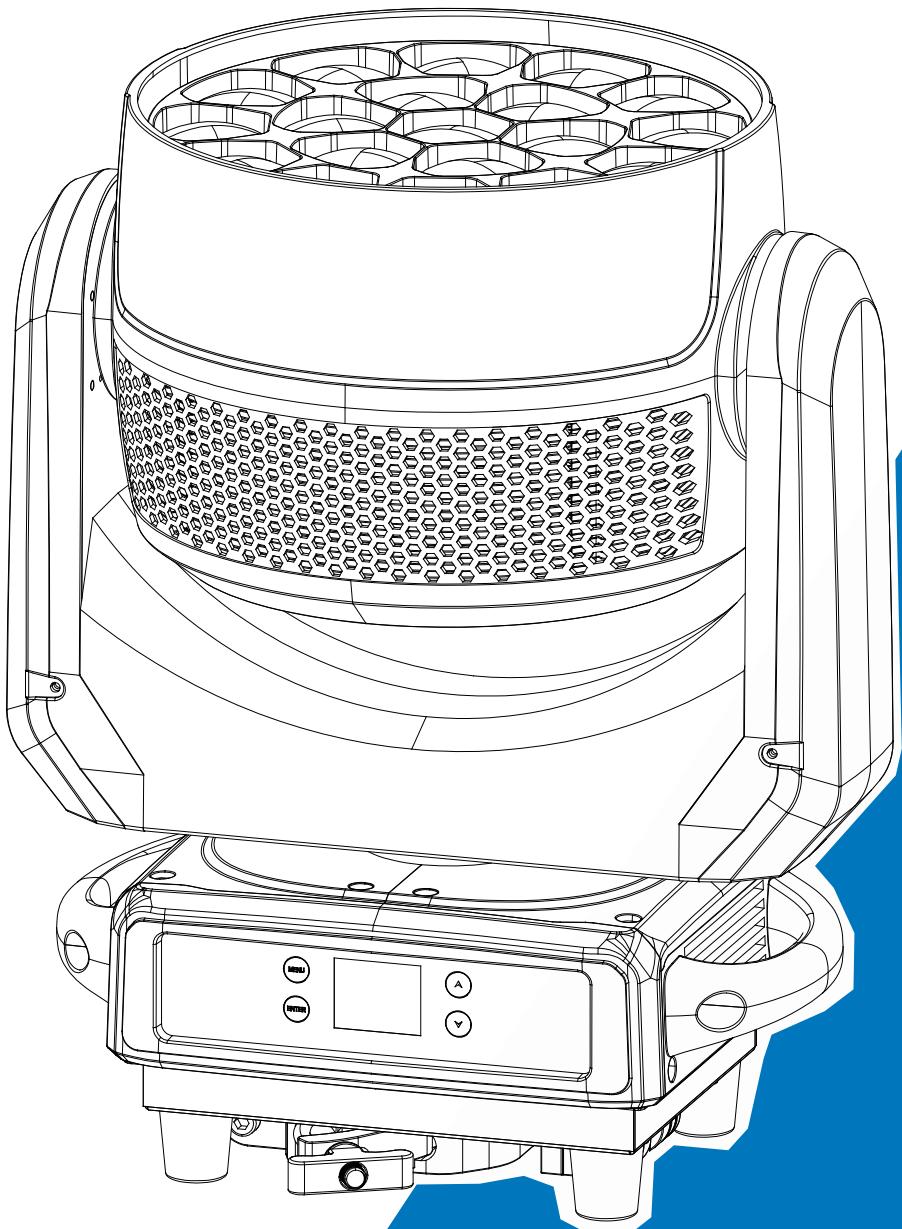


ACME[®]

N⁵
Neozone



User Manual

Please read the instruction carefully before use

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1. Safety Instructions



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

WARNING

Please keep this User Guide 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 to ensure that there is no transportation damage before using the unit.
- This product 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 is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: 0°C. Maximum ambient temperature TA: 40°C. Do not operate this product at a lower or higher temperature.
- DO NOT connect the device to any dimmer pack.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to 75°C. DO NOT touch the housing bare-handed during its operation.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.

- DO NOT operate in a 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 entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 0.5 meters.
- Disconnect mains power before fuse replacement or servicing.
- Replace fuse 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 housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging if the device is to be transported.
- Avoid direct eye exposure to the light source while the product is on.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.

Installation:

The fixture should be fixed on the clamp. Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always install a safety cable that can hold at least 12 times the weight of the fixture when installing.

DO install and operate by qualified operator. It must be installed in a place where there is out of the reach of people.

2. Technical Specifications

Power Voltage:

AC 100~240V, 50/60Hz

Power Consumption:

960W

Light Source:

19x40W RGBW LED

Zoom Range:

5°~50°

Movement:

Pan: 540°

Tilt: 220°

Pan/Tilt Resolution: 16bit

Dimmer/Shutter:

0~100% smooth dimming; outstanding strobe effect with variable speed

Control:

DMX Channel: 17/21/86/10+ Channels

Control Mode: DMX512, RDM

Firmware Upgrade via DMX link

Construction:

Display: LCD display

Data In/Out: 3-pin XLR, RJ45 (5-pin XLR is optional)

Power In/Out: Power Connector in/out

Protection Rating: IP20

Features:

Variable CTO

Pixel control, outstanding color macro effect

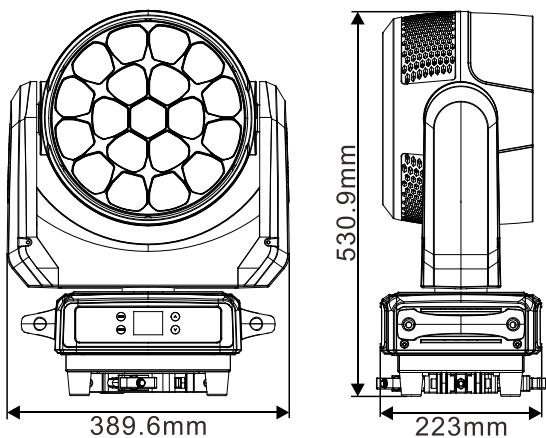
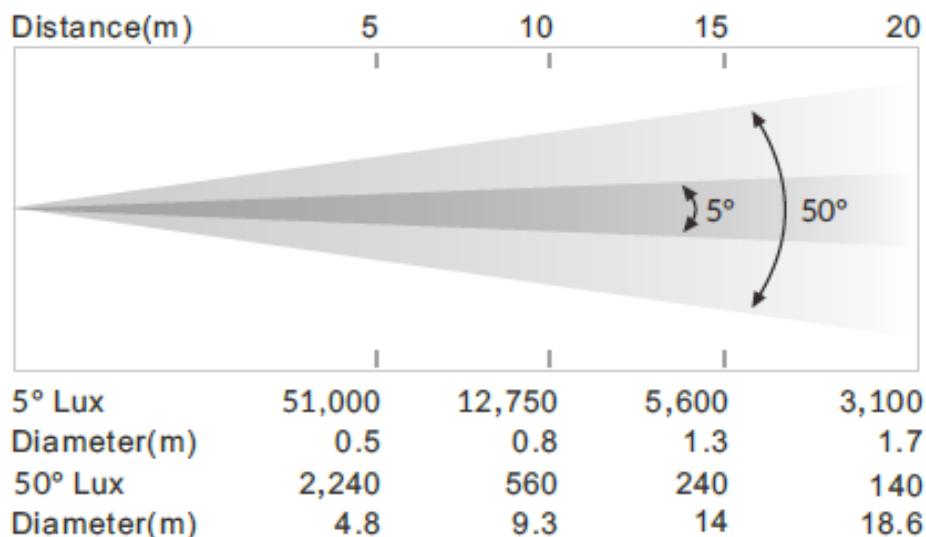
Electronic linear zoom system

