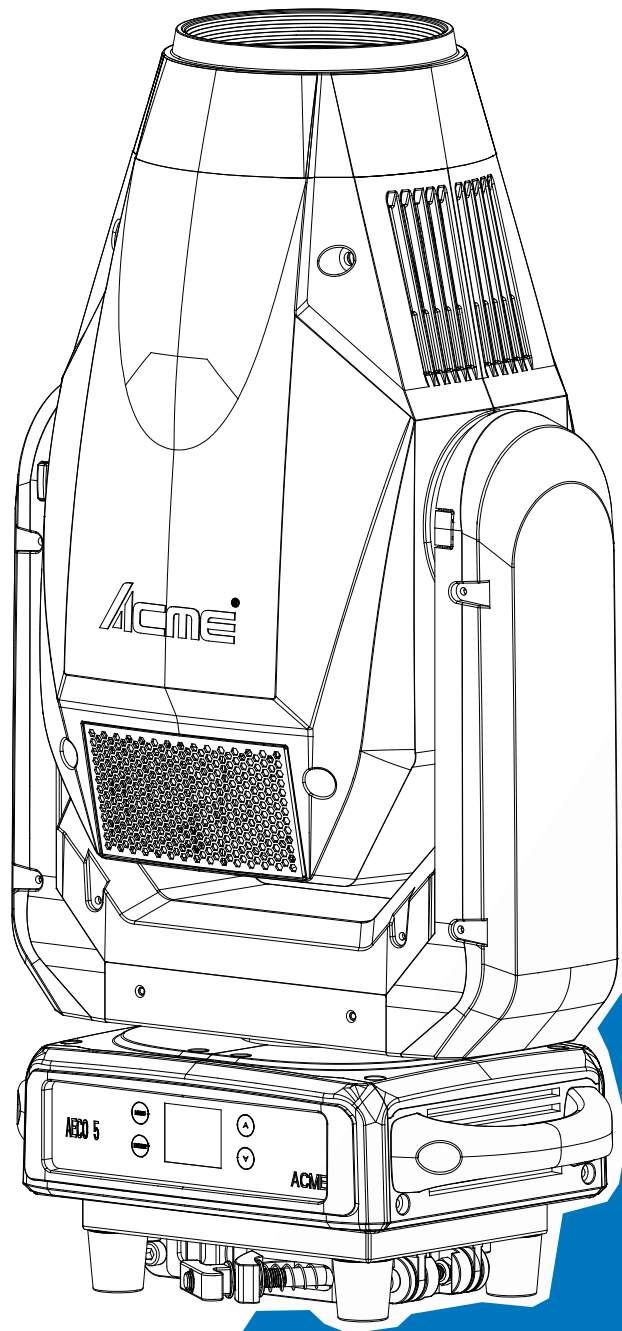


Acme[®]

AECO 5



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 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 are blocked, otherwise the unit will be overheated.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: 0°C. Maximum ambient temperature TA: 40°C.
- DO NOT connect the device to any dimmer pack.
- 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 65°C. DO NOT touch the housing bare-handed during its operation.
- 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 fixtures regularly.

- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid power wires together twist other cables.
- The minimum distance between light output and the illuminated surface must be more than 3 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 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 again.
- DO NOT look directly at the light while the LED is on.
- DO NOT start on the unit without LED enclosure or when housing is damaged.

Installation:

The fixture should be mounted via its Omega Quick Release Clamp bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating and make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the fixtures weight. Always use a safety cable that can hold 12 times of the weight of the fixture when installing.

The equipment must be installed by professionals. It must be installed in a place where is out of the reach of people and no one can pass by or under it.

2. Technical Specifications

Power Voltage:

AC 100~240V, 50/60Hz

Power Consumption:

670W

Light Source:

ESP_SSL410

Color Temperature:

6000K

Zoom Range:

6.5°~54°

Movement:

Pan: 540°

Tilt: 270°

Pan/Tilt Resolution: 16 bit

Fixation: Tilt lock

Dimmer/Shutter:

Smooth dimming from 0-100%; outstanding strobe effect with various speeds

Color Wheel:

1x color wheel with 6 colors plus white

Gobo Wheel:

1x static gobo wheel with 8 gobos plus open

1x rotating gobo wheel with 7 gobos plus open, convenient replacement

Control:

DMX Channel: 33/24/28 channels

Protocols: DMX512, RDM, Art-Net, sACN

Firmware upgrade via DMX link or USB Disk

Construction:

Display: LCD display

Data In/Out: 3-pin XLR or 5-pin XLR, RJ45

Power In/Out: Power Connector in/out

Protection Rating: IP20

Features:

Motorized focus

Linear CMY color mixing

Color Rendering: Ra≥95; R9≥90

Variable CTO

1x 4-facet prism rotatable in either direction

2 different frost filters to create and improve the wash effect. They can be used independently and overlaid

Motorized linear iris

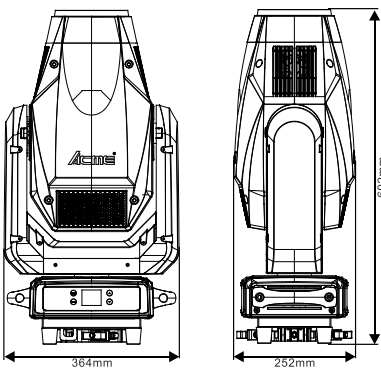
4 x fast and smooth framing shutters; The position and the angle of each shutter blade can be controlled individually; Each shutter blade can block out light completely; The framing module can rotate at ±45 degrees

2 x fixed clamps for 50mm truss

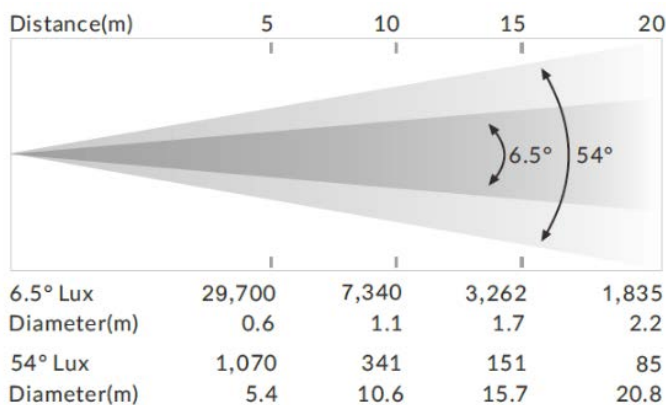
Dimension/Weight:

364x252x692mm, 26.8kgs

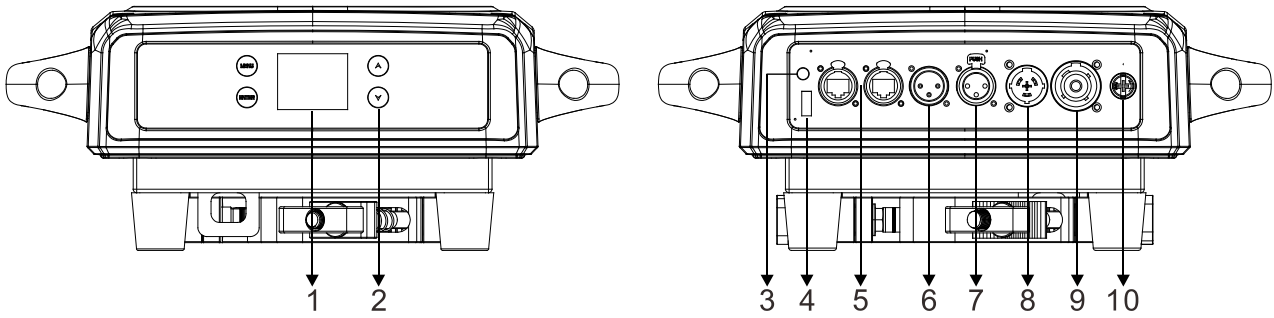
14"x10"x27" in, 59lbs



Photometric Diagram:



3. 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. FIRMWARE UPGRADE: Used to upgrade the fixture's firmware

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

6. DMX IN:

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

7. DMX OUT:

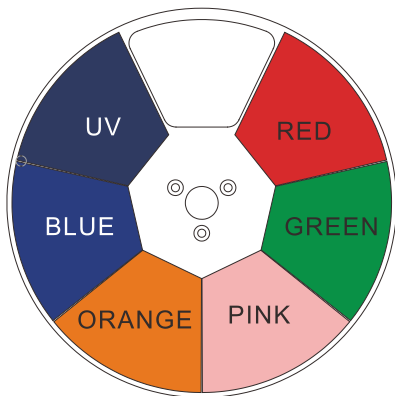
For DMX512 link, use 3-pin XLR cable to link the next units (5-pin XLR is optional)

