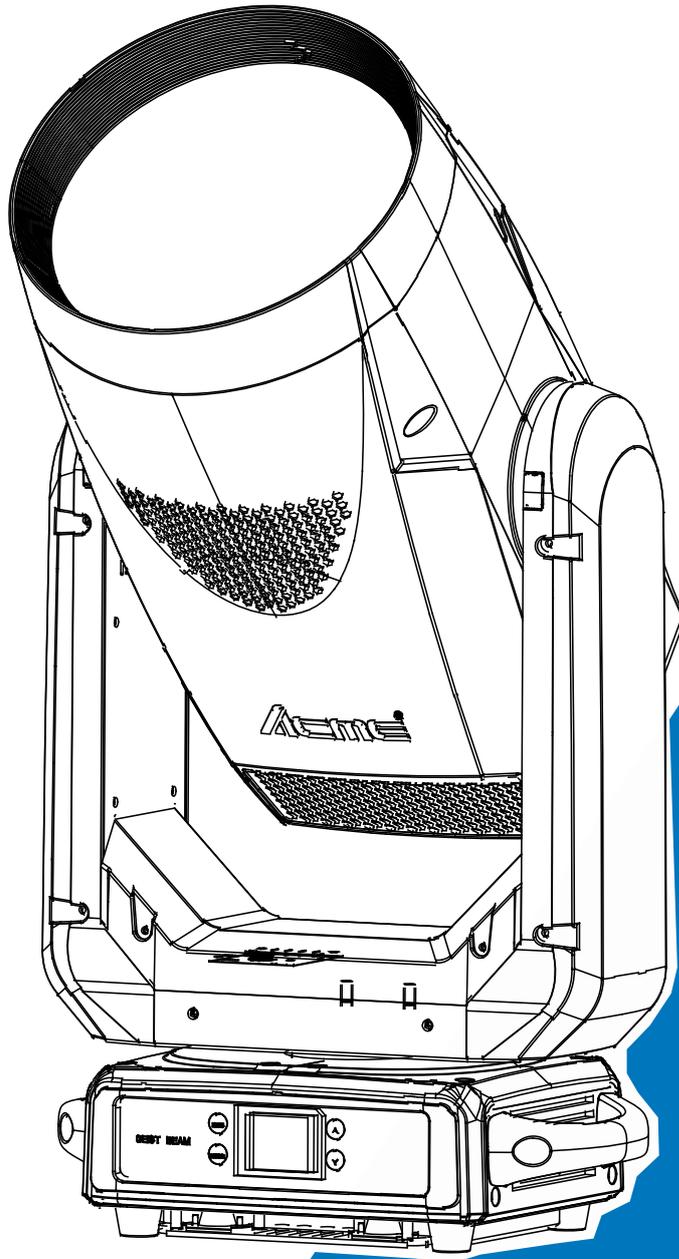




GEIST BEAM



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 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 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:

700W

Light Source:

SUL450N-80-R00-000

Color Temperature:

7000K

Beam Angel:

3°

Movement:

Pan: 540°

Tilt: 270°

Pan/Tilt Resolution: 16-bit

Fixation: Tilt lock

Dimmer/Shutter:

Smooth dimming from 0-100%; outstanding strobe effect with variable speed

Color Wheel:

1 color Wheel with 8 fixed colors plus 1 diffuser filter and white, with rainbow effect

Gobo Wheel:

1 static gobo wheel with 10 gobos plus open

1 rotating gobo wheel with 7 gobos plus open

Control:

DMX Channel: 23/16 Channels

Protocols: DMX512, Art-Net, RDM, sACN

Firmware Upgrade via DMX link or USB disk

Construction:

Display: LCD color display, backlit touch button

Date In/Out: 3-pin XLR, RJ45 connector in/out (5-pin XLR is optional)

Power In/Out: Power Connector in/out

Protection Rating: IP20

Features:

CRI mode: Ra>70

Linear CMY color mixing

2 x prisms: 8-facet prism+6-facet linear prism, rotatable in both directions and overlayable

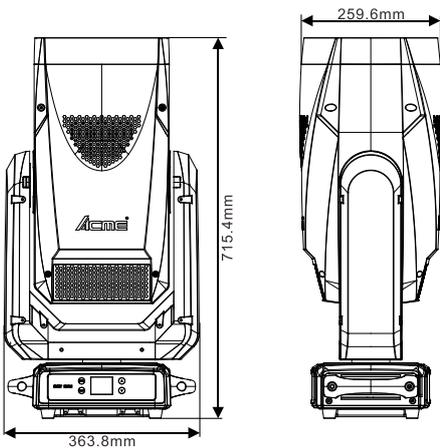
Outstanding color macro effect

Independent frost effect

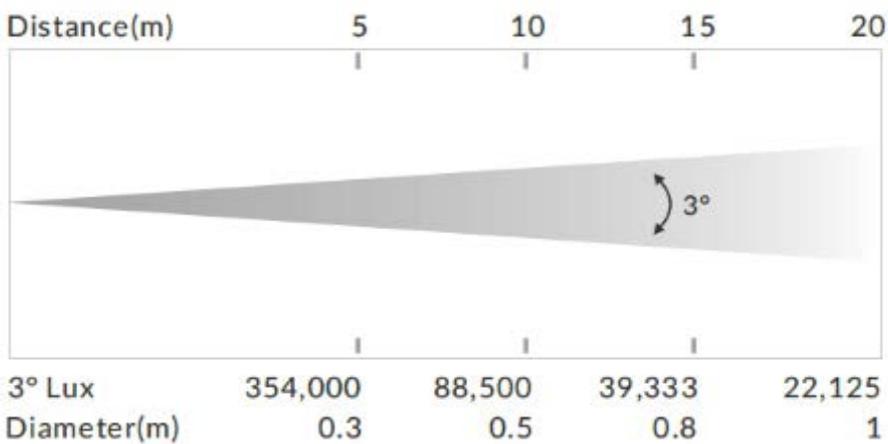
Dimension/Weight:

363.8x259.6x715.4mm, 28.5kgs

14.3"x10.2"x28.2" in, 62.8lbs

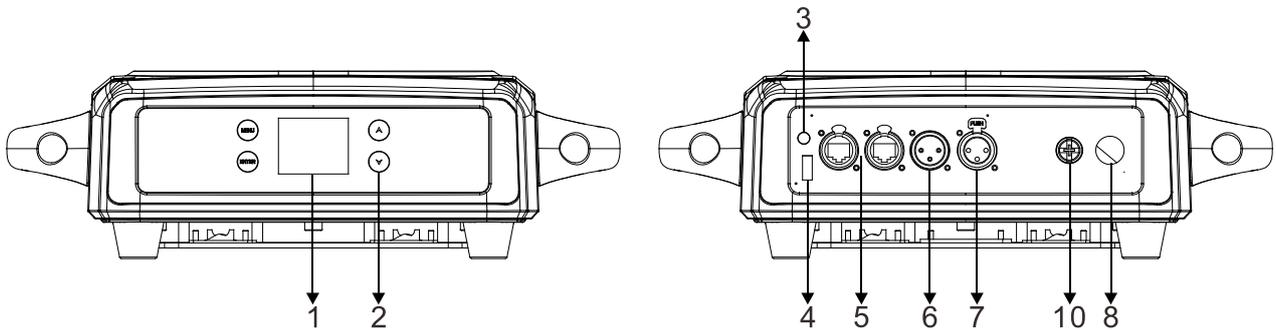


Photometrics Diagram:

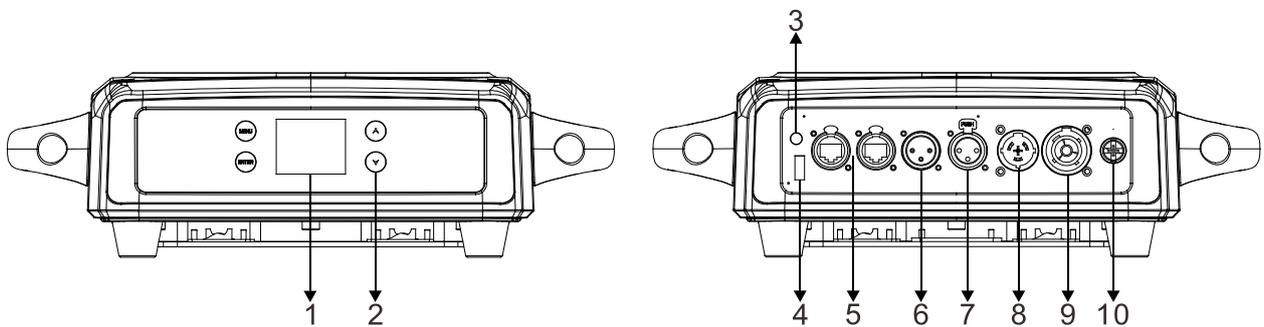


3 Control Panel

Wire Version:



POWERCON Version:



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:

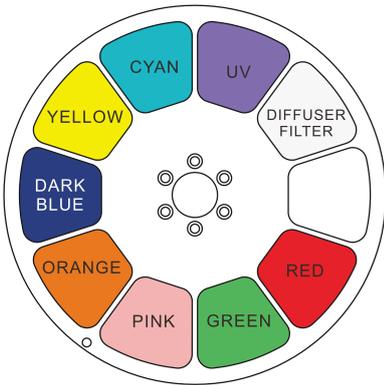
For DMX512 link, use 3-pin XLR cable to link the next units (5-pin XLR is optional)

8. POWER IN: To connect to supply power

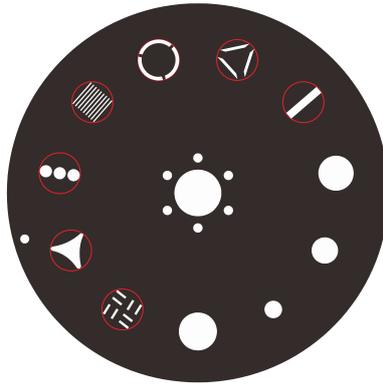
9. POWER OUT(POWERCON Version): To connect to the next fixture

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

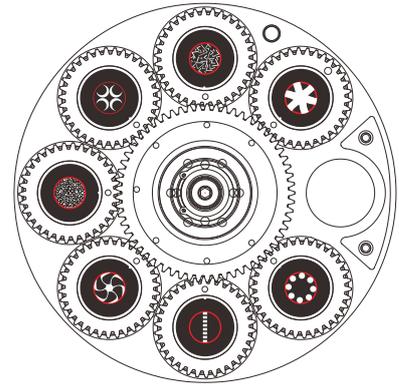
4. Color/Gobo



COLOR WHEEL



STATIC GOBO WHEEL



ROTATING GOBO WHEEL

DANGER!