Powerful beam and wash effects

Dimension/Weight:

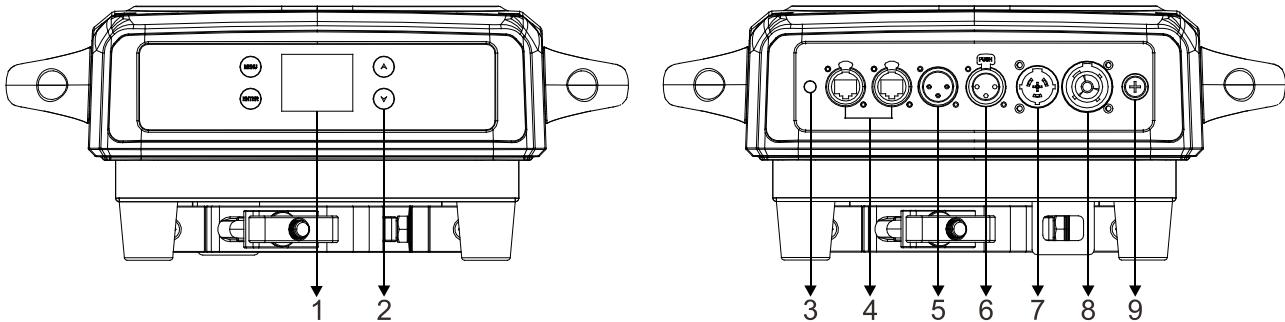
389.6x223x530.9mm, 21.3kgs

15.3"x8.8"x20.9"in, 47lbs

**Photometric Diagram:**

3. How To Set The Unit

3.1 Control Panel



1. Display: To show the various menus and the selected function

2. Button:

MENU	To enter into move backward or leave the menu
▲ UP	To go backward to move up in the menu
▼ DOWN	To go forward to move down in the menu
ENTER	To perform the desired functions

3. BATTERY DISPLAY

4. ETHERNET: Transfers fixture's information to a main controller

5. DMX IN:

For DMX512 link, use 3-pin XLR cable to link the unit and DMX controller (5-pin XLR is optional)

6. DMX OUT:

For DMX512 link, use 3-pin XLR cable to link the next units (5-pin XLR is optional)

7. POWERCON IN: To connect to supply power

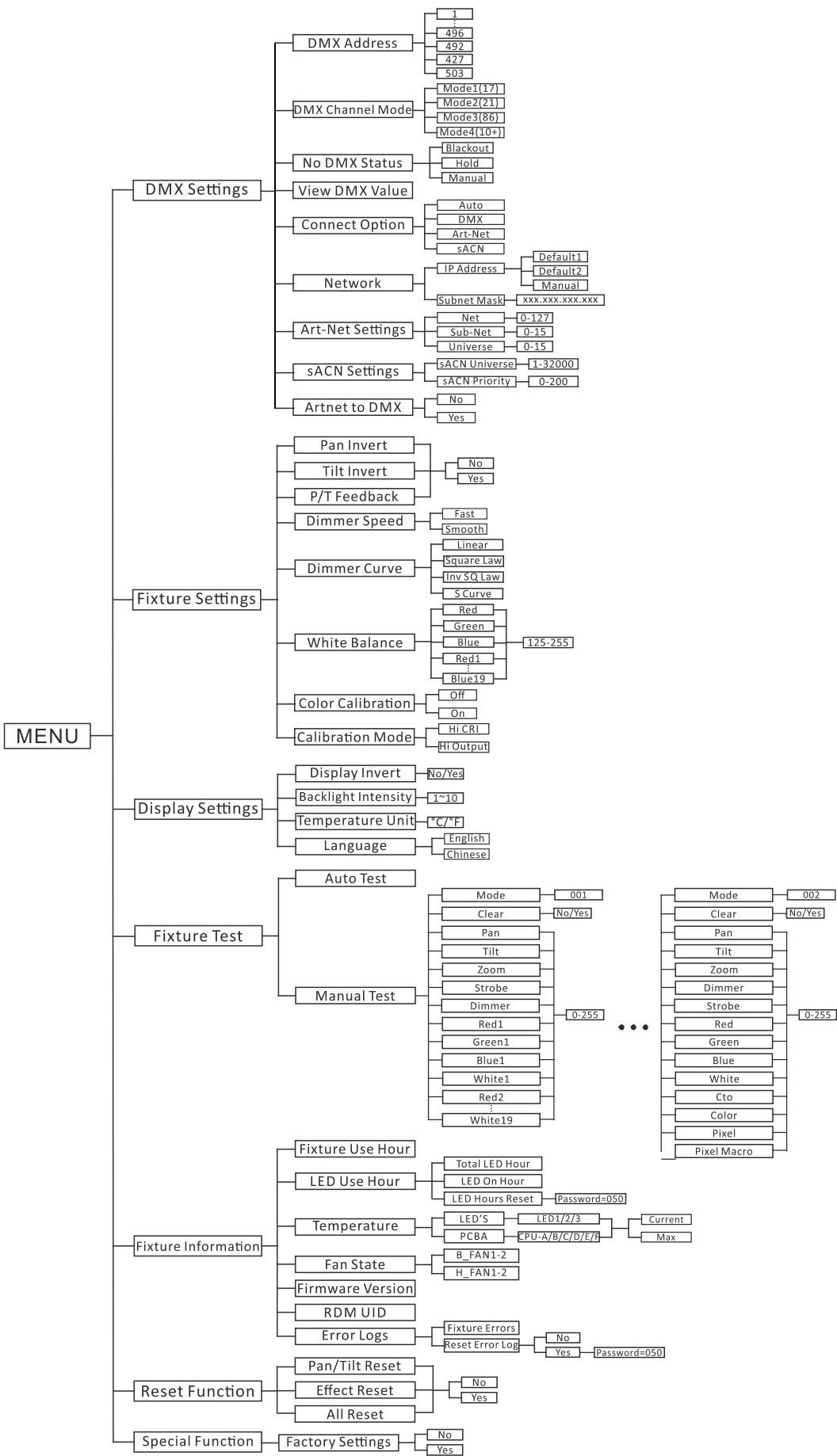
8. POWERCON OUT: To connect to the next fixture

9. FUSE(T 15A): To protect the unit from over-voltage or short circuit

3.2 Main Function

Turn on the unit, press the MENU button into menu mode, and press the UP/DOWN button until the required function is shown on the monitor. Select the function by the ENTER button. Use the UP/DOWN button to choose the submenu, press the ENTER button to store and automatically return to the last menu. Press the MENU button or let the unit idle 30 seconds to exit menu mode.