8. POWER IN: To connect to supply power

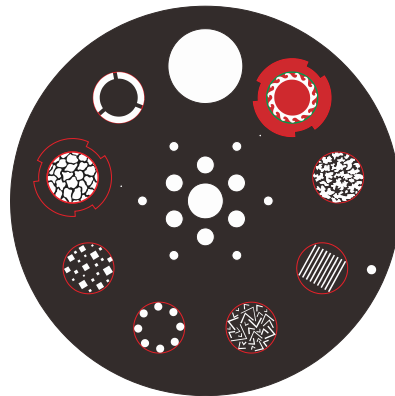
9. POWER OUT: To connect to the next fixture

10. FUSE(T 10A): Protects the unit from over-voltage or short circuit

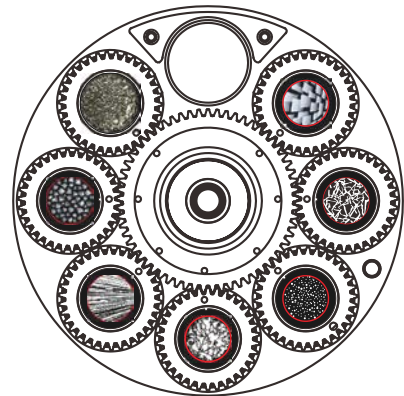
4. Color/Gobo



COLOR WHEEL



STATIC GOBO WHEEL



ROTATING GOBO WHEEL

DANGER!

***Install the rotating gobo wheel with the device switched off only.
Unplug from mains before changing the rotating gobo wheel!***

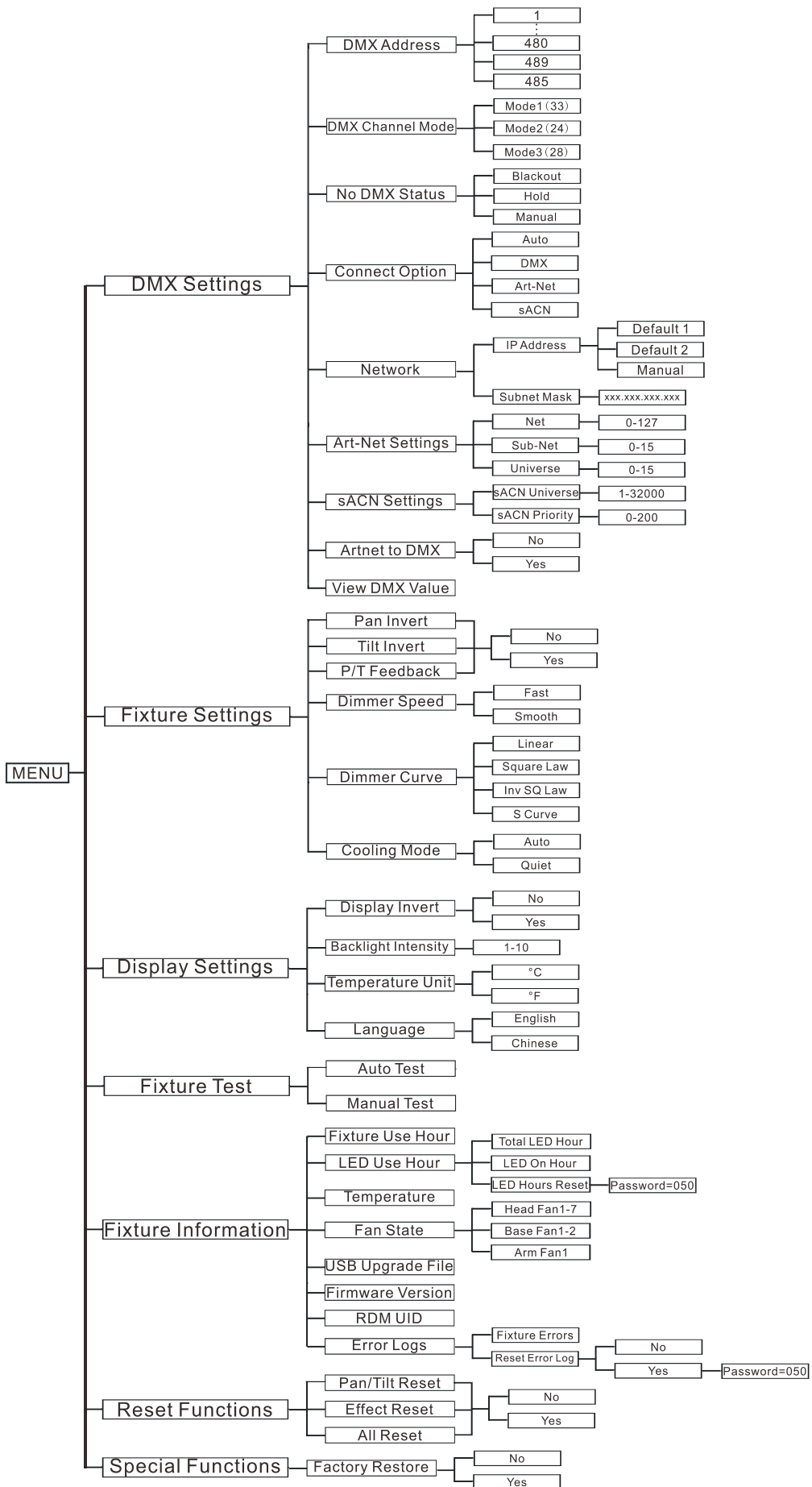
CAUTION: Never unscrew the screws of the rotating gobo as the ball bearing will otherwise be opened!

