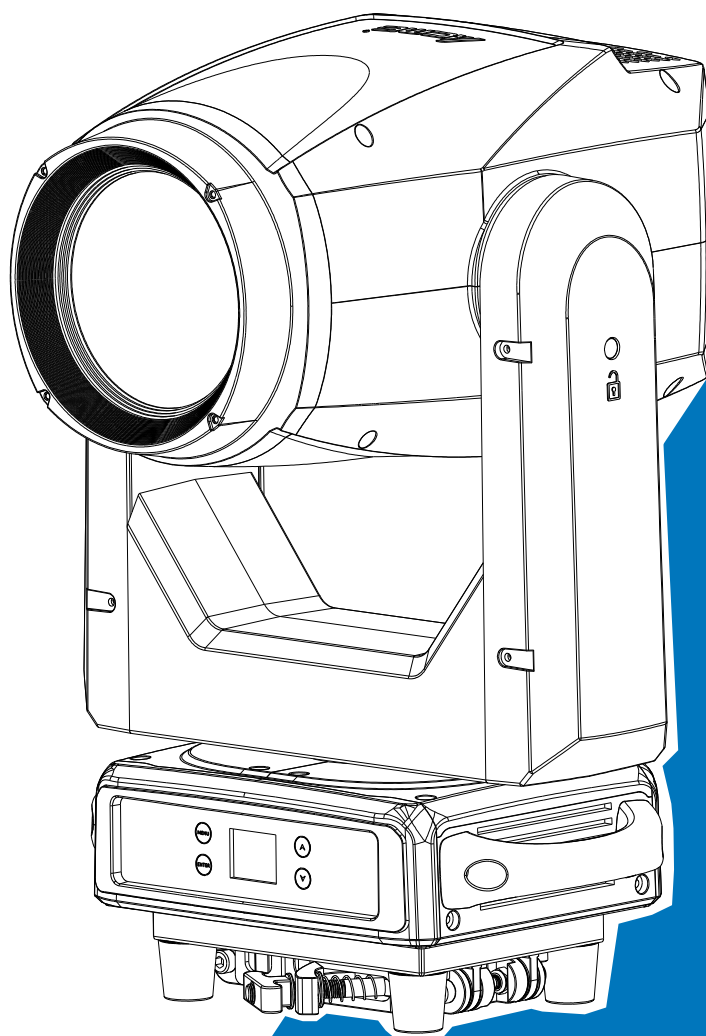


# Acme<sup>®</sup>

## AUTOLUX



## User Manual

Please read the instruction carefully before use

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## 01/ Safety Information



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

### WARNING

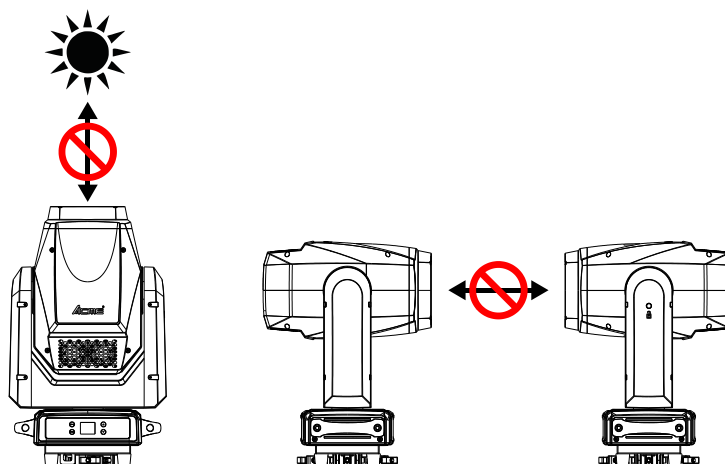
Please keep this User Manual for future consultation. If you sell the fixture to another user, be sure that they also receive this instruction manual.