The main functions are shown below:



DMX Settings

To select **DMX Settings**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **DMX Address**, **DMX Channel Mode**, **No DMX Status**, **View DMX Value**, **Connect Option**, **Network**, **Art-Net Settings**, **sACN Settings** or **Artnet to DMX**.

DMX Address

To select **DMX Address**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust the address from **001** to **496/492/427/503**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

DMX Channel Mode

To select **DMX Channel Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Mode1 (17)**, **Mode2 (21)**, **Mode3 (86)** or **Mode4 (10+)**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

No DMX Status

To select **No DMX Status**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Blackout**(fixture blacks out if DMX signal stops), **Hold**(fixture continues to obey the last command it received Via DMX if DMX signal stops) or **Manual**(the fixture will automatically read the DMX value in the “Manual Test” menu for operation after selecting this mode), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

View DMX Value

To select **View DMX Value**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to view the DMX channel value. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Connect Option

To select **Connect Option**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Auto**, **DMX**, **Art-Net** or **sACN**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Network

To select **Network**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **IP Address** or **Subnet Mask**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Art-Net Settings

To select **Art-Net Settings**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Net**, **Subnet** or **Universe**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

sACN Settings

To select **sACN Settings**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **sACN Universe** or **sACN Priority**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Artnet to DMX

To select **Artnet to DMX**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** or **Yes**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Fixture Settings

To select **Fixture Settings**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Pan Invert**, **Tilt Invert**, **P/T Feedback**, **Dimmer Speed**, **Dimmer Curve**, **White Balance**, **Color Calibration** or **Calibration Mode**.

Pan Invert

To select **Pan Invert**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** (normal) or **Yes** (pan invert), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Tilt Invert

To select **Tilt Invert**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** (normal) or **Yes** (tilt invert), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

P/T Feedback

To select **P/T Feedback**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** (Pan or tilt's position will not feedback while out of step) or **Yes** (Feedback while pan/tilt out of step), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

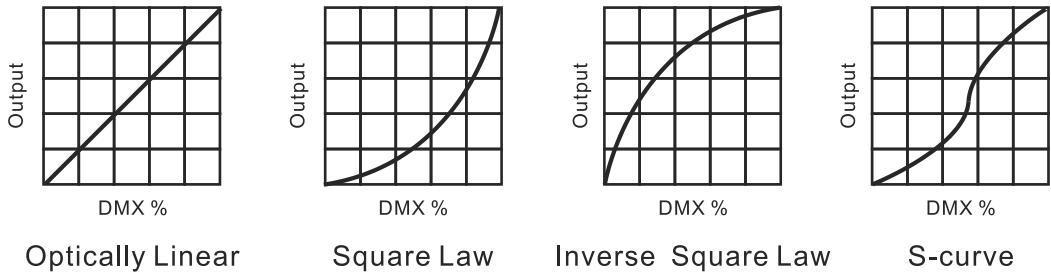
Dimmer Speed

To select **Dimmer Speed**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Fast** or **Smooth**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Dimmer Curve

To select **Dimmer Curve**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **Linear**, **Square Law**, **Inv SQ Law** or **S Curve**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Dimmer Modes



Optically Linear: The increase in light intensity appears to be linear as DMX value is increased.

Square Law: Light intensity control is finer at low levels and coarser at high levels.

Inverse Square Law: Light intensity control is coarser at low levels and finer at high levels.

S-Curve: Light intensity control is finer at low levels and high levels and coarser at medium levels.

White Balance

To select **White Balance**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Red**, **Green**, **Blue**, **Red1**, **Green1**, **Blue1**..... or **Red19**, **Green19**, **Blue19**, press the **ENTER** button to store. Use the **UP/DOWN** button to adjust the value from **125** to **255**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Color Calibration

To select **Color Calibration**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Off** or **On**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Calibration Mode

To select **Calibration Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Hi CRI** (High CRI Mode) or **Hi Output** (High Output Mode), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Display Settings

To select **Display Settings**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Display Invert, Backlight Intensity, Temperature Unit or Language**.

Display Invert

Select **Display Invert**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** (normal display) or **Yes** (invert display), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Backlight Intensity

Select **Backlight Intensity**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust backlight intensity from **1** (dark) to **10** (bright), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Temperature Unit

Select **Temperature Unit**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **°C** or **°F**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Language

Select **Language**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **English** or **Chinese**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Fixture Test

To select **Fixture Test**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Auto Test** or **Manual Test**.

Auto Test

Select **Auto Test**, press the **ENTER** button to confirm, the unit will run built-in programs to automatically test pan, tilt, zoom, etc. Press the **MENU** button back to the last menu or exit menu mode after auto test.

Manual Test

To select **Manual Test**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Mode, Clear, Pan, Tilt, Zoom, Strobe, Dimmer, Red1, Green1, Blue1, White1.....Red19, Green19, Blue19, White19** or **Red, Green, Blue, White, Cto, Color, Pixel, Pixel Macro**, press the **ENTER** button to confirm, use the **UP/DOWN** button to adjust the value, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode. (The fixture will return to the previous DMX state after exiting Manual Test menu and the Manual Test parameters will be automatically saved after power off and restart.)

Fixture Information

To select **Fixture Information**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Fixture Use Hour, LED Use Hour, Temperature, Fan State, Firmware Version, RDM UID** or **Error Logs**.

Fixture Use Hour

Select **Fixture Use Hour**, press the **ENTER** button to confirm, fixture use hour will show on the display, press the **MENU** button to exit.

LED Use Hour

To select **LED Use Hour**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Total LED Hour, LED On Hour** or **LED Hours Reset**, press the **ENTER** button to store. Use the **UP/DOWN** button to select **LED Hours Reset**, press the **ENTER** button to confirm, use the **UP/DOWN** button to set the password **050** to reset the LED hours, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode let the unit idle 30 seconds.

