026 - 027	Color6
	028 - 029	Color6+Color7
	030 - 031	Color7
	032 - 033	Color7+Color8
	034 - 035	Color8
	036 - 037	Color8+Color9
	038 –039	Color9
	040 - 042	Color9+Color10
	043 - 044	Color10
	045 - 046	Color10+Color11
	047 - 048	Color11
	049 - 050	Color11+Color12
	051 - 052	Color12
	053 - 054	Color12+Color13
	055 - 056	Color13
	057 - 058	Color13+Color14
	059 - 060	Color14
	061 - 063	Color14+White
	064 - 127	Index
	128 - 189	Rotation: Fast →Slow
	190 - 193	Stop
	194 - 255	Rotation: Slow →Fast
10		**Gobo：**
	000 - 003	White
	004 - 006	Gobo1

	007 - 009	Gobo2
	010 - 012	Gobo3
	013 - 015	Gobo4
	016 -018	Gobo5
	019 - 021	Gobo6
	022 - 024	Gobo7
	025 - 027	Gobo8
	028 - 030	Gobo9
	031 - 033	Gobo10
	034 - 036	Gobo11
	037 - 039	Gobo12
	040 - 042	Gobo13
	043 - 045	Gobo14
	046 - 048	Gobo15
	049 - 051	Gobo16
	052 - 055	Gobo17
	056 - 059	White Shaking
	060 - 063	Gobo1 Shaking
	064 - 068	Gobo2 Shaking
	069 - 071	Gobo3 Shaking
	072 - 075	Gobo4 Shaking
	076 - 079	Gobo5 Shaking
	080 - 083	Gobo6 Shaking
	084 - 087	Gobo7 Shaking
	088 - 091	Gobo8 Shaking
	092 - 095	Gobo9 Shaking
	096 - 099	Gobo10 Shaking
	100 - 103	Gobo11 Shaking
	104 - 107	Gobo12 Shaking
	108 - 111	Gobo13 Shaking
	112 - 115	Gobo14 Shaking
	116 –119	Gobo15 Shaking
	120 - 123	Gobo16 Shaking
	124 - 127	Gobo17 Shaking
	128 - 189	Rotation: Fast →Slow
	190 - 193	Stop
	194 - 255	Rotation: Slow →Fast
11		**Prism：**
	000 - 007	Lamp on
	008 - 127	Prism Rotation
	128 - 132	Prism rotation effects1
	133 - 137	Prism rotation effects2
	138 - 141	Prism rotation effects3
	142 - 146	Prism rotation effects4
	147 - 150	Prism rotation effects5
	151 - 155	Prism rotation effects6

	156 - 159	Prism rotation effects7
	160 - 164	Prism rotation effects8
	165 - 168	Prism rotation effects9
	169 - 173	Prism rotation effects10
	174 - 177	Prism rotation effects11
	178 - 182	Prism rotation effects12
	183 - 187	Prism rotation effects13
	188 - 191	Prism rotation effects14
	192 - 196	Prism rotation effects15
	197 - 200	Prism rotation effects16
	201 - 205	Prism rotation effects17
	206 - 209	Prism rotation effects18
	210 - 214	Prism rotation effects19
	215 - 218	Prism rotation effects20
	219 - 223	Prism rotation effects21
	224 - 227	Prism rotation effects22
	228 - 232	Prism rotation effects23
	233 - 236	Prism rotation effects24
	237 - 241	Prism rotation effects25
	242 - 246	Prism rotation effects26
	247 - 250	Prism rotation effects27
	251 - 255	Prism rotation effects28
12		**Prism Rotation：**
	000 - 127	Index Rotation
	128 - 190	Rotation: Fast → Slow
	191 - 192	Stop
	193 - 255	Rotation: Slow → Fast
13		**Focus**
	0 - 255	Far → Near
14		**Frost**
	0 - 255	0% → 100%
15		**Strobe：**
	000 - 007	Lamp off
	008 - 015	Lamp on
	016 - 131	Shutter Slow->Fast
	132 - 167	Fast Close Slow Open
	168 - 203	Fast Open Slow Close
	204 –239	Shutter Slow →Fast
	240 –247	Strobe Random
	240 - 255	Lamp on
16		**Dimmer：**
	0 - 255	0% → 100%

