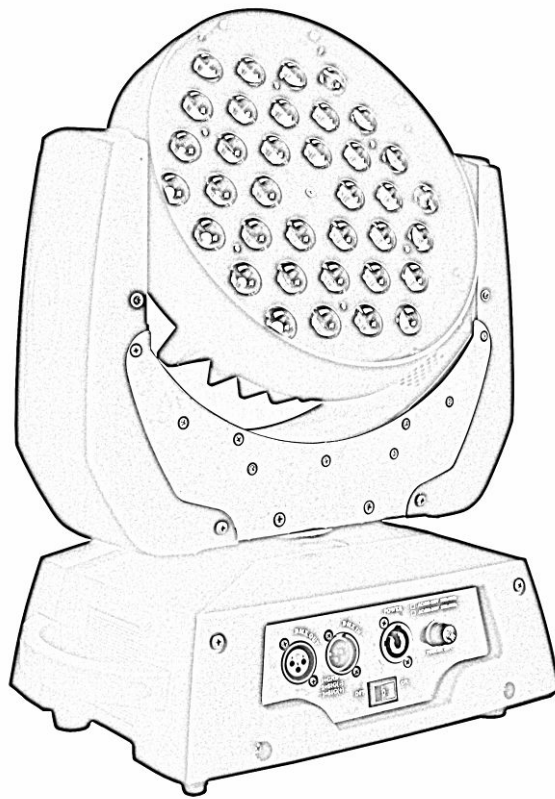# USER MANUAL

LED ZOOM MOVING HEAD LIGHT

(54*10W RGBW 4IN1 DMX 512 15CH)

Model: MHLED 5441Z

CE

Please read over this manual before operation the light

CONTENTS

Important notice:

· In this instruction for use contains about the installment and the use aspect important information of the LED moving head. When installing and using, you need to look this usage instruction strictly.

· Before open the LED moving head and if you want to do the repair work, please make sure the power source is at the separation condition.

Attention:

Unceasingly carries on the product improvement about our company the policy, in this instruction booklet carries the data will have the possibility to be able to change in the future, when no longer separate notice change matters concerned. Our company retains when the product improvement changes the related specification the authority. This instruction booklet publisher cannot be responsible regarding this instruction booklet in information accuracy, also cannot the related consequence which causes regarding these information be responsible.

I. Product Illustration

Our product adopt semiconductor to produce radiation, LED as light origin. With advantage of operation quietly, less power waste, high brightness, gaily-colored, astigmatic, high longevity (60-100 thousands hours), non-calorific etc. Our product apply to use 3 kinds light as red, green, blue LED, synthesize turn colors under election, can create effect of auto gradual change/skip change color, frequent blinking. Can accept control by DMX512, real save power, no pollution green lighting tool.

II .The installment of led moving head

Use the four bolts with M8 size by the clip of the LED moving head to install it. Should guarantee the reliability of the install, this way is to prevent the LED moving head occur swings and skids when it's working. The weight is about 8Kg of each LED moving head, before install, you should confirm the structure whether can support this weight of the LED moving head light. In order to guarantee the security, you also need to install a safety chain in the lamp body side handle.