Temperature

Select **Temperature**, press the **ENTER** button to confirm, fixture temperature will show on the display, press the **MENU** button to exit.

Fan State

Select **Fan State**, press the **ENTER** button to confirm, fan state will show on the display, press the **MENU** button to exit.

Firmware Version

Select **Firmware Version**, press the **ENTER** button to confirm, firmware version will show on the display, press the **MENU** button back to exit.

RDM UID

Select **RDM UID**, press the **ENTER** button to confirm, RDM UID will show on the display, press the **MENU** button back to exit.

Error Logs

Select **Error Logs**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Fixture Errors** or **Reset Error Log**, press the **ENTER** button to store. Select **Reset Error Log**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** or **Yes**, press the **ENTER** button to store. Select **Yes**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to set the password **050**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Reset Function

To select **Reset Function**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Pan/Tilt Reset**, **Effect Reset** or **All Reset**.

Pan/Tilt Reset

Select **Pan/Tilt Reset**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **No**(normal) or **Yes** (the unit will run built-in program to reset pan and tilt to their home positions), press the **ENTER** button to store. Press the **MENU** button to exit.

Effect Reset

Select **Effect Reset**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **No**(normal) or **Yes** (the unit will run built-in program to reset effect to their home positions), press the **ENTER** button to store. Press the **MENU** button to exit.

All Reset

Select **All Reset**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **No**(normal) or **Yes** (the unit will run built-in program to reset all motors to their home positions), press **ENTER** button to store. Press the **MENU** button to exit.

Special Function

Factory Settings

Select **Factory Settings**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **No**(normal) or **Yes** (the fixture will reset to factory settings), press **ENTER** button to store. Press the **MENU** button to exit.

RDM FUNCTIONS

Select the MANUFACTURER menu to display the manufacturer of the fixture.

Select the SOFTWARE VERSION menu and the program version number of the fixture will be displayed.

Select the DMX START ADDRESS menu to change the DMX 512 address (001-512).

Select the DEVICE MODEL DESCRIPTION menu to display the model of the fixture.

Select the DEVICE LABEL menu to change the model of the fixture.

Select the DMX PERSONALITY menu to set the channel mode of the fixture (17/21/86/10+ channel).

Select the DMX PERSONALITY DESCRIPTION menu to display the current channel mode of the fixture.

Select the DEVICE HOURS menu to display the running time of the fixture.

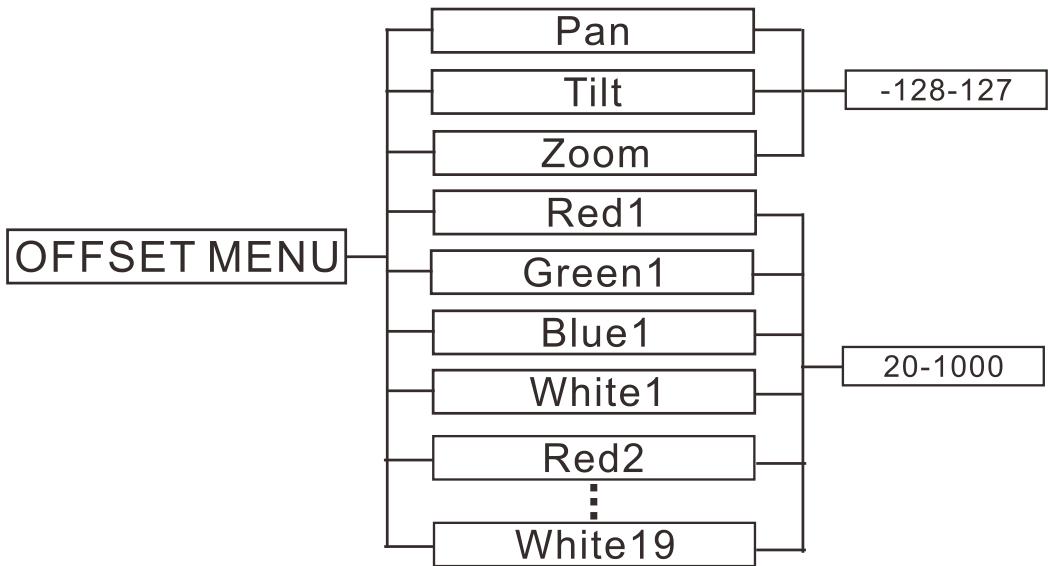
Select the PAN INVERT menu and the fixture will run the pan invert mode.

Select the TILT INVERT menu and the fixture will run the tilt invert mode.

Select the RESET DEVICE menu, the WARM RESET/COLD RESET option will be displayed. When WARM RESET is selected, the fixture will start a warm reset, and exit when COLD RESET is selected.

3.3 Home Position Adjustment

Press the MENU button into menu mode, then press 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 choose the submenu, press the ENTER button to store and automatically return to the last menu. Press MENU button to exit.



Pan

Enter offset mode, Select **Pan**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

Tilt

Enter offset mode, Select **Tilt**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

Zoom

Enter offset mode, Select **Zoom**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

Red1

Enter offset mode, Select **Red1**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 20 to 1000, press the **ENTER** button to store. Press the **MENU** button to exit.

Green1

Enter offset mode, Select **Green1**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 20 to 1000, press the **ENTER** button to store. Press the **MENU** button to exit.

Blue1

Enter offset mode, Select **Blue1**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 20 to 1000, press the **ENTER** button to store. Press the **MENU** button to exit.

White1

Enter offset mode, Select **White1**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 20 to 1000, press the **ENTER** button to store. Press the **MENU** button to exit.

Red2

Enter offset mode, Select **Red2**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 20 to 1000, press the **ENTER** button to store. Press the **MENU** button to exit.