15 Channels (Mode 2):

Channel	Value	Function
1		**Color：**
	000 - 004	White
	005 - 008	White+Color1
	009 - 012	Color1
	013 - 017	Color1+Color2
	018 - 021	Color2
	022 - 025	Color2+Color3
	026 - 029	Color3
	030 - 034	Color3+Color4
	035 - 038	Color4
	039 - 042	Color4+Color5
	043 - 046	Color5
	047 - 051	Color5+Color6
	052 - 055	Color6
	056 - 059	Color6+Color7
	060 - 063	Color7
	064 - 068	Color7+Color8
	069 - 072	Color8
	073 - 076	Color8+Color9
	077 - 081	Color9
	082 - 085	Color9+Color10
	086 –089	Color10
	090 - 093	Color10+Color11
	094 - 098	Color11
	099 - 102	Color11+Color12
	103 - 106	Color12
	107 - 110	Color12+Color13
	111 - 115	Color13
	116 - 119	Color13+Color14
	120 - 123	Color14
	124 - 127	Color14+White
	128 –225	Rotation: Slow → Fast
2		**Strobe：**
	000 - 003	Closed
	004 - 103	Strobe Slow →Fast
	104 –107	Open
	108 - 207	Pulsation Slow →Fast
	208 - 212	Open
	213 - 225	Random Slow Strobe
	226 - 238	Random Medium Strobe
	239 –251	Random Fast Strobe
	252 - 255	Open

3	0 - 255	**Dimmer：** 0% → 100%
4		**Gobo：**
		White
	000 - 003	Gobo1
	004 - 007	Gobo2
	008 -011	Gobo3
	012 - 015	Gobo4
	016 - 019	Gobo5
	020 - 023	Gobo6
	024 - 027	Gobo7
	028 - 031	Gobo8
	032 - 035	Gobo9
	036 - 039	Gobo10
	040 - 043	Gobo11
	044 - 047	Gobo12
	048 - 051	Gobo13
	052 - 055	Gobo14
	056 - 059	Gobo15
	060 - 063	Gobo16
	064 - 067	Gobo17
	068 - 071	Rotation: Fast →Slow
	072 - 113	Stop
	114 - 117	Rotation: Slow →Fast
	118 - 159	White Shaking
	160 - 166	Gobo1 Shaking
	167 - 172	Gobo2 Shaking
	173 - 179	Gobo3 Shaking
	180 - 185	Gobo4 Shaking
	186 - 191	Gobo5 Shaking
	192 - 198	Gobo6 Shaking
	199 - 204	Gobo7 Shaking
	205 - 211	Gobo8 Shaking
	212 - 223	Gobo9 Shaking
	224 - 230	Gobo10 Shaking
	231 - 236	Gobo11 Shaking
	237 - 243	Gobo12 Shaking
	244 –249	Gobo13 Shaking
	250 - 255	Gobo14 Shaking
5		**Prism:**
	000 -127	Prism Excluded
	128 - 255	Prism Inserted
6	000 - 127	**Prism Rotation：**
	128 - 190	Index Rotation
	191 - 192	Rotation Fast->Slow

	193 - 255	Stop Rotation Slow->Fast
7	0 - 255	**Frost：** 0% → 100%
8	0 - 255	**Focus** Far → Near
9	0 - 255	**Pan** 0 ° → 540°
10	0 - 255	**Pan Fine**
11	0 - 255	**Tilt** 0 ° → 270°
12	0 - 255	**Tilt Fine**
13	000 - 011 012 - 024 025 - 037 038 - 255	**Function** No Function P/T speed Fast P/T speed Normal No Function
14	000 - 025 026 - 076 077 - 127 128 - 255	**Reset:** No Function Effects reset Pan/Tilt rest Complete reset
15	000 - 025 026 - 100 101 - 255	**Lamp Control:** No Function Lamp off Lamp on