(1)Omega-holders
(2)Clamp
(3)Safety-rope
(4)Quick-lock fastener
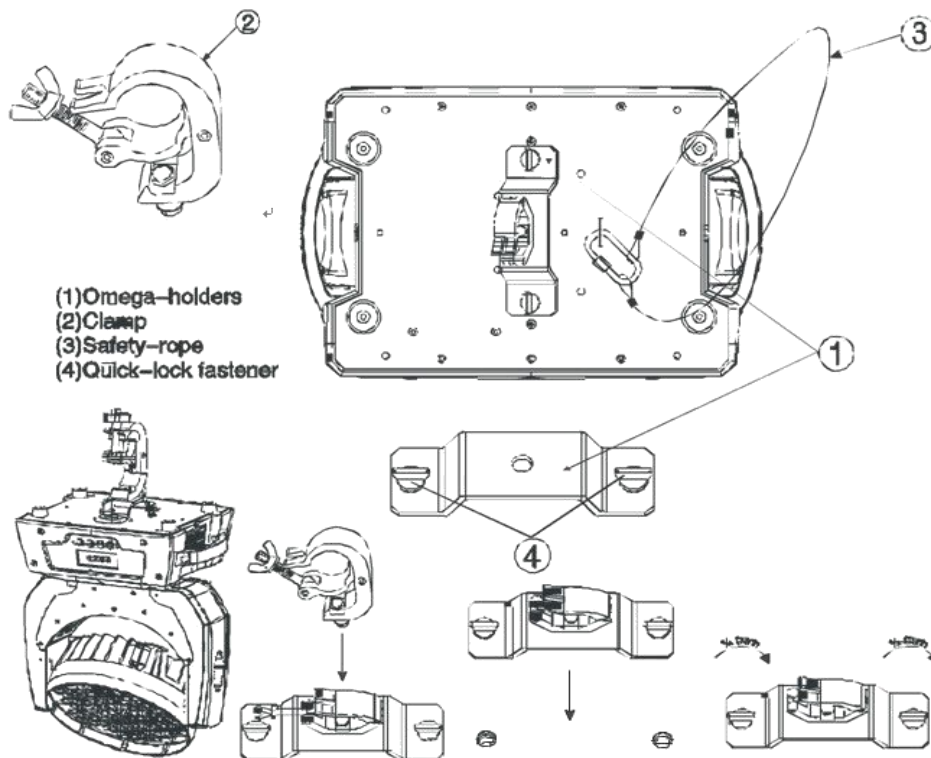
Warning: **Do not use the hand of the LED moving head to up and down or fix.**

III. The connection of control correspond wire

The connection of controller between the led moving head lamp and respectively led moving head lamp should use the twin core shielded cable, and the diameter of each core at least be 0.3mm. After receives the DMX512 signal, the lamp of nearby the address switch condition will glisten. When it's do not receive the DMX signal, the lamp will in extinguish condition, but if the signal lamp glisten continuously, the mean is the DMX signal is not be correct.

When installing, uses the DMX signal terminal is much better. It can avoid the digital control signal breached by the electrical noise. Generally speaking, the DMX terminal is Cannon plug coupling, it has a 120 ohm resistances between the 2 feet and 3 feet, it will connected on the last led moving head lamp's digital plug of the led moving head lamp chain.