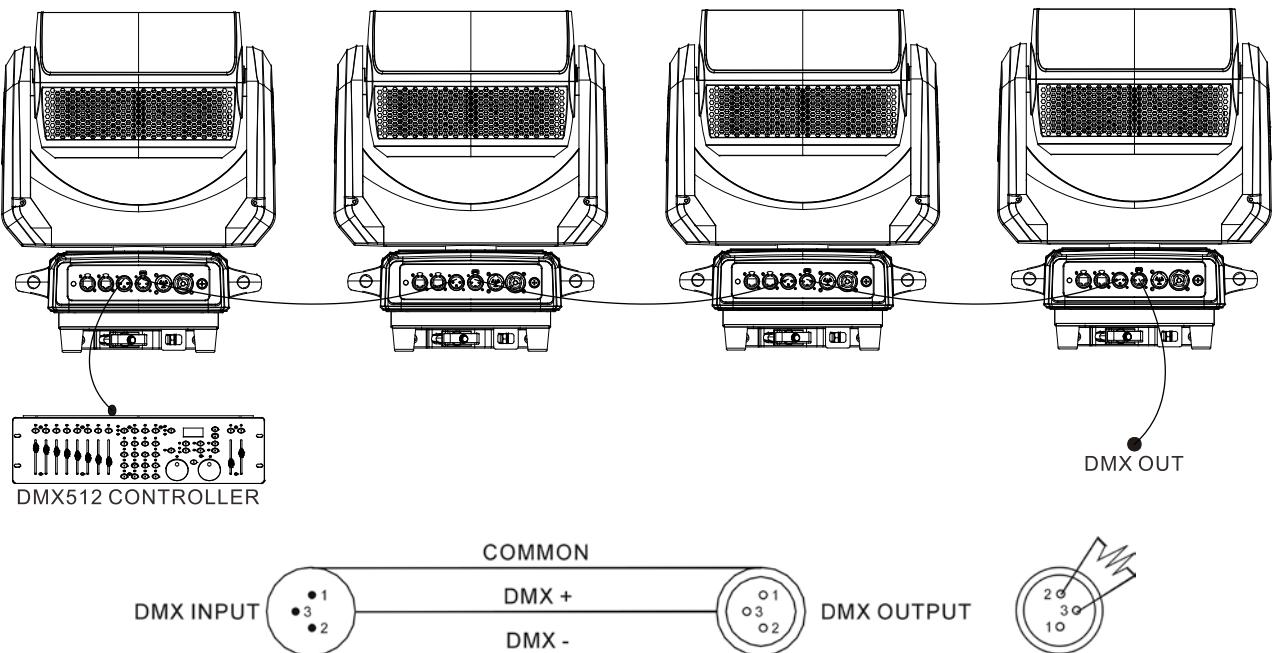
.....

White19

Enter offset mode, Select **White19**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 20 to 1000, press the **ENTER** button to store. Press the **MENU** button to exit.

4. Control By Universal DMX Controller

4.1 DMX512 Connection



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 1-512.
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.

4.2 Address Setting

If you use 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 to enter menu mode, select DMX Settings, press the ENTER button to confirm, use the UP/DOWN button to select DMX Address, press the ENTER button to confirm, the present address will blinking the display, use the UP/DOWN button to adjust the address from 001 to 512, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Please refer to the following diagram to address your DMX512 channel for the first 4 units.

Channel mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
17 channels	1	18	35	52
21 channels	1	22	43	64
86 channels	1	87	173	259
10+ Channel (Controlled by DMX)	1	11	21	31
10+ Channel (Controlled by Artnet)	1	77	153	229

4.3 DMX 512 Configuration

Please refer to below configurations to control the fixtures

Attentions:

1. The unit will maintain the last condition until reset if you cut-off the DMX signal.
2. For the channel Function, keep the value for about 3 seconds, then the corresponding function will take into effect.

17 Channels:

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0°→540°
2	000-255	PAN FINE
3	000-255	TILT 0°→220°
4	000-255	TILT FINE
5	000-255	ZOOM 5°→50°
6	000-009	FUNCTION
	010-019	No Function
	020-029	No Function
	030-039	No Function
	040-049	Dimmer Curve Linear
	050-059	Dimmer Curve Square Law
	060-069	Dimmer Curve Inv SQ Law
	070-079	Dimmer Curve S
	080-089	No Function
	090-099	No Function
	100-109	No Function
	110-119	Led Frequency Setting Enable
	120-129	Led Frequency Setting Disable
	130-139	No Function
	140-149	Pan/Tilt Reset
	150-159	Effect Reset
	160-169	Color Calibration: On
	170-179	Color Calibration: Off
	180-189	Calibration Mode: High CRI
	190-199	Calibration Mode: High Output
	200-209	All Reset
	210-219	Dimmer Speed Fast
	220-229	Dimmer Speed Smooth
	230-239	No Function
	240-245	No Function
	246-251	No Function
	252-255	No Function
7	000-255	DIMMER 0%→100%
8	000-255	DIMMER FINE
9	000-007	STROBE Close

	008-015 016-131 032-139 140-181 182-189 190-231 232-239 240-247 248-255	Open Strobe from Slow to Fast Open Fast Close Slow Open, Slow to Fast Open Fast Open Slow Close, Slow to Fast Open Random Strobe from Slow to Fast Open
10	000-255	RED 0%→100%
11	000-255	GREEN 0%→100%
12	000-255	BLUE 0%→100%
13	000-255	WHITE 0%→100%
14	000 001-004 005-009 010-013 014-018 019-022 023-027 028-031 032-036 037-040 041-045 046-049 050-054 055-058 059-063 064-067 068-072 073-076 077-081 082-085 086-090 091-094 095-099 100-103 104-108 109-112 113-117 118-121	CTO(8000K-2500K) Null 8000K 7900K 7800K 7700K 7600K 7500K 7400K 7300K 7200K 7100K 7000K 6900K 6800K 6700K 6600K 6500K 6400K 6300K 6200K 6100K 6000K 5900K 5800K 5700K 5600K 5500K 5400K

	122-126 127-130 131-135 136-139 140-144 145-148 149-153 154-157 158-162 163-166 167-171 172-175 176-180 181-184 185-189 190-193 194-198 199-202 203-207 208-211 212-216 217-220 221-225 226-229 230-234 235-238 239-243 244-247 248-255	5300K 5200K 5100K 5000K 4900K 4800K 4700K 4600K 4500K 4400K 4300K 4200K 4100K 4000K 3900K 3800K 3700K 3600K 3500K 3400K 3300K 3200K 3100K 3000K 2900K 2800K 2700K 2600K 2500K
15		COLOR MACRO Null Color1 Color2 Color3 Color4 Color5 Color6 Color7 Color8 Color9 Color10 Color11 Color12 Color13 Color14 Color15 Color16

	072-075 076-079 080-083 084-087 088-091 092-095 096-099 100-103 104-107 108-111 112-115 116-119 120-123 124-127 128-131 132-135 136-165 166-195 196-205 206-215 216-225 226-235 236-245 246-255	Color17 Color18 Color19 Color20 Color21 Color22 Color23 Color24 Color25 Color26 Color27 Color28 Color29 Color30 Color31 Color32 Rotate CW Fast to Slow Rotate CCW Slow to Fast Red→Green Red→Blue Red→White Green→Blue Green→White Blue→White
16	000 001 002-245 246 247 248 249 250 251-255	PIXEL (See "Pixel of 16 CH" in detail) No Function Open Pattern1-244 Built-in Mode1 Built-in Mode2 Built-in Mode3 Randomly Light Up a Pixel Randomly Light Up two Pixels Open
17	000-031 032-091 092-101 102-161 162-255	PIXEL ROTATION Null Rotate CW Fast to Slow Null Rotate CCW Slow to Fast Null