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

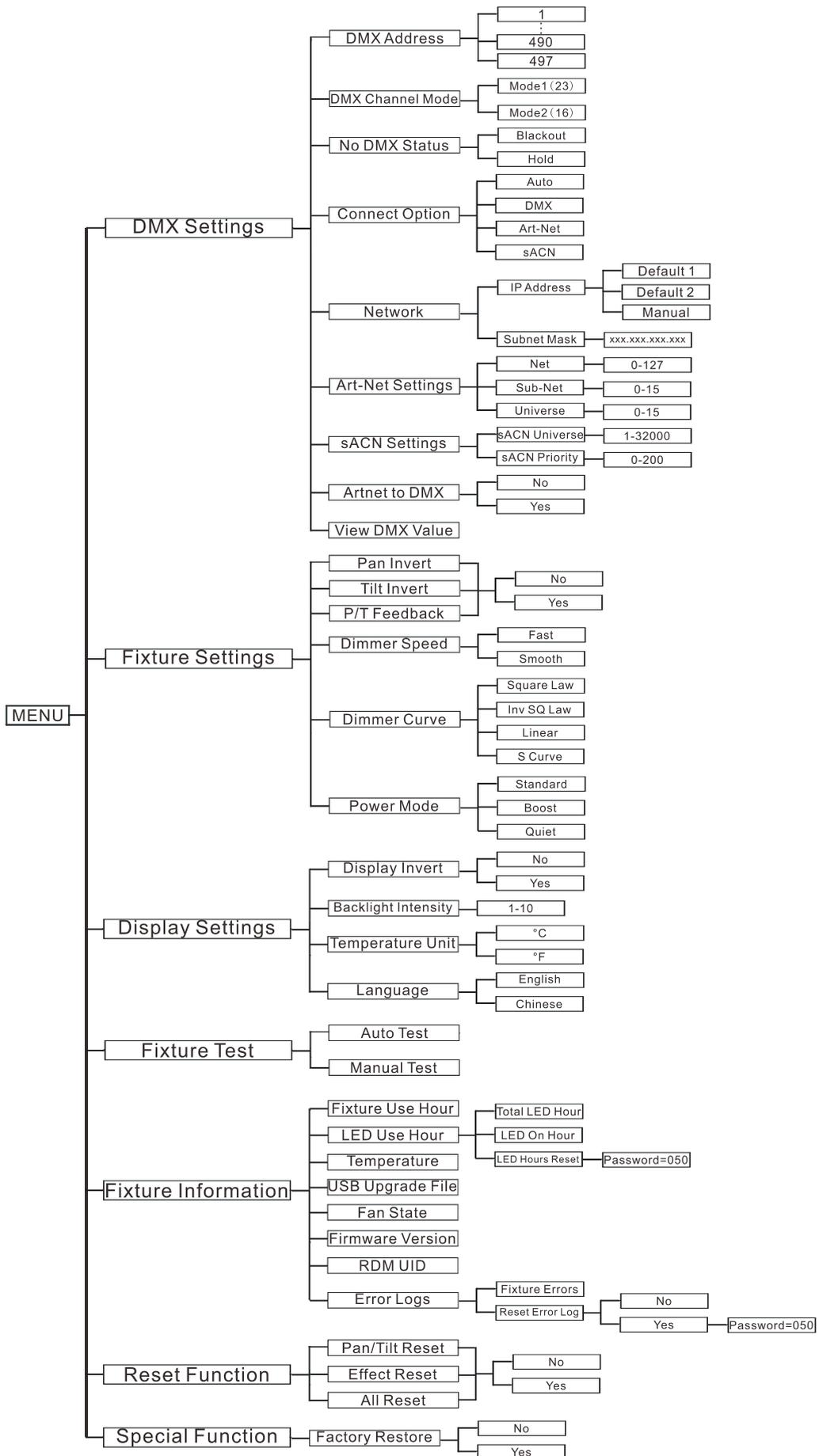
CAUTION: Never unscrew the screws of the rotating gobo as the ball bearing will otherwise be opened!

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 **490/497**, 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(23)** or **Mode2(16)**, 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) or **Hold**(fixture continues to obey the last command it received Via DMX if DMX signal stops), 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 **Power 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.

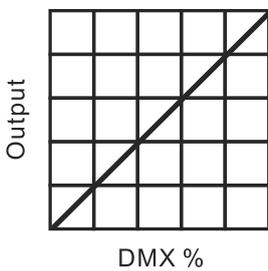
Dimmer Speed

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.

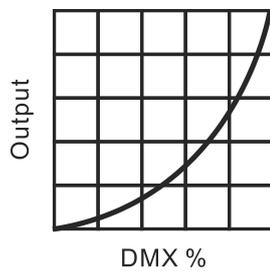
Dimmer Curve

To select **Dimmer Curve**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **Square Law**, **Inv SQ Law**, **Linear** 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.