DMX+

3

DMX−

1 2

GND
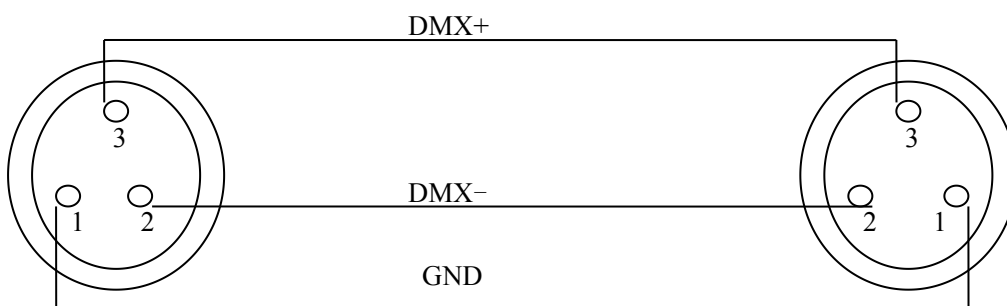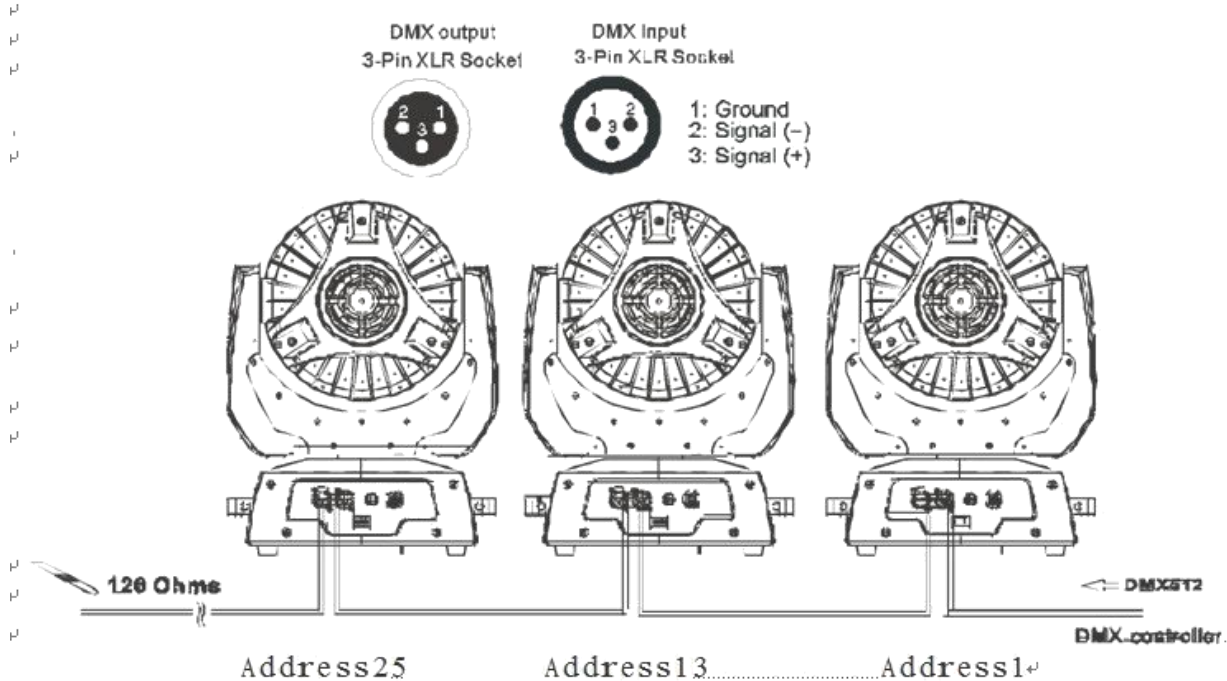
Connecting DMX512 digital signal,
Please using high quality screen line to connect it, for fear interfering.

GND

DIGITAL SIGNAL
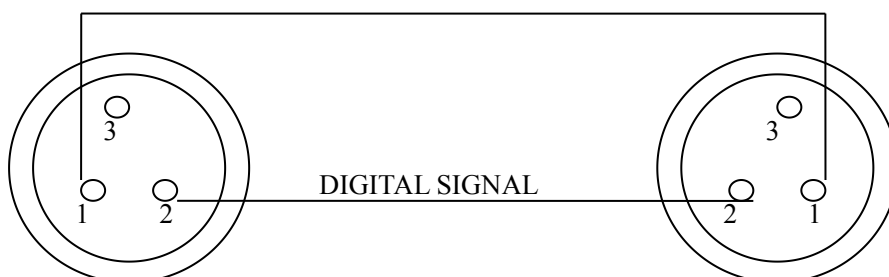
IV. the connection of Power Cable

Use the provided plug to connect the main power to the projector paying attention to the voltage and frequency marked on the panel of the projector. It is recommended that each projector be supplied separately so that they may be individually switched on and off.

IMPORTANT

It is essential that each projector is correctly earthed and that electrical installation conforms

to all relevant standards. Power consumption of this projector is 200VA.