#### Important:

**Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.**

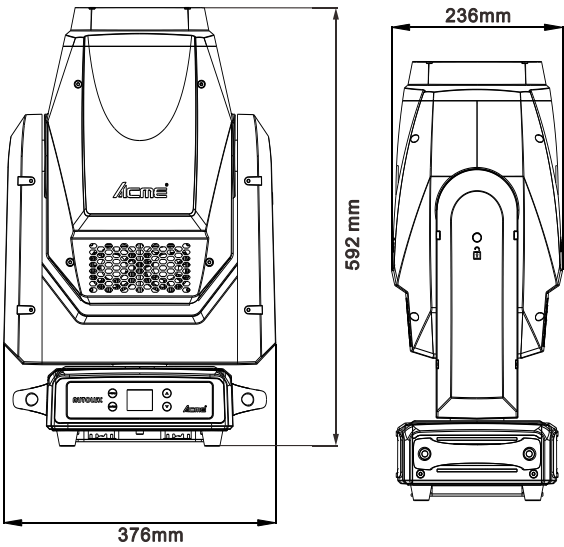
- Unpack and check carefully to ensure that there is no transportation damage before using the fixture.
- This product is for indoor use only. Use only in a dry location.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety cable when fixing the fixture. Handle the fixture by carrying its base instead of the head only.
- The fixture must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation holes are blocked, otherwise the fixture could over heat.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: -10°C. Maximum ambient temperature TA: 45°C. Do not operate this product at a lower or higher temperature.
- DO NOT connect the device to any dimmer pack.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Fixture's surface temperature may reach up to 70°C. DO NOT touch the housing bare-handed during its operation.

- Avoid any flammable liquids, water or metal from entering the fixture. If it happens, cut off the mains power immediately.
- DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.
- DO NOT touch any wiring during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 3 meters.
- In the event of a serious operating problem, stop using the fixture immediately.
- Never turn the fixture off and on repeatedly.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- DO NOT open the housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this fixture if it becomes damaged. DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging or suitable road case if the device is to be transported.
- Avoid direct eye exposure to the light source while the product is on.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.
- External sources of light beams from direct sunlight or any other strong light source, which penetrate the front lens of lighting fixtures, can cause severe internal damage. DO NOT expose the fixture front lens to light beams from direct sunlight or any other strong light source from any angle while unpacking, installation, use, and extended idle times outdoors. DO NOT focus a light beam from one lighting fixture directly towards another.