5. How To Set The Unit

5.1 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**, **Connect Option**, **Network**, **Art-Net Settings**, **sACN Settings**, **Artnet to DMX** or **View DMX Value**.

DMX Address

To select **DMX Address**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust the address from **001** to **480/489/485**, 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(33)**, **Mode2(24)** or **Mode3(28)**, 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.

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.

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.

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** or **Cooling 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.

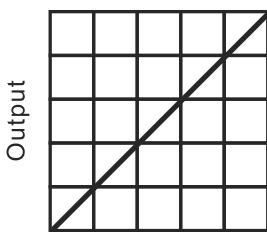
Dimmer Speed

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

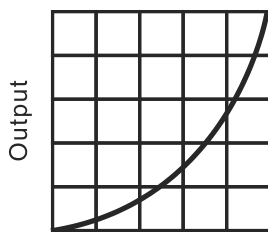
To select **Dimmer Curve**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **Linear**, **Square Law**, **Inv SQ Law** or **S Curve**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Dimmer Modes



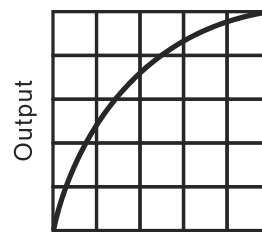
DMX %

Optically Linear



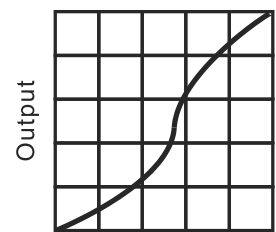
DMX %

Square Law



DMX %

Inverse Square Law



DMX %

S-curve

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.

Cooling Mode

To select **Cooling Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Auto** or **Quiet**, 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, color, gobo, gobo rotation, animation, prism, prism rotation, frost, focus, zoom, etc. Press the **MENU** button back to the last menu or exit menu mode after auto test.

Manual Test

Select **Manual Test**, press the **ENTER** button to confirm, the present channel will show on the display, use the **UP/DOWN** button to select channel, press the **ENTER** button to confirm, then use the **UP/DOWN** button to adjust the value, press the **ENTER** button to store, the fixture will run as the channel value indicates. Press the **MENU** button back to the last menu or exit menu mode idling 30 seconds.

(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**, **USB Upgrade File**, **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.

USB Upgrade File

Select **USB Upgrade File**, press the **ENTER** button to confirm, USB upgrade file will show on the display, press the **MENU** button back 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 Functions

To select **Reset Functions**, 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 back to the last menu or let the unit idle 30 seconds to exit menu mode.

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 back to the last menu or let the unit idle 30 seconds to exit menu mode.

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 Functions

Factory Restore

Select **Factory Restore**, 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 (33/24/28 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.

5.2 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.

Offset Menu	Dimmer	0-999
	Frequency(Hz)	1072-1327
	Pan	-128-127
	Tilt	-128-127
	Cyan	-128-127
	Magenta	-128-127
	Yellow	-128-127
	Color	-128-127
	Cto	-128-127
	Gobo1	-128-127
	R-Gobo1	-128-127
	Gobo2	-128-127
	Prism1	-128-127
	R-Prism1	-128-127
	Iris	-128-127
	Frost1	-128-127
	Frost2	-128-127
	Focus	-128-127
	Zoom	-128-127
	Framing	-128-127
	BladeDW1	0-255
	BladeDW2	0-255
	BladeUP1	0-255
	BladeUP2	0-255
	BladeLF1	0-255
	BladeLF2	0-255
	BladeRG1	0-255
	BladeRG2	0-255

Dimmer

Enter offset mode, Select **Dimmer**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 0 to 999, press the **ENTER** button to store. Press the **MENU** button to exit.

Frequency(Hz)

Enter offset mode, Select **Frequency(Hz)**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 1072 to 1327, press the **ENTER** button to store. Press the **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.

Cyan

Enter offset mode, Select **Cyan**, 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.