The connection of Power cable between the led moving head lamp and respectively led moving head lamp should use the three core shielded cable,

Power cable joint (at most 4pcs) in each other, this is the Connector picture as below:

Important Notice:

In order to avoid overloading the power supply, the power cable can only supply power for at most 4 light

POWER IN   POWER OUT   POWER IN

Powercon   **Powercon**

POWER 0UT   POWER IN
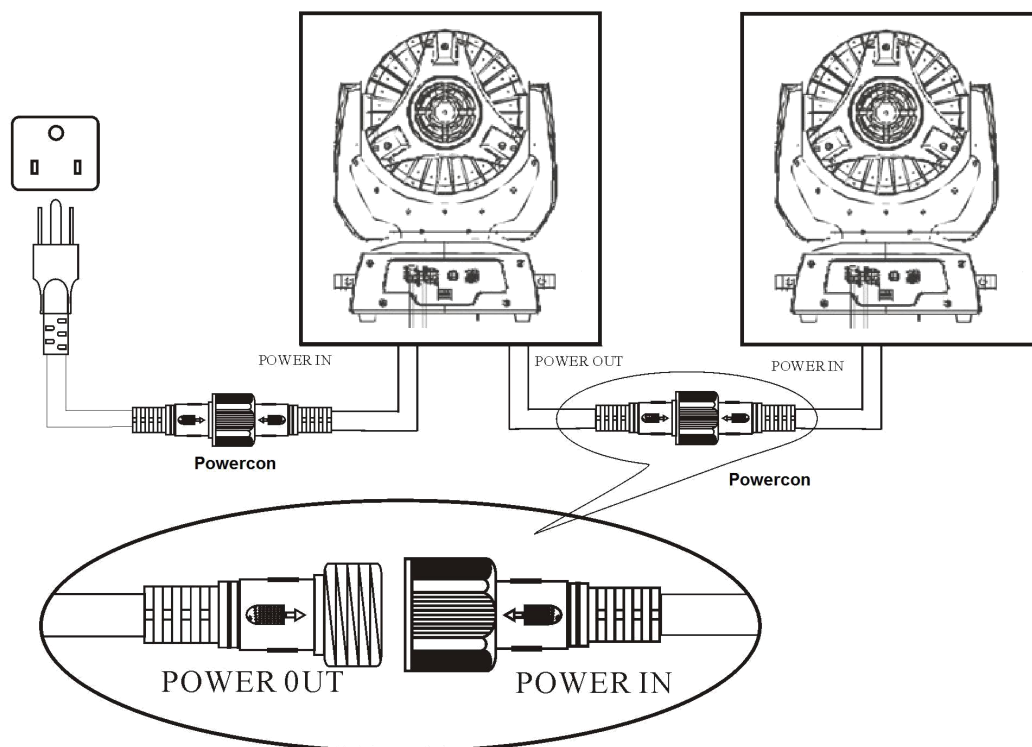
IV. Clean maintenance

In order to guarantee the LED moving head lamp can work better, you should keep the lamp in clean state. Suggests clean the lamp body and fan in each 15 days. For the PVS board, you need clean it on time. When you cleaning the PVC piece, please do not use any soluble cleanser,

V. Warning

·Don't disassemble and assemble the LED moving head.

·Please do not put the led moving head lamp in water or other any type's liquids and the metal (IP20).

·Do not install the led moving head lamp in the humidity environment.

·Should maintain the minimum 0.5 meter distance between the led moving head lamp and other neighboring object surface.

VI. Difficult processing

Question	Answer
The LED moving head lamp can not start.	Inspects the fuse on the rear panel.
Although shines, but the LED moving head lamp can not accept the instruction of the controller.	Check the digital start address (sees 09th) and also check the connection situation of the communication control line the (to see 03rd).
LED moving head lamp only can work intermittently.	Inspect the power supply and voltage is whether normal.
Do not receive the DMX512 signal	Whether the signal lines do contact good or broken
The light beam appears gloomily.	Inspect the optics part is whether clean.

Other maintains work should by the specialist which has the experience to carry on.