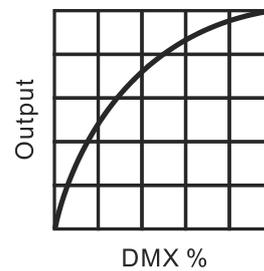
Dimmer Modes



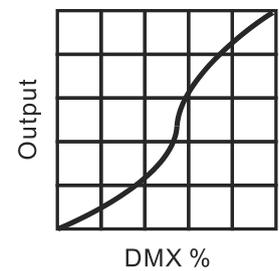
Optically Linear



Square Law



Inverse Square Law



S-curve

Mode 1(Optically Linear):

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

Mode 2(Square Law):

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

Mode 3(Inverse Square Law):

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

Mode 4(S-Curve):

Light intensity control is finer at low levels and high levels and coarser at medium levels.

Power Mode

To select **Power Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Standard**, **Boost** 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, prism, prism rotation, frost, focus, 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.

(All channels value will become 0 after exiting Manual Test menu)

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

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.

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 **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 **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 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 (23/16 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.

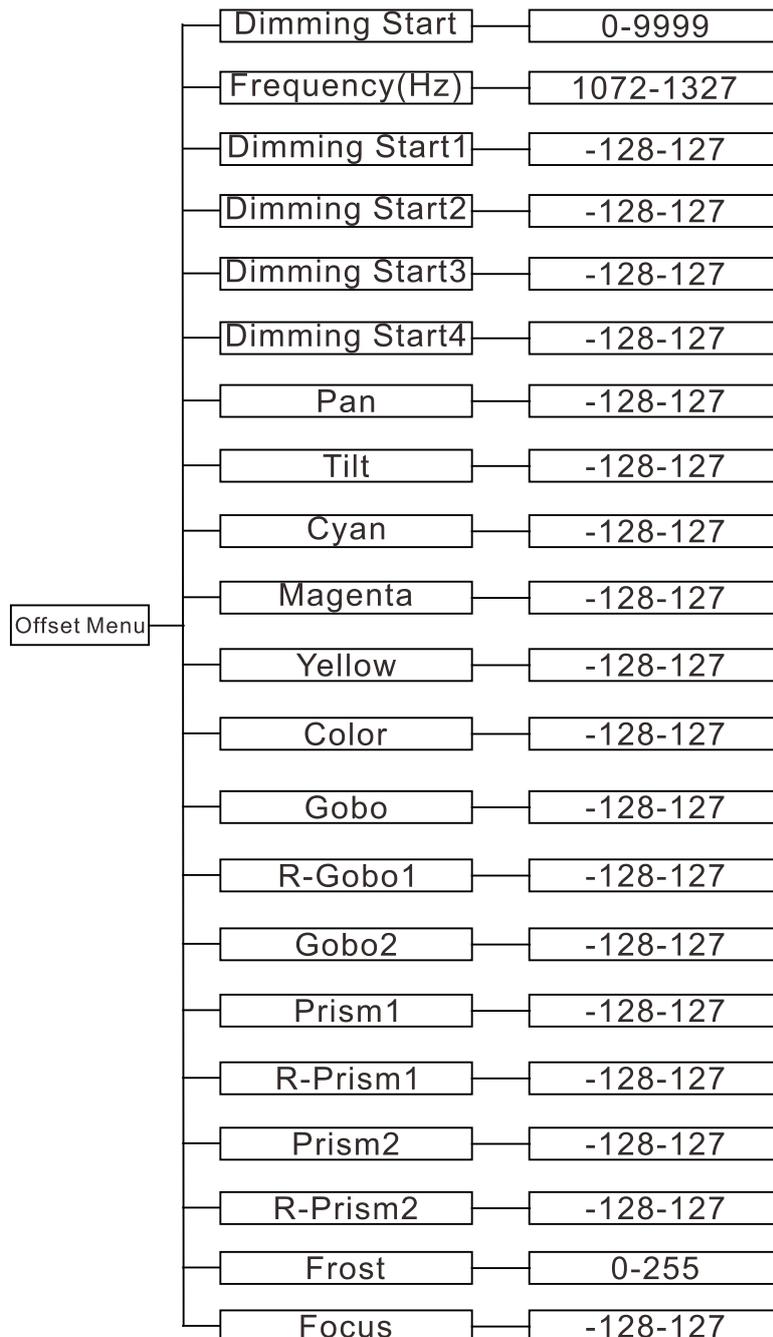
Select the PAN INVERT menu and the fixture will run the pan invert mode.