Magenta

Enter offset mode, Select **Magenta**, 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.

Yellow

Enter offset mode, Select **Yellow**, 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.

Color

Enter offset mode, Select **Color**, 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.

Cto

Enter offset mode, Select **Cto**, 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.

Gobo1

Enter offset mode, Select **Gobo1**, 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.

R-Gobo1

Enter offset mode, Select **R-Gobo1**, 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.

Gobo2

Enter offset mode, Select **Gobo2**, 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.

Prism1

Enter offset mode, Select **Prism1**, 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.

R-Prism1

Enter offset mode, Select **R-Prism1**, 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.

Iris

Enter offset mode, Select **Iris**, 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.

Frost1

Enter offset mode, Select **Frost1**, 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.

Frost2

Enter offset mode, Select **Frost2**, 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.

Focus

Enter offset mode, Select **Focus**, 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.

Framing

Enter offset mode, Select **Framing**, 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.

BladeDW1

Enter offset mode, Select **BladeDW1**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

BladeDW2

Enter offset mode, Select **BladeDW2**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

BladeUP1

Enter offset mode, Select **BladeUP1**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

BladeUP2

Enter offset mode, Select **BladeUP2**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

BladeLF1

Enter offset mode, Select **BladeLF1**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

BladeLF2

Enter offset mode, Select **BladeLF2**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

BladeRG1

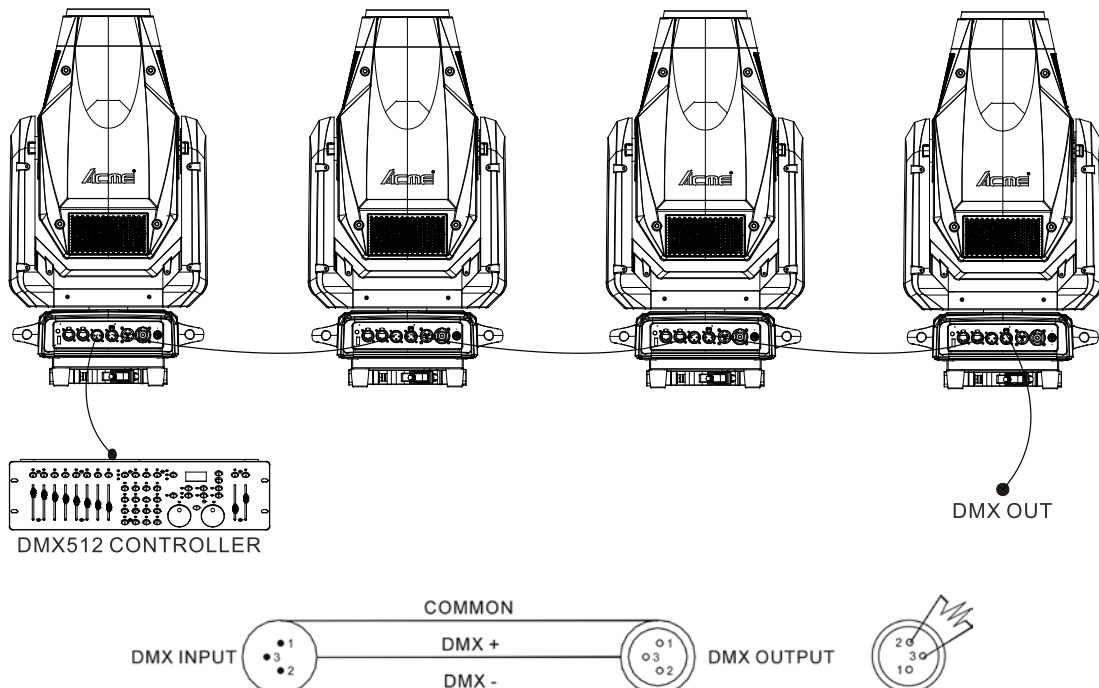
Enter offset mode, Select **BladeRG1**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

BladeRG2

Enter offset mode, Select **BladeRG2**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

6. Control By Universal DMX Controller

6.1 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.