VII. Equipment and appendix

1 led moving head lamp   1PCE

2 the product of USER MANUAL   1PCE

3 Power source connected lines   1PCE

4 signal lines   1PCE

VIII. Technical parameters

Voltage / frequency: 90-240V/50-60Hz

Bulbs: 54*10W RGBW 4IN1 Multi-Chip LED Lamp

Power: 540W

ZOOM: 10 degree- 90 degree free adjustment

Control signal: DMX 512, in sets at the automatic procedure

Channel: 15CH, DMX512 channel control

Motion: level 540 degree, vertical 280 degree, horizontal and vertical uses the electronic replacement function

Color: 16.7 million kinds of colors changes

Adjusts the light: 0-100 electron adjusts the light, various colors may alone move also may mix the color tone

Strobe: 1-25/second high speed strobe, but single color mixes the color strobe

ZOOM angel: 10-90degree adjust

IX. Functional description

Ccontroller can control Moving head light's three axes (PAN axis, TITL axis and Zoom axis), The light have RGBW 4IN1 Multi-Chip LED Lamp, and 3IN1 Tricolor RGB LED Moving Head, and 3color and 4 color, it have DMX mode (can be set DMX address), self-propelled mode (can be set up master-slave), Sound mode (can be set master / slave), The mode selection can be set by the panel or DMX 512 controller (this must be set to DMX mode); The light also have strobe / random frequency flash / strobe out fast and slow / slow forward faster strobe mode, the color jump / gradients

IIX. Functional Setting
1. Fast operation settings

Controller can quickly set the light's mode, the main interface, followed by "ESC" key to select DMX mode, Auto mode or sound-activated mode,

● In DMX mode: Press "UP" "DOWN" to optional DMX address;

● In the self-propelled mode: Press "UP" "DOWN" to choose master or slave;

● In the sound mode: Press "UP" "DOWN" to choose master or slave

2. Normal operation settings
1) SET DMX ADDRESS

In the main interface, press "ENTER" to enter the main menu, press "UP" or "DWON" choose "1.DMX ADR", press "ENTER" to enter to set the parameter, then press "UP" or "DOWN" to set DMX address, After setting, please press "ENTER" to save the setting, and press "ESC" is set to give UP.

2) SET WORKING MODE:

The light can operate in any of three modes: DMX mode, Auto mode and sound-activated mode;

In the main interface, press "ENTER" to enter the main menu, press "UP" or "DWON" choose "2.WORK MOD", press "ENTER" to setting, then press "UP" or "DOWN" to choose working mode, after settings, press "ENTER" to save the settings, and press "ESC" is set to give up.

3) Set the master / slave mode

In the master/slave mode or sound-activated mode, the light can be set as master or slave

mode, In master, the light is self-propelled, while simultaneously sending data to the other light; in slave mode, the light is not sent the data to other light, it won't have any effect of the light in the same work mode,. set as follows:.

In the main interface, press "ENTER" to enter the main menu, press "UP" or "DWON" to choose "3.MASTER", press "ENTER" to enter to set the parameter, then press "UP" or "DOWN" choose the master / slave mode, After the setting, press "ENTER" to save the settings, and press "ESC" is set to give up

4) Setting PAN's Rotation direction:

In the main interface, press "ENTER" to enter the main menu, press "UP" or "DWON" to choose "4..PAN", press "ENTER" to enter to set the parameter, then press "UP" or "DOWN" choose the PAN-axis forward or reverse, After the setting, press "ENTER" to save the settings, and press "ESC" is set to give up。

5) Setting Tilt's Rotation direction:

In the main interface, press "ENTER" to enter the main menu, press "UP" or "DWON" to choose "5.TILT", press "ENTER" to enter to set the parameter, then press "UP" or "DOWN" choose the TILT-axis forward or reverse, After the setting, press "ENTER" to save the settings, and press "ESC" is set to give up。

6) RESET PARAMETER

◆ RESET

In the main interface, press "ENTER" to enter the main menu, press "UP" or "DWON" to choose "7.RESET", press "ENTER" to enter to set the parameter, then press "UP" or "DOWN" choose"[DEVI]",and then press "ENTER" to RESET,and press "ESC" is set to give up。

◆ RESET PARAMETER

In the main interface, press "ENTER" to enter the main menu, press "UP" or "DWON" to choose "7.RESET", press "ENTER" to enter to set the parameter, then press "UP" or "DOWN" choose"[PARAM]",and then press "ENTER" to RESET the light to factory default,and press "ESC" is set to give up.