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.



Dimming Start

Enter offset mode, Select **Dimming Start**, 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 9999, 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.

Dimming Start1

Enter offset mode, Select **Dimming Start1**, 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.

Dimming Start2

Enter offset mode, Select **Dimming Start2**, 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.

Dimming Start3

Enter offset mode, Select **Dimming Start3**, 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.

Dimming Start4

Enter offset mode, Select **Dimming Start4**, 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.

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.

Gobo

Enter offset mode, Select **Gobo**, 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.

Prism2

Enter offset mode, Select **Prism2**, 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-Prism2

Enter offset mode, Select **R-Prism2**, 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.

Frost

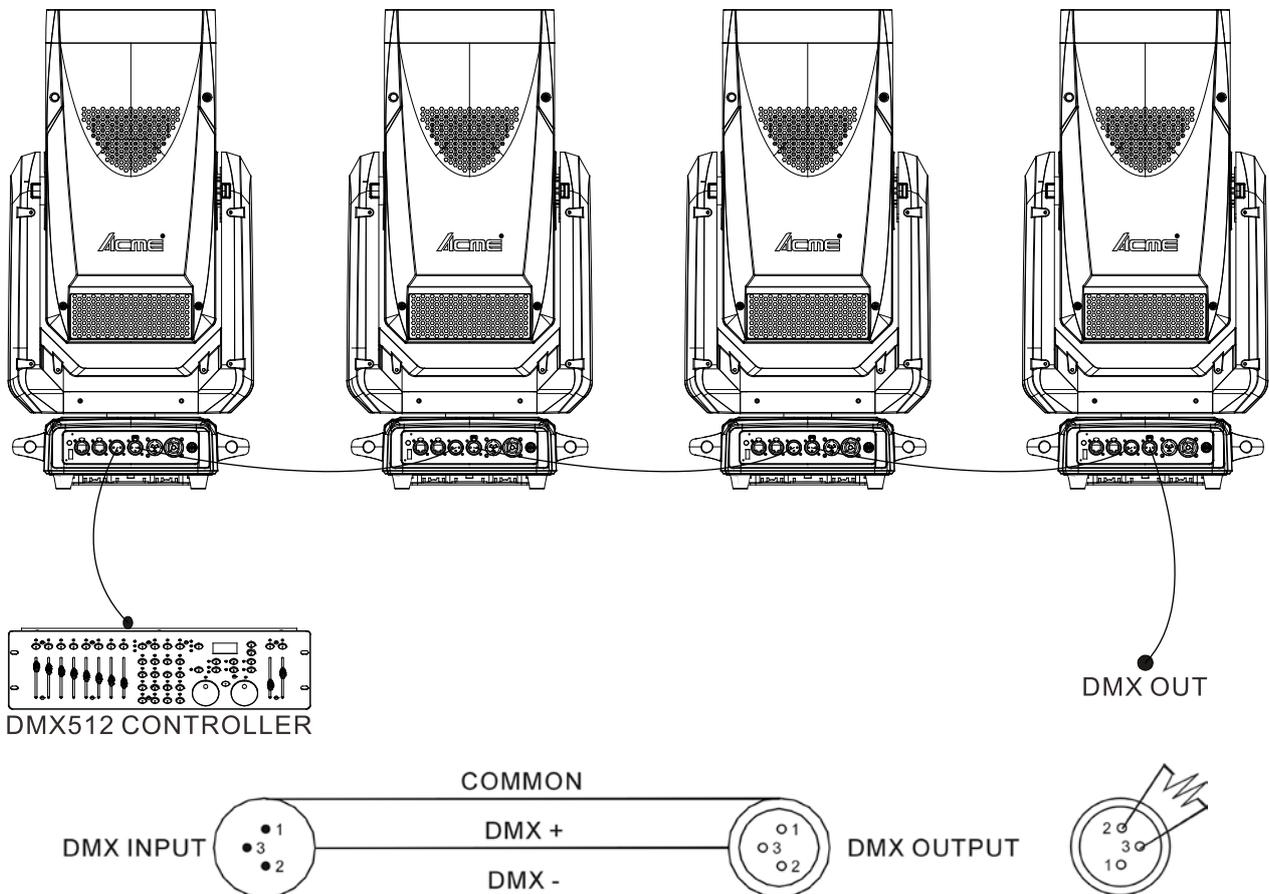
Enter offset mode, Select **Frost**, press the **ENTER** button to confirm, the present position will blink on the display, use the **UP/DOWN** button to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