21 Channels:

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0°→540°
2	000-255	PAN FINE
3	000-255	TILT 0°→220°
4	000-255	TILT FINE
5	000-255	ZOOM 5°→50°
6	000-009	FUNCTION
	010-019	No Function
	020-029	No Function
	030-039	No Function
	040-049	Dimmer Curve Linear
	050-059	Dimmer Curve Square Law
	060-069	Dimmer Curve Inv SQ Law
	070-079	Dimmer Curve S
	080-089	No Function
	090-099	No Function
	100-109	No Function
	110-119	No Function
	120-129	No Function
	130-139	Led Frequency Setting Enable
	140-149	Led Frequency Setting Disable
	150-159	No Function
	160-169	Pan/Tilt Reset
	170-179	Effect Reset
	180-189	Color Calibration: On
	190-199	Color Calibration: Off
	200-209	Calibration Mode: High CRI
	210-219	Calibration Mode: High Output
	220-229	All Reset
	230-239	Dimmer Speed Fast
	240-245	Dimmer Speed Smooth
	246-251	No Function
	252-255	No Function
7	000-255	DIMMER 0%→100%
8	000-255	DIMMER FINE
9	000-007	STROBE Close

	008-015 016-131 032-139 140-181 182-189 190-231 232-239 240-247 248-255	Open Strobe from Slow to Fast Open Fast Close Slow Open, Slow to Fast Open Fast Open Slow Close, Slow to Fast Open Random Strobe from Slow to Fast Open
10	000-255	RED1 0%→100%
11	000-255	GREEN1 0%→100%
12	000-255	BLUE1 0%→100%
13	000-255	WHITE1 0%→100%
14	000-255	RED2 0%→100%
15	000-255	GREEN2 0%→100%
16	000-255	BLUE2 0%→100%
17	000-255	WHITE2 0%→100%
18	000-255	RED3 0%→100%
19	000-255	GREEN3 0%→100%
20	000-255	BLUE3 0%→100%
21	000-255	WHITE3 0%→100%

86 Channels:

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0°→540°
2	000-255	PAN FINE
3	000-255	TILT 0°→220°
4	000-255	TILT FINE
5	000-255	PAN/TILT SPEED Fast to Slow
6	000-255	ZOOM 5°→50°
7	000-007 008-015 016-131 032-139 140-181 182-189 190-231 232-239 240-247 248-255	STROBE Close Open Strobe from Slow to Fast Open Fast Close Slow Open, Slow to Fast Open Fast Open Slow Close, Slow to Fast Open Random Strobe from Slow to Fast Open
8	000-255	DIMMER 0%→100%
9	000-255	DIMMER FINE
10	000-255	RED1 0%→100%
11	000-255	GREEN1 0%→100%
12	000-255	BLUE1 0%→100%
13	000-255	WHITE1 0%→100%
14	000-255	RED2 0%→100%
15	000-255	GREEN2 0%→100%
16	000-255	BLUE2 0%→100%
17	000-255	WHITE2 0%→100%

18	000-255	RED3 0%→100%
19	000-255	GREEN3 0%→100%
20	000-255	BLUE3 0%→100%
21	000-255	WHITE3 0%→100%
22	000-255	RED4 0%→100%
23	000-255	GREEN4 0%→100%
24	000-255	BLUE4 0%→100%
25	000-255	WHITE4 0%→100%
26	000-255	RED5 0%→100%
27	000-255	GREEN5 0%→100%
28	000-255	BLUE5 0%→100%
29	000-255	WHITE5 0%→100%
30	000-255	RED6 0%→100%
31	000-255	GREEN6 0%→100%
32	000-255	BLUE6 0%→100%
33	000-255	WHITE6 0%→100%
34	000-255	RED7 0%→100%
35	000-255	GREEN7 0%→100%
36	000-255	BLUE7 0%→100%
37	000-255	WHITE7 0%→100%
38	000-255	RED8 0%→100%
39	000-255	GREEN8 0%→100%

40	000-255	BLUE8 0%→100%
41	000-255	WHITE8 0%→100%
42	000-255	RED9 0%→100%
43	000-255	GREEN9 0%→100%
44	000-255	BLUE9 0%→100%
45	000-255	WHITE9 0%→100%
46	000-255	RED10 0%→100%
47	000-255	GREEN10 0%→100%
48	000-255	BLUE10 0%→100%
49	000-255	WHITE10 0%→100%
50	000-255	RED11 0%→100%
51	000-255	GREEN11 0%→100%
52	000-255	BLUE11 0%→100%
53	000-255	WHITE11 0%→100%
54	000-255	RED12 0%→100%
55	000-255	GREEN12 0%→100%
56	000-255	BLUE12 0%→100%
57	000-255	WHITE12 0%→100%
58	000-255	RED13 0%→100%
59	000-255	GREEN13 0%→100%
60	000-255	BLUE13 0%→100%
61	000-255	WHITE13 0%→100%

62	000-255	RED14 0%→100%
63	000-255	GREEN14 0%→100%
64	000-255	BLUE14 0%→100%
65	000-255	WHITE14 0%→100%
66	000-255	RED15 0%→100%
67	000-255	GREEN15 0%→100%
68	000-255	BLUE15 0%→100%
69	000-255	WHITE15 0%→100%
70	000-255	RED16 0%→100%
71	000-255	GREEN16 0%→100%
72	000-255	BLUE16 0%→100%
73	000-255	WHITE16 0%→100%
74	000-255	RED17 0%→100%
75	000-255	GREEN17 0%→100%
76	000-255	BLUE17 0%→100%
77	000-255	WHITE17 0%→100%
78	000-255	RED18 0%→100%
79	000-255	GREEN18 0%→100%
80	000-255	BLUE18 0%→100%
81	000-255	WHITE18 0%→100%
82	000-255	RED19 0%→100%
83	000-255	GREEN19 0%→100%

84	000-255	BLUE19 0%→100%
85	000-255	WHITE19 0%→100%
86	000-009	FUNCTION
	010-019	No Function
	020-029	No Function
	030-039	No Function
	040-049	Dimmer Curve Linear
	050-059	Dimmer Curve Square Law
	060-069	Dimmer Curve Inv SQ Law
	070-079	Dimmer Curve S
	080-089	No Function
	090-099	No Function
	100-109	No Function
	110-119	Led Frequency Setting Enable
	120-129	Led Frequency Setting Disable
	130-139	No Function
	140-149	No Function
	150-159	Pan/Tilt Reset
	160-169	Effect Reset
	170-179	Color Calibration: On
	180-189	Color Calibration: Off
	190-199	Calibration Mode: High CRI
	200-209	Calibration Mode: High Output
	210-219	All Reset
	220-229	Dimmer Speed Fast
	230-239	Dimmer Speed Smooth
	240-245	No Function
	246-251	No Function
	252-255	No Function