6.2 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
33 channels	1	34	67	100
24 channels	1	25	49	73
28 channels	1	29	57	85

6.3 DMX512 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.

33 Channels (Mode 1):

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0°→540°
2	000-255	PAN FINE
3	000-255	TILT 0°→270°
4	000-255	TILT FINE
5	000-255	PAN/TILT SPEED Fast to Slow
6	000-255	CYAN 0%→100%
7	000-255	MAGENTA 0%→100%
8	000-255	YELLOW 0%→100%
9	000-255	CTO 0%→100%
10	000-009 010-018 019-027 028-036 037-045 046-054 055-063 064-127 128-189 190-193 194-255	COLOR Open Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color Wheel Indexing Counter-Clockwise Rotation, Fast to Slow Stop Clockwise Rotation, Slow to Fast
11	000-007 008-015 016-023	GOBO 1 Open Gobo 1 Gobo 2

	024-031 032-039 040-047 048-055 056-063 064-072 073-081 082-090 091-099 100-108 109-117 118-127 128-189 190-193 194-255	Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo1 Shaking Gobo2 Shaking Gobo3 Shaking Gobo4 Shaking Gobo5 Shaking Gobo6 Shaking Gobo 7 Shaking Counter-Clockwise Rotation, Fast to Slow Stop Clockwise Rotation, Slow to Fast
12	000-127 128-189 190-193 194-255	R-GOBO 1 Index 0°→360° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
13	000-007 008-014 015-021 022-028 029-035 036-042 043-049 050-056 057-063 064-071 072-079 080-087 088-095 096-103 104-111 112-119 120-127 128-189 190-193 194-255	GOBO 2 Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 1 Shaking Gobo 2 Shaking Gobo 3 Shaking Gobo 4 Shaking Gobo 5 Shaking Gobo 6 Shaking Gobo 7 Shaking Gobo 8 Shaking Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
14	000-255	IRIS 100%→0%
15	000-007 008-255	PRISM No Effect On

16	000-127 128-189 190-193 194-255	R-PRISM Index 0°→360° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
17	000-255	FROST 1 0%→100%
18	000-255	FROST 2 0%→100%
19	000-255	ZOOM 54°→6.5°
20	000-255	FOCUS 0%→100%
21	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	STROBE Close Open Strobe from Slow to Fast Open Fast Open Slow Close Open Fast Close Slow Open Open Random Strobe Open
22	000-255	DIMMER 0%→100%
23	000-255	DIMMER FINE
24	000-255	BLADE 0°→180°
25	000-255	BLADE DW 1 0%→100%
26	000-255	BLADE DW 2 0%→100%
27	000-255	BLADE UP 1 0%→100%
28	000-255	BLADE UP 2 0%→100%
29	000-255	BLADE LF 1 0%→100%
30	000-255	BLADE LF 2 0%→100%
31	000-255	BLADE RG 1 0%→100%
32		BLADE RG 2

	000-255	0%→100%
33	000-029 030-039 040-049 050-059 060-069 070-079 080-089 090-179 180-189 190-199 200-209 210-219 220-229 230-255	SPECIAL FUNCTION Null Dimmer Curve Square Law Dimmer Curve Inv Square Law Dimmer Curve Linear Dimmer Curve S Standard Quiet Null Dimmer Speed Fast Dimmer Speed Smooth Reset All Reset Effect Reset Pan/Tilt Null

24 Channels (Mode 2):

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0°→540°
2	000-255	PAN FINE
3	000-255	TILT 0°→270°
4	000-255	TILT FINE
5	000-255	PAN/TILT SPEED Fast to Slow
6	000-255	CYAN 0%→100%
7	000-255	MAGENTA 0%→100%
8	000-255	YELLOW 0%→100%
9	000-255	CTO 0%→100%
10	000-009 010-018 019-027 028-036 037-045	COLOR Open Color 1 Color 2 Color 3 Color 4

	046-054 055-063 064-127 128-189 190-193 194-255	Color 5 Color 6 Color Wheel Indexing Counter-Clockwise Rotation, Fast to Slow Stop Clockwise Rotation, Slow to Fast
11	000-007 008-015 016-023 024-031 032-039 040-047 048-055 056-063 064-072 073-081 082-090 091-099 100-108 109-117 118-127 128-189 190-193 194-255	GOBO 1 Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo1 Shaking Gobo2 Shaking Gobo3 Shaking Gobo4 Shaking Gobo5 Shaking Gobo6 Shaking Gobo 7 Shaking Counter-Clockwise Rotation, Fast to Slow Stop Clockwise Rotation, Slow to Fast
12	000-127 128-189 190-193 194-255	R-GOBO 1 Index 0°→360° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
13	000-007 008-014 015-021 022-028 029-035 036-042 043-049 050-056 057-063 064-071 072-079 080-087 088-095 096-103 104-111	GOBO 2 Open Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 1 Shaking Gobo 2 Shaking Gobo 3 Shaking Gobo 4 Shaking Gobo 5 Shaking Gobo 6 Shaking