7) Advanced parameter settings:

The following parameters can be set:

◆ Setting LED Mixing color proportion (Color Temperature):

In the main interface, press "ENTER" to enter the main menu, press "UP" or "DWON" to choose "6. ADVANCE", press "ENTER" to enter to set the parameter, then press "UP" or "DOWN" to choose"COL MIX"，Press "DWON" to adjust corresponding ratio of the color 's

brightness, after setting, press "ENTER" to save the settings,,and press "ESC" is set to give up。

◆ **Setting cooling fans working mode:**

In the main interface, press "ENTER" to enter the main menu, press "UP" or "DWON" to choose "6. ADVANCE", press "ENTER" to enter to set the parameter, then press "UP" or "DOWN" to choose"FAN CTL", press "ENTER" into the setting, Press "UP" or "DOWN" to choose"[ALWAYS]", the fans is start or "[AUTO]"star the fax base on the switch,after setting, press "ENTER" to save the settings,,and press "ESC" is set to give up。

◆ **Setting PAN's Rotation rate:**

In the main interface, press "ENTER" to enter the main menu, press "UP" or "DWON" to choose "6. ADVANCE", press "ENTER" to enter to set the parameter, then press "UP" or "DOWN" to choose"X ANGLE", press "ENTER" into the setting, Press "UP" or" DOWN" to choose"[540]"or"[630]", after setting, press "ENTER" to save the settings,,and press "ESC" is set to give up。

◆ **Setting PAN'S initial offset position:**

In the main interface, press "ENTER" to enter the main menu, press "UP" or "DWON" to choose "6. ADVANCE", press "ENTER" to enter to set the parameter, then press "UP" or "DOWN" to choose"X OFFSET", press "ENTER" into the setting, Press "UP" or "DOWN" to set initial offset position after PAN'S reset,after setting, press "ENTER" to save the settings,,and press "ESC" is set to give up。

IX. Panel operation

This control display panel menu especially for the many kinds of models computer lamp design, provided the many kinds of functions control mode, the control has been simple. Act regarding certain model computer lamps, the corresponding menu option hypothesis is invalid.

Panel Diagram:

```
DMX | nor
ADR=001

 (■)   (▲)    (▼)   (↵)
ESC   UP   DOWN ENTER
```
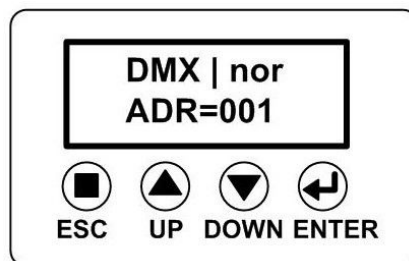
ESC: a: In the main interface, choose working model

b: In the regular menu, return to the upper menu, give up parameters setting.

UP: a: choose menu.

DOWN: b: Setting Parameter values

ENTER: a: Into the next menu

b: returned to the upper menu, and save.

DMX MODE   AUTO MODE   SOUND MODE

| DMX \| nor | → | AUTO MOD | → | SUND MOD |
| ADR=001 | | <master> | | <master> |

Main Interface

SUND MOD
<slave>   Press UP , Down to change master / slave mode, Press ESC Exit, Press ENTER Save

AUTO MOD
<slave>   Press UP , Down to change master / slave mode, Press ESC Exit, Press ENTER Save

DMX \| nor
ADR=002   Press UP , Down to change DMX Address Press ESC Exit, Press ENTER Save

Shortcut Menu

C o n v e n t i o n a l   M e n u

1-7
DMX ADR → DMX ADR [001]   Press UP , Down to change DMX Address Press ESC Exit, Press ENTER Save