19 Channels (Mode 3):

Channel	Value	Function
1	000 - 004 005 - 008 009 - 012 013 - 017 018 - 021 022 - 025 026 - 029 030 - 034	**Color:** White White+Color1 Color1 Color1+Color2 Color2 Color2+Color3 Color3 Color3+Color4

	035 - 038	Color4
	039 - 042	Color4+Color5
	043 - 046	Color5
	047 - 051	Color5+Color6
	052 - 055	Color6
	056 - 059	Color6+Color7
	060 - 063	Color7
	064 - 068	Color7+Color8
	069 - 072	Color8
	073 - 076	Color8+Color9
	077 - 081	Color9
	082 - 085	Color9+Color10
	086 –089	Color10
	090 - 093	Color10+Color11
	094 - 098	Color11
	099 - 102	Color11+Color12
	103 - 106	Color12
	107 - 110	Color12+Color13
	111 - 115	Color13
	116 - 119	Color13+Color14
	120 - 123	Color14
	124 - 127	Color14+White
	128 –225	Rotation: Slow → Fast
2		**Strobe：**
	000 - 003	Closed
	004 - 103	Strobe: Slow →Fast
	104 –107	Open
	108 - 207	Pulsation: Slow →Fast
	208 - 212	Open
	213 - 225	Random Slow Strobe
	226 - 238	Random Medium Strobe
	239 –251	Random Fast Strobe
	252 - 255	Open
3		**Dimmer：**
	000-255	0% → 100%
4		**Gobo：**
	000 - 003	White
	004 - 007	Gobo1
	008 –011	Gobo2
	012 - 015	Gobo3
	016 - 019	Gobo4
	020 - 023	Gobo5
	024 - 027	Gobo6
	028 - 031	Gobo7
	032 - 035	Gobo8

	036 - 039 040 - 043 044 - 047 048 - 051 052 - 055 056 - 059 060 - 063 064 - 067 068 - 071 072 - 113 114 - 117 118 - 159 160 - 166 167 - 172 173 - 179 180 - 185 186 - 191 192 - 198 199 - 204 205 - 211 212 –217 218 - 223 224 - 230 231 - 236 237 - 243 244 –249 250 - 255	Gobo9 Gobo10 Gobo11 Gobo12 Gobo13 Gobo14 Gobo15 Gobo16 Gobo17 Rotation: Fast →Slow Stop Rotation Slow->Fast White Shaking 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
5	000 - 127 128 - 255	**Prism:** Prism Excluded Prism Inserted
6	000 - 127 128 - 190 191 - 192 193 - 255	**Prism Rotation：** Index Rotation Rotation: Fast →Slow Stop Rotation: Slow →Fast
7	0 - 255	**Frost：** 0% → 100%
8	0 - 255	**Focus** Far → Near
9	0 - 255	**Pan** 0 ° → 540°
10	0 - 255	**Pan Fine**
11	0 - 255	**Tilt** 0 ° → 270°
12	0 - 255	**Tilt Fine**

13	000 - 011 012 - 024 025 - 037 038 - 255	**Function** No Function P/T speed Fast P/T speed Normal No Function
14	000 - 025 026 - 076 077 - 127 128 - 255	**Reset:** No Function Effects reset Pan/Tilt rest Complete reset
15	000 - 025 026 - 100 101 - 255	**Lamp Control:** No Function Lamp off Lamp on
16	0 - 255	**Pan/Tilt time:** Fast → Slow
17	0 - 254 255	**Color time:** Fast → Slow Fast
18	0 - 254 255	**Beam time：** Fast → Slow Fast
19	0 - 254 255	**Gobo time：** Fast → Slow Fast