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.

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
23 channels	1	24	47	70
16 channels	1	17	33	49

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.

23 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→Slow
6	000-255	CYAN 0%→100%
7	000-255	MAGENTA 0%→100%
8	000-255	YELLOW 0%→100%
9	000-007 008-011 012-015 016-019 020-023 024-027 028-031 032-035 036-039 040-127 128-189 190-193 194-255	COLOR White Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Color 8 Color Index Rotation Fast to Slow Stop Rotation Slow to Fast
10	000-007 008-015 016-023	GOBO1 White Gobo 1 Gobo 2

	024-031 032-039 040-047 048-055 056-063 064-071 072-079 080-087 088-095 096-103 104-111 112-127 128-189 190-193 194-255	Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 1 Shaking Slow to Fast Gobo 2 Shaking Slow to Fast Gobo 3 Shaking Slow to Fast Gobo 4 Shaking Slow to Fast Gobo 5 Shaking Slow to Fast Gobo 6 Shaking Slow to Fast Gobo 7 Shaking Slow to Fast Clockwise Rotation Fast to Slow Stop Counter-Clockwise Rotation Slow to Fast
11	000-127 128-189 190-193 194-255	R-GOBO1 Index 0°→360° Clockwise Rotation Fast to Slow Stop Counter-Clockwise Rotation Slow to Fast
12	000-007 008-013 014-019 020-025 026-031 032-037 038-043 044-049 050-055 056-061 062-067 068-073 074-079 080-085 086-091 092-097 098-103 104-109 110-115 116-121 122-127 128-189 190-193 194-255	GOBO2 White Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Gobo 8 Gobo 9 Gobo 10 Gobo 1 Shaking Slow to Fast Gobo 2 Shaking Slow to Fast Gobo 3 Shaking Slow to Fast Gobo 4 Shaking Slow to Fast Gobo 5 Shaking Slow to Fast Gobo 6 Shaking Slow to Fast Gobo 7 Shaking Slow to Fast Gobo 8 Shaking Slow to Fast Gobo 9 Shaking Slow to Fast Gobo 10 Shaking Slow to Fast Clockwise Rotation Fast to Slow Stop Counter-Clockwise Rotation Slow to Fast
13		PRISM1