2-7
WORK MOD → WORK MOD [DMX] → WORK MOD [AUTO] → WORK MOD [SUND]   Press UP , Down to change Working Mode Press ESC Exit, Press ENTER Save

3-7
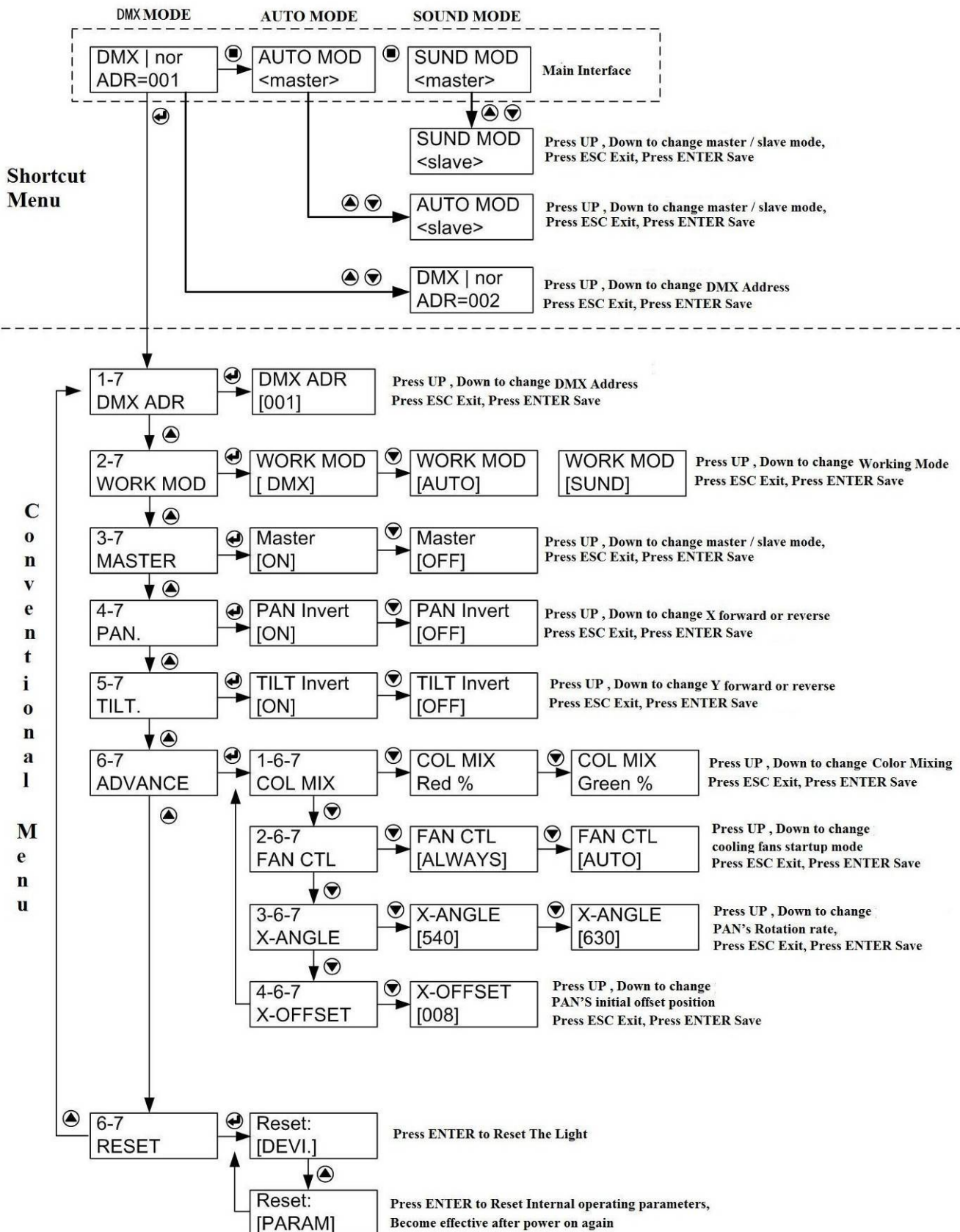MASTER → Master [ON] → Master [OFF]   Press UP , Down to change master / slave mode, Press ESC Exit, Press ENTER Save