10+ Channels (Controlled by DMX):

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0°→540°
2	000-255	PAN FINE
3	000-255	TILT 0°→220°
4	000-255	TILT FINE

5	000-255	PAN/TILT SPEED Fast to Slow
6	000-255	ZOOM $5^\circ \rightarrow 50^\circ$
7	000-007	STROBE Close
	008-015	Open
	016-131	Strobe from Slow to Fast
	032-139	Open
	140-181	Fast Close Slow Open, Slow to Fast
	182-189	Open
	190-231	Fast Open Slow Close, Slow to Fast
	232-239	Open
	240-247	Random Strobe from Slow to Fast
	248-255	Open
8	000-255	DIMMER $0\% \rightarrow 100\%$
9	000-255	DIMMER FINE
10	000-009	FUNCTION No Function
	010-019	No Function
	020-029	No Function
	030-039	Dimmer Curve Linear
	040-049	Dimmer Curve Square Law
	050-059	Dimmer Curve Inv SQ Law
	060-069	Dimmer Curve S
	070-079	No Function
	080-089	No Function
	090-099	No Function
	100-109	Led Frequency Setting Enable
	110-119	Led Frequency Setting Disable
	120-129	No Function
	130-139	No Function
	140-149	Pan/Tilt Reset
	150-159	Effect Reset
	160-169	Color Calibration: On
	170-179	Color Calibration: Off
	180-189	Calibration Mode: High CRI
	190-199	Calibration Mode: High Output
	200-209	All Reset
	210-219	Dimmer Speed Fast
	220-229	Dimmer Speed Smooth
	230-239	No Function
	240-245	No Function
	246-251	No Function
	252-255	No Function

10+ Channels (Controlled by Artnet):

CHANNEL	VALUE	FUNCTION
1	000-255	RED1 0%→100%
2	000-255	GREEN1 0%→100%
3	000-255	BLUE1 0%→100%
4	000-255	WHITE1 0%→100%
5	000-255	RED2 0%→100%
6	000-255	GREEN2 0%→100%
7	000-255	BLUE2 0%→100%
8	000-255	WHITE2 0%→100%
9	000-255	RED3 0%→100%
10	000-255	GREEN3 0%→100%
11	000-255	BLUE3 0%→100%
12	000-255	WHITE3 0%→100%
13	000-255	RED4 0%→100%
14	000-255	GREEN4 0%→100%
15	000-255	BLUE4 0%→100%
16	000-255	WHITE4 0%→100%
17	000-255	RED5 0%→100%
18	000-255	GREEN5 0%→100%
19	000-255	BLUE5 0%→100%
20	000-255	WHITE5 0%→100%

21	000-255	RED6 0%→100%
22	000-255	GREEN6 0%→100%
23	000-255	BLUE6 0%→100%
24	000-255	WHITE6 0%→100%
25	000-255	RED7 0%→100%
26	000-255	GREEN7 0%→100%
27	000-255	BLUE7 0%→100%
28	000-255	WHITE7 0%→100%
29	000-255	RED8 0%→100%
30	000-255	GREEN8 0%→100%
31	000-255	BLUE8 0%→100%
32	000-255	WHITE8 0%→100%
33	000-255	RED9 0%→100%
34	000-255	GREEN9 0%→100%
35	000-255	BLUE9 0%→100%
36	000-255	WHITE9 0%→100%
37	000-255	RED10 0%→100%
38	000-255	GREEN10 0%→100%
39	000-255	BLUE10 0%→100%
40	000-255	WHITE10 0%→100%
41	000-255	RED11 0%→100%
42	000-255	GREEN11 0%→100%

43	000-255	BLUE11 0%→100%
44	000-255	WHITE11 0%→100%
45	000-255	RED12 0%→100%
46	000-255	GREEN12 0%→100%
47	000-255	BLUE12 0%→100%
48	000-255	WHITE12 0%→100%
49	000-255	RED13 0%→100%
50	000-255	GREEN13 0%→100%
51	000-255	BLUE13 0%→100%
52	000-255	WHITE13 0%→100%
53	000-255	RED14 0%→100%
54	000-255	GREEN14 0%→100%
55	000-255	BLUE14 0%→100%
56	000-255	WHITE14 0%→100%
57	000-255	RED15 0%→100%
58	000-255	GREEN15 0%→100%
59	000-255	BLUE15 0%→100%
60	000-255	WHITE15 0%→100%
61	000-255	RED16 0%→100%
62	000-255	GREEN16 0%→100%
63	000-255	BLUE16 0%→100%
64	000-255	WHITE16 0%→100%

65	000-255	RED17 0%→100%
66	000-255	GREEN17 0%→100%
67	000-255	BLUE17 0%→100%
68	000-255	WHITE17 0%→100%
69	000-255	RED18 0%→100%
70	000-255	GREEN18 0%→100%
71	000-255	BLUE18 0%→100%
72	000-255	WHITE18 0%→100%
73	000-255	RED19 0%→100%
74	000-255	GREEN19 0%→100%
75	000-255	BLUE19 0%→100%
76	000-255	WHITE19 0%→100%

Pixel of 16 CH:

							
Value: 088	Value: 089	Value: 090	Value: 091	Value: 092	Value: 093	Value: 094	Value: 095
							
Value: 096	Value: 097	Value: 098	Value: 099	Value: 100	Value: 101	Value: 102	Value: 103
							
Value: 104	Value: 105	Value: 106	Value: 107	Value: 108	Value: 109	Value: 110	Value: 111
							
Value: 112	Value: 113	Value: 114	Value: 115	Value: 116	Value: 117	Value: 118	Value: 119
							
Value: 120	Value: 121	Value: 122	Value: 123	Value: 124	Value: 125	Value: 126	Value: 127
							
Value: 128	Value: 129	Value: 130	Value: 131	Value: 132	Value: 133	Value: 134	Value: 135
							
Value: 136	Value: 137	Value: 138	Value: 139	Value: 140	Value: 141	Value: 142	Value: 143
							
Value: 144	Value: 145	Value: 146	Value: 147	Value: 148	Value: 149	Value: 150	Value: 151
							
Value: 152	Value: 153	Value: 154	Value: 155	Value: 156	Value: 157	Value: 158	Value: 159
							
Value: 160	Value: 161	Value: 162	Value: 163	Value: 164	Value: 165	Value: 166	Value: 167
							
Value: 168	Value: 169	Value: 170	Value: 171	Value: 172	Value: 173	Value: 174	Value: 175