	000-007 008-255	No Effect On
14	000-127 128-189 190-193 194-255	R-PRISM1 Index 0°→360° Clockwise Rotation Fast to Slow Stop Counter-Clockwise Rotation Slow to Fast
15	000-007 008-255	PRISM2 No Effect On
16	000-127 128-189 190-193 194-255	R-PRISM2 Index 0°→360° Clockwise Rotation Fast to Slow Stop Counter-Clockwise Rotation Slow to Fast
17	000-255	FROST 0%→100%
18	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
19	000-255	DIMMER 0%→100%
20	000-255	DIMMER FINE
21	000-255	FOCUS 0%→100%
22	000-255	FOCUS FINE
23	000-029 030-039 040-049 050-059 060-069 070-079 080-089 090-099 100-109 110-119	SPECIAL FUNCTION Null Dimmer Curve Linear Dimmer Curve Square Law Dimmer Curve Inv Square Law Dimmer Curve S Power Mode Standard Power Mode Boost Power Mode Quiet Led Frequency Setting Enable Led Frequency Setting Disable

	120-129 130-139 140-179 180-189 190-199 200-209 210-219 220-229 230-255	Soften Enable Soften Disable Null Dimmer Speed Fast Dimmer Speed Smooth Reset All Reset Effect Reset Pan/Tilt Null
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16 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→Slow
6	000-255	CYAN 0%→100%
7	000-255	MAGENTA 0%→100%
8	000-255	YELLOW 0%→100%
9	000-007 008-011 012-015 016-019 020-023 024-027 028-031 032-035 036-039 040-127 128-189 190-193 194-255	COLOR White Color 1 Color 2 Color 3 Color 4 Color 5 Color 6 Color 7 Color 8 Color Index Rotation Fast to Slow Stop Rotation Slow to Fast
10		FROST

	000-255	0%→100%
11	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
12	000-255	DIMMER 0%→100%
13	000-255	DIMMER FINE
14	000-255	FOCUS 0%→100%
15	000-255	FOCUS FINE
16	000-029 030-039 040-049 050-059 060-069 070-079 080-089 090-099 100-109 110-119 120-129 130-139 140-179 180-189 190-199 200-209 210-219 220-229 230-255	SPECIAL FUNCTION Null Dimmer Curve Linear Dimmer Curve Square Law Dimmer Curve Inv Square Law Dimmer Curve S Power Mode Standard Power Mode Boost Power Mode Quiet Led Frequency Setting Enable Led Frequency Setting Disable Soften Enable Soften Disable Null Dimmer Speed Fast Dimmer Speed Smooth Reset All Reset Effect Reset Pan/Tilt Null

7. Error Information

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

10. 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.

11. 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.

12. Prism1/2 Reset Error

Check if the position of the Prism1/2 mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the Prism1/2 operating range.

Check if the Prism1/2 Hall elements is damaged.

Check if the Prism1/2 Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the Prism1/2 motor is damaged.

Check if there is any damage to the circuit of the Prism1/2 motor drive board.

13. R-Prism1/2 Reset Error

Check if the position of the Prism1/2 mounting magnetic steel falls off or is damaged.

Check if there are other interference items in the Prism1/2 operating range.

Check if the Prism1/2 Hall elements is damaged.

Check if the Prism1/2 Hall elements is in poor contact with the lead of the PCB board or disconnected.

Check if the Prism1/2 motor is damaged.

Check if there is any damage to the circuit of the Prism1/2 motor drive board.

14. 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.

15. 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.

16. 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.

17. 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.

18. BaseFan1/2 Stop Err

Check if the fan circuit on the motherboard breaks down.

Check if the component is damaged.

19. BaseFan1/2 Too Low

Check if the fan is out of order.

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

20. BaseFan1/2 Too High

Check if the fan is out of order.

Check if the fan circuit on the motherboard breaks down.

21. 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.

22. 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.

23. 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.

24. 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.

25. 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.

26. ArmFan1 Stop Err

Check if the fan circuit on the motherboard breaks down.

Check if the component is damaged.

27. ArmFan1 Too Low

Check if the fan is out of order.

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

28. ArmFan1 Too High

Check if the fan is out of order.

Check if the fan circuit on the motherboard breaks down.

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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