	112-119 120-127 128-189 190-193 194-255	Gobo 7 Shaking Gobo 8 Shaking Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
14	000-255	IRIS 100%→0%
15	000-007 008-255	PRISM No Effect On
16	000-127 128-189 190-193 194-255	R-PRISM Index 0°→360° Clockwise Rotation, Fast to Slow Stop Counter-Clockwise Rotation, Slow to Fast
17	000-255	FROST 1 0%→100%
18	000-255	FROST 2 0%→100%
19	000-255	ZOOM 54°→6.5°
20	000-255	FOCUS 0%→100%
21	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	STROBE Close Open Strobe from Slow to Fast Open Fast Open Slow Close Open Fast Close Slow Open Open Random Strobe Open
22	000-255	DIMMER 0%→100%
23	000-255	DIMMER FINE
24	000-029 030-039 040-049 050-059 060-069 070-079 080-089	SPECIAL FUNCTION Null Dimmer Curve Square Law Dimmer Curve Inv Square Law Dimmer Curve Linear Dimmer Curve S Standard Quiet

	090-179 180-189 190-199 200-209 210-219 220-229 230-255	Null Dimmer Speed Fast Dimmer Speed Smooth Reset All Reset Effect Reset Pan/Tilt Null
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28 Channels (Mode 3):

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0°→540°
2	000-255	PAN FINE
3	000-255	TILT 0°→270°
4	000-255	TILT FINE
5	000-255	PAN/TILT SPEED Fast to Slow
6	000-255	CYAN 0%→100%
7	000-255	MAGENTA 0%→100%
8	000-255	YELLOW 0%→100%
9	000-255	CTO 0%→100%
10	000-009 010-018 019-027 028-036 037-045 046-054 055-063 064-127 128-189 190-193 194-255	COLOR Open Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color Wheel Indexing Counter-Clockwise Rotation, Fast to Slow Stop Clockwise Rotation, Slow to Fast
11	000-255	IRIS 100%→0%
12		FROST 1

	000-255	0%→100%
13	000-255	FROST 2 0%→100%
14	000-255	ZOOM 54°→6.5°
15	000-255	FOCUS 0%→100%
16	000-007 008-015 016-131 132-139 140-181 182-189 190-231 232-239 240-247 248-255	STROBE Close Open Strobe from Slow to Fast Open Fast Open Slow Close Open Fast Close Slow Open Open Random Strobe Open
17	000-255	DIMMER 0%→100%
18	000-255	DIMMER FINE
19	000-255	BLADE 0°→180°
20	000-255	BLADE DW 1 0%→100%
21	000-255	BLADE DW 2 0%→100%
22	000-255	BLADE UP 1 0%→100%
23	000-255	BLADE UP 2 0%→100%
24	000-255	BLADE LF 1 0%→100%
25	000-255	BLADE LF 2 0%→100%
26	000-255	BLADE RG 1 0%→100%
27	000-255	BLADE RG 2 0%→100%
28	000-029 030-039 040-049 050-059	SPECIAL FUNCTION Null Dimmer Curve Square Law Dimmer Curve Inv Square Law Dimmer Curve Linear

	060-069	Dimmer Curve S
	070-079	Standard
	080-089	Quiet
	090-179	Null
	180-189	Dimmer Speed Fast
	190-199	Dimmer Speed Smooth
	200-209	Reset All
	210-219	Reset Effect
	220-229	Reset Pan/Tilt
	230-255	Null

7. Error Information

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

Check whether the 485 (DATA) leads on the PCB board are installed 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. Cyan Reset Error

Check if the position of the cyan color wheel mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the cyan color wheel operating range.

Check if the cyan color wheel Hall elements is damaged.

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

Check if the cyan color wheel motor is damaged.

Check if there is any damage to the circuit of the cyan color wheel motor drive board.

7. Magenta Reset Error

Check if the position of the magenta color wheel mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the magenta color wheel operating range.

Check if the magenta color wheel Hall elements is damaged.

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

Check if the magenta color wheel motor is damaged.

Check if there is any damage to the circuit of the magenta color wheel motor drive board.

8. Yellow Reset Error

Check if the position of the yellow color wheel mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the yellow color wheel operating range.

Check if the yellow color wheel Hall elements is damaged.

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

Check if the yellow color wheel motor is damaged.

Check if there is any damage to the circuit of the yellow color wheel motor drive board.

9. Cto Reset Error

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

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

Check if the cto Hall elements is damaged.

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

Check if the cto motor is damaged.

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

10. Color Reset Error

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

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

Check if the color wheel Hall elements is damaged.

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

Check if the color wheel motor is damaged.

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

11. Gobo1/2 Reset Error

Check if the position of the gobo wheel1/2 mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the gobo wheel1/2 operating range.