							
Value: 176	Value: 177	Value: 178	Value: 179	Value: 180	Value: 181	Value: 182	Value: 183
							
Value: 184	Value: 185	Value: 186	Value: 187	Value: 188	Value: 189	Value: 190	Value: 191
							
Value: 192	Value: 193	Value: 194	Value: 195	Value: 196	Value: 197	Value: 198	Value: 199
							
Value: 200	Value: 201	Value: 202	Value: 203	Value: 204	Value: 205	Value: 206	Value: 207
							
Value: 208	Value: 209	Value: 210	Value: 211	Value: 212	Value: 213	Value: 214	Value: 215
							
Value: 216	Value: 217	Value: 218	Value: 219	Value: 220	Value: 221	Value: 222	Value: 223
							
Value: 224	Value: 225	Value: 226	Value: 227	Value: 228	Value: 229	Value: 230	Value: 231
							
Value: 232	Value: 233	Value: 234	Value: 235	Value: 236	Value: 237	Value: 238	Value: 239
							
Value: 240	Value: 241	Value: 242	Value: 243	Value: 244	Value: 245		
							
Value: 246			Value: 247				
							
Value: 248			Value: 249 Randomly		Value: 250 Randomly		Value: 251-255

5. Error Information

1. CPU-B/C/D/E/F Error

Check whether the 485 (DATA) leads on the PCB board are install in place or disconnected.

Check whether the 485 (DATA) lead is disconnected.

Check whether the relevant signal circuit 485 (DATA) on the PCB board is damaged.

2. Pan Reset Error

Check if the position of the pan mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the pan operating range.

Check if the pan Hall elements is damaged.

Check if the pan Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the pan motor is damaged.

Check if there is any damage to the circuit of the pan motor drive board.

3. Pan Encode Error

Check if the pan encoder is damaged.

Check if the pan encoder is in poor contact with the lead of the PCB board or disconnected.

4. Tilt Reset Error

Check if the position of the tilt mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the tilt operating range.

Check if the tilt Hall elements is damaged.

Check if the tilt Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the tilt motor is damaged.

Check if there is any damage to the circuit of the tilt motor drive board.

5. Tilt Encode Error

Check if the tilt encoder is damaged.

Check if the tilt encoder is in poor contact with the lead of the PCB board or disconnected.

6. Zoom Reset Error

Check if the position of the zoom mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the zoom operating range.

Check if the zoom Hall elements is damaged.

Check if the zoom Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the zoom motor is damaged.

Check if there is any damage to the circuit of the zoom motor drive board.

7. LED Temp.1/2/3 Error

Check if the temperature detecting board is normal.

Check if the components of the temperature detecting board are damaged.

Check if the lead of the temperature detecting board is installed in place or disconnected.

8. LED Timeout Use

9. LED Too Hot Off

When the fixture temperature reaches 85°C, it will automatically turn off to protect the fixture.

10. BaseFan1/2 Start Error

Check if the fan is not running.

Check if the fan leads are installed in place or disconnected.

Check if the fan is damaged.

Check if there are other interference items in the fan operating range.

11. BaseFan1/2 Stop Error

Check if the fan circuit on the motherboard breaks down.

Check if the component is damaged.

12. BaseFan1/2 Too Slow

Check if the fan is out of order.

Check if there are other interference items in the fan operating range.

13. BaseFan1/2 Too Fast

Check if the fan is out of order.

Check if the fan circuit on the motherboard breaks down.

14. HeadFan1/2 Start Error

Check if the fan is not running.

Check if the fan leads are installed in place or disconnected.

Check if the fan is damaged.

Check if there are other interference items in the fan operating range.

15. HeadFan1/2 Stop Error

Check if the fan circuit on the motherboard breaks down.

Check if the component is damaged.

16. HeadFan1/2 Too Slow

Check if the fan is out of order.

Check if there are other interference items in the fan operating range.

17. HeadFan1/2 Too Fast

Check if the fan is out of order.

Check if the fan circuit on the motherboard breaks down.

18. Color Cal IC Error

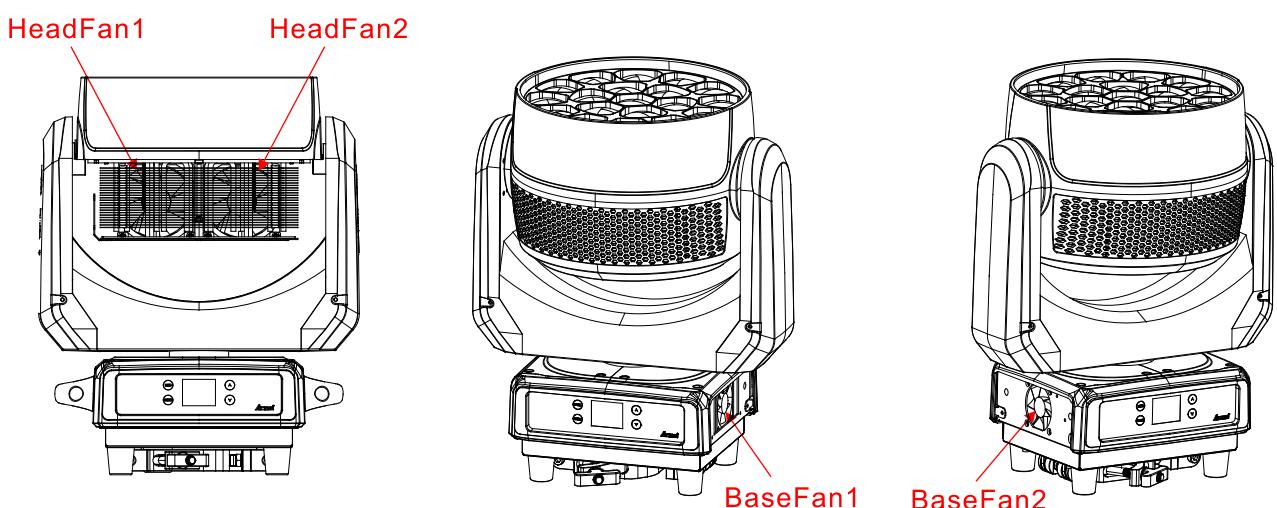
Check if the color calibration IC is damaged.

Check if the color calibration IC board is inserted well and if the electronic components are well soldered.

Check if the motherboard is malfunctioning.

Check if the R76 bit resistors and other components on the motherboard are well soldered.

The position of each fan of the fixture:



6. 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. Check DMX connectors, cables to see if they are linked properly.
2. 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 to high voltage cables that may cause damage or interference to DMX interface circuit.

C. One of the channels is not working well

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

7. Fixture Cleaning

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

- Clean with soft cloth and use normal glass to clean liquid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days.

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