20 Channels (Mode 4):

Channel	Value	Function
1	000 - 004 005 - 008 009 - 012 013 - 017 018 - 021 022 - 025 026 - 029 030 - 034 035 - 038 039 - 042 043 - 046 047 - 051	**Color:** White White+Color1 Color1 Color1+Color2 Color2 Color2+Color3 Color3 Color3+Color4 Color4 Color4+Color5 Color5 Color5+Color6

	052 - 055	Color6
	056 - 059	Color6+Color7
	060 - 063	Color7
	064 - 068	Color7+Color8
	069 - 072	Color8
	073 - 076	Color8+Color9
	077 - 081	Color9
	082 - 085	Color9+Color10
	086 –089	Color10
	090 - 093	Color10+Color11
	094 - 098	Color11
	099 - 102	Color11+Color12
	103 - 106	Color12
	107 - 110	Color12+Color13
	111 - 115	Color13
	116 - 119	Color13+Color14
	120 - 123	Color14
	124 - 127	Color14+White
	128 –225	Rotation: Slow → Fast
2		**Strobe：**
	000 - 003	Closed
	004 - 103	Strobe: Slow →Fast
	104 –107	Open
	108 - 207	Pulsation: Slow →Fast
	208 - 212	Open
	213 - 225	Random Slow Strobe
	226 - 238	Random Medium Strobe
	239 –251	Random Fast Strobe
	252 - 255	Open
3		**Dimmer：**
	000-255	0% → 100%
4		**Gobo：**
	000 - 003	White
	004 - 007	Gobo1
	008 –011	Gobo2
	012 - 015	Gobo3
	016 - 019	Gobo4
	020 - 023	Gobo5
	024 - 027	Gobo6
	028 - 031	Gobo7
	032 - 035	Gobo8
	036 - 039	Gobo9
	040 - 043	Gobo10
	044 - 047	Gobo11
	048 - 051	Gobo12

	052 - 055 056 - 059 060 - 063 064 - 067 068 - 071 072 - 113 114 - 117 118 - 159 160 - 166 167 - 172 173 - 179 180 - 185 186 - 191 192 - 198 199 - 204 205 - 211 212 –217 218 - 223 224 - 230 231 - 236 237 - 243 244 –249 250 - 255	Gobo13 Gobo14 Gobo15 Gobo16 Gobo17 Rotation: Fast →Slow Stop Rotation: Slow →Fast White Shaking 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
5	000 - 127 128 - 255	**Prism:** Prism Excluded Prism Inserted
6	000 - 127 128 - 190 191 - 192 193 - 255	**Prism Rotation：** Index Rotation Rotation: Fast →Slow Stop Rotation: Slow →Fast
7		**No Function**
8	0 - 255	**Frost：** 0% → 100%
9	0 - 255	**Focus** Far → Near
10	0 - 255	**Pan** 0 ° → 540°
11	0 - 255	**Pan Fine**
12	0 - 255	**Tilt** 0 ° → 270°
13	0 - 255	**Tilt Fine**
14	000 - 011	**Function** No Function

	012 - 024 025 - 037 038 - 255	P/T speed Fast P/T speed Normal No Function
15	000 - 025 026 - 076 077 - 127 128 - 255	**Reset:** No Function Effects reset Pan/Tilt rest Complete reset
16	000 - 025 026 - 100 101 - 255	**Lamp Control:** No Function Lamp off Lamp on
17	0 - 255	**Pan/Tilt time:** Fast → Slow
18	0 - 254 255	**Color time:** Fast → Slow Fast
19	0 - 254 255	**Beam time：** Fast → Slow Fast
20	0 - 254 255	**Gobo time：** Fast → Slow Fast

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

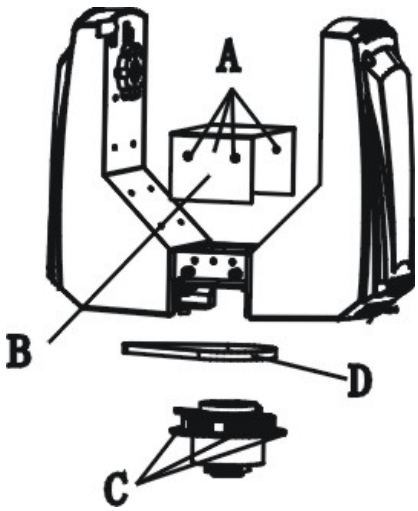
1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