Check if the gobo wheel1/2 Hall elements is damaged.

Check if the gobo wheel1/2 Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the gobo wheel1/2 motor is damaged.

Check if there is any damage to the circuit of the gobo wheel1/2 motor drive board.

12. R-Gobo1 Reset Error

Check if the position of the gobo wheel1 mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the gobo wheel1 operating range.

Check if the gobo wheel1 Hall elements is damaged.

Check if the gobo wheel1 Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the gobo wheel1 motor is damaged.

Check if there is any damage to the circuit of the gobo wheel1 motor drive board.

13. Blade Reset Error

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

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

Check if the blade Hall elements is damaged.

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

Check if the blade motor is damaged.

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

14. Prism Reset Error

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

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

Check if the Prism Hall elements is damaged.

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

Check if the Prism motor is damaged.

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

15. R-Prism Reset Error

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

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

Check if the Prism Hall elements is damaged.

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

Check if the Prism motor is damaged.

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

16. Focus Reset Error

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

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

Check if the focus Hall elements is damaged.

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

Check if the focus motor is damaged.

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

17. 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.

18. Led Temp. 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.

19. Led Temp. Too High

Check if the fan is working properly.

Check if the fan speed is normal.

Check if the ambient temperature is abnormal.

20. BaseFan1/2 Start Err

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.

21. BaseFan1/2 Stop Err

Check if the fan circuit on the motherboard breaks down.

Check if the component is damaged.

22. BaseFan1/2 Too Low

Check if the fan is out of order.

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

23. BaseFan1/2 Too High

Check if the fan is out of order.

Check if the fan circuit on the motherboard breaks down.

24. HeadFan1/2/3/4/5/6/7 Start Err

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.

25. HeadFan1/2/3/4/5/6/7 Stop Err

Check if the fan circuit on the motherboard breaks down.

Check if the component is damaged.

26. HeadFan1/2/3/4/5/6/7 Too Low

Check if the fan is out of order.

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

27. HeadFan1/2/3/4/5/6/7 Too High

Check if the fan is out of order.

Check if the fan circuit on the motherboard breaks down.

28. ArmFan1 Start Err

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.

29. ArmFan1 Stop Err

Check if the fan circuit on the motherboard breaks down.

Check if the component is damaged.

30. ArmFan1 Too Low

Check if the fan is out of order.

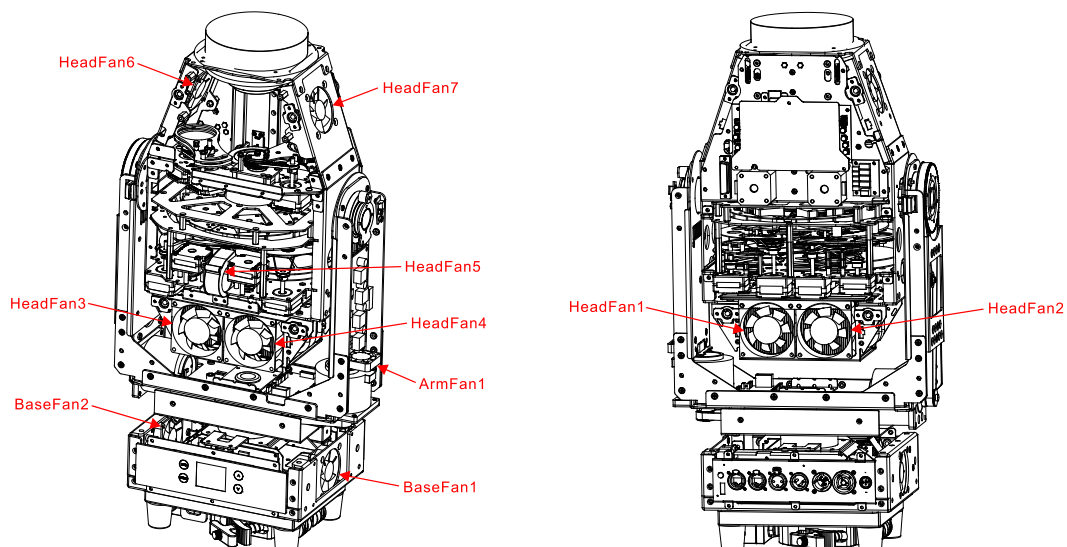
Check if there are other interference items in the fan operating range.

31. ArmFan1 Too High

Check if the fan is out of order.

Check if the fan circuit on the motherboard breaks down.

The position of each fan of the fixture:



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. 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.

9. 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. Clean the internal optics at least every 30 days.

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