4-7
PAN. → PAN Invert [ON] → PAN Invert [OFF]   Press UP , Down to change X forward or reverse Press ESC Exit, Press ENTER Save

5-7
TILT. → TILT Invert [ON] → TILT Invert [OFF]   Press UP , Down to change Y forward or reverse Press ESC Exit, Press ENTER Save

6-7
ADVANCE →

1-6-7
COL MIX → COL MIX Red % → COL MIX Green %   Press UP , Down to change Color Mixing Press ESC Exit, Press ENTER Save

2-6-7
FAN CTL → FAN CTL [ALWAYS] → FAN CTL [AUTO]   Press UP , Down to change cooling fans startup mode Press ESC Exit, Press ENTER Save

3-6-7
X-ANGLE → X-ANGLE [540] → X-ANGLE [630]   Press UP , Down to change PAN's Rotation rate, Press ESC Exit, Press ENTER Save

4-6-7
X-OFFSET → X-OFFSET [008]   Press UP , Down to change PAN'S initial offset position Press ESC Exit, Press ENTER Save

6-7
RESET → Reset: [DEVI.]   Press ENTER to Reset The Light

Reset: [PARAM]   Press ENTER to Reset Internal operating parameters, Become effective after power on again

10

8. Channel list

CH		Value	Function
CH1	PAN	000-255	Pan 540°　or　Pan 630°
CH2	TILT	000-255	TILT 280°
CH3	ZOOM	000-255	Linear zoom, small to big 10°-90°
CH4	Strobe / Reset	000-009	On (Not Strobe)
		010-059	Strobe slow - fast
		060-064	On (Not Strobe)
		065-114	Random Strobe slow - fast
		115-119	On (Not Strobe)
		120-169	Gradual ON Strobe slow - fast
		170-174	On (Not Strobe)
		175-224	Gradual Dark Strobe slow - fast
		225-234	On (Not Strobe)
		235-244	Not Strobe, close, Reset (After 3sec.)
		245-255	On (Not Strobe)
CH5	Color	000-002	R
		003-004	RW
		005-007	RG
		008-009	RGW
		010-012	G
		013-014	GW
		015-017	GB
		018-019	GBW
		020-022	B
		023-024	BW
		025-027	RB

		028-029	RBW
		030-039	W
		040-049	RGBW
		050-083	R ON、G Gradual ON、B close
		084-117	R Gradual Close, G ON、B Close
		118-151	R Close、G ON、B Gradual ON
		152-185	R Close、G Gradual Close、B ON
		186-218	R Gradual ON、G Close、B ON
		219-252	R ON、G Close、B Gradual Close
		253-255	RGBW
CH6	Dimmer	000-255	0%-100% Dimmer, Dark to Light
CH7	RED	000-256	RED 0%-100% Dimmer, Dark to Light
CH8	Green	000-257	Green 0%-100% Dimmer, Dark to Light
CH9	Blue	000-258	Blue 0%-100% Dimmer, Dark to Light
CH10	White	000-259	White 0%-100% Dimmer, Dark to Light
CH11	,RGBW RAINBOW Effect & Speed adjustment	000-005	RGBW, Color is decide by CH5
		006-127	RGBW Graduated, Speed adjustment, from slow to fast
		128-255	RGBW change color, Speed adjustment, from slow to fast
CH12	X Fine	000-255	PAN fine adjustment 3.6°
CH13	Y Fine	000-255	Tilt fine adjustment 3.6°
CH14	Motor Speed	000-255	Motor from fast to slow scan
CH15	RUNNING MODE	000-049	DMX Mode
		050-099	X Auto
		100-149	Y Auto
		150-199	X、Y Auto at the same time
		200-255	Sound Activity