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

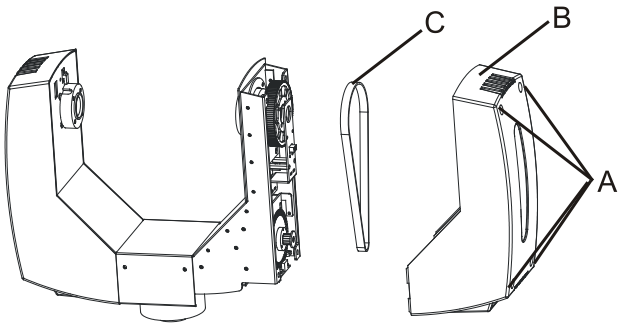
1. Turn off the mains power.
2. Loosen the screws (A), open the cover (B).
3. Loosen the screws (C).
4. Unplug all the connect wires over the belt.
5. Change a new belt (D), put the belt around the axis gear and motor gear.
6. Plug all the connect wires back upon the belt.
7. Tighten all the screws.



F. If The tilt belt is broken

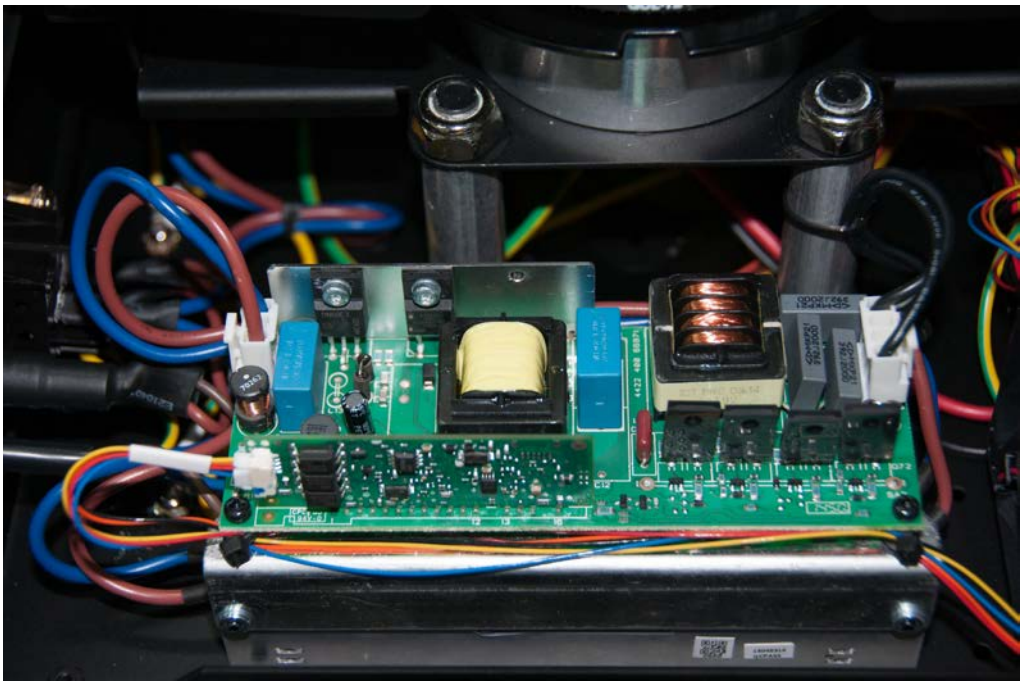
1. Turn off the mains power.
2. Loosen all the screws (A) that fix the bridge(B).
3. Change a new belt (C). Please adjust the tension of the belt properly. Note: do not fix the belt too tight as it is can easily rupture.

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.

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Harmonized Standard

EN 60598-1:2008 + All:2009; 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