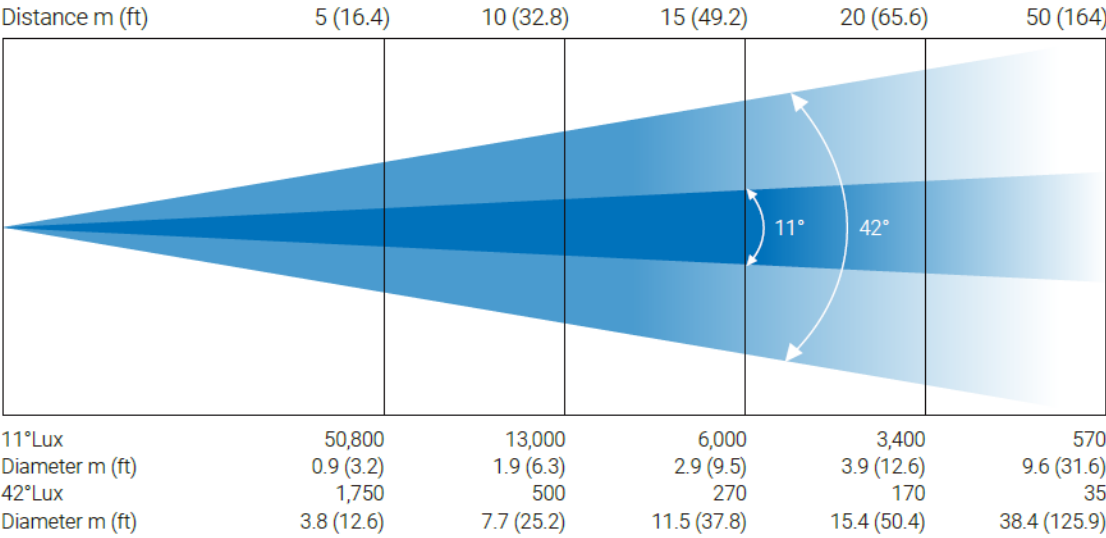


## 02/ Technical Specifications

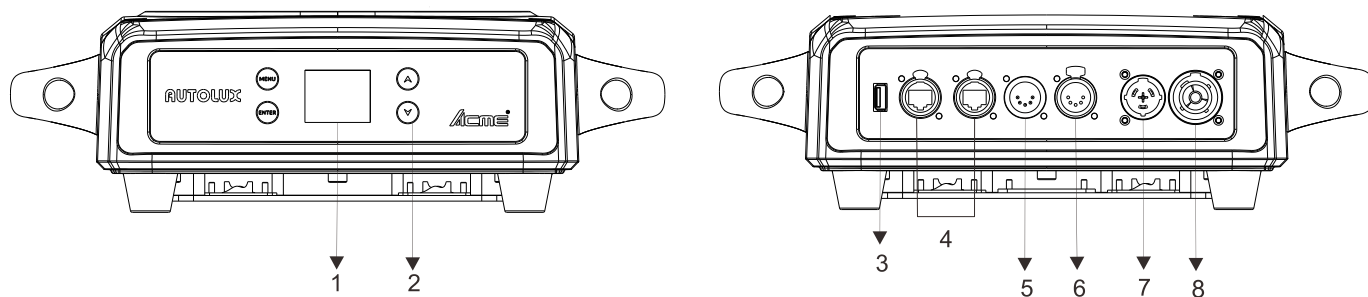
|                         |                                                                                                                               |                                     |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| AC Power                | 100-240Vac; 50/60Hz                                                                                                           |                                     |
| Max. Power Consumption  | 865W                                                                                                                          |                                     |
| Light Source            | ESP_ECO700N-70-R90-000                                                                                                        |                                     |
| Color Temperature       | 6200K                                                                                                                         |                                     |
| Zoom Range              | 11°-42°                                                                                                                       |                                     |
| Color Wheel             | 6 colors + open                                                                                                               |                                     |
| Movement                | Pan                                                                                                                           | 540°                                |
|                         | Tilt                                                                                                                          | 270°                                |
|                         | 16 bit movement resolution                                                                                                    |                                     |
|                         | Automatic pan/tilt repositioning                                                                                              |                                     |
| Control and Programming | DMX Channels                                                                                                                  | 25                                  |
|                         | Protocols                                                                                                                     | DMX512                              |
|                         |                                                                                                                               | RDM                                 |
|                         | Firmware Update                                                                                                               | via DMX or USB memory device        |
| Construction            | Display                                                                                                                       | LCD display                         |
|                         | DMX and RDM Data In/Out                                                                                                       | 3-pin XLR (optional with 5-pin XLR) |
|                         | Power In/Out                                                                                                                  | Power Connector in/out              |
|                         | Protection Rating                                                                                                             | IP20                                |
| Dynamic Effects         | Outstanding strobe effect with variable speed                                                                                 |                                     |
|                         | 0-100% continuous dimming and strobe effects                                                                                  |                                     |
|                         | Choice of four dimming curves                                                                                                 |                                     |
|                         | Free moving mode for outstanding motion stabilization                                                                         |                                     |
|                         | Framing: rotatable framing module, +/-60°, 4 x individually controllable full framing blades with variable angle and position |                                     |
| Included Items          | Power Cable                                                                                                                   |                                     |
|                         | Two omega brackets with 1/4-turn fasteners                                                                                    |                                     |
|                         | User Manual (this document)                                                                                                   |                                     |
| Dimensions              | 376x236x592mm                                                                                                                 | 14.8"x9.3"x23.3"                    |
| Weight                  | 23kg                                                                                                                          | 50.7 lbs                            |



Photometric Diagram:



## 03/ Overview



|                     |                                                                                                                        |                                                |
|---------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| 1. Display          | To show the various menus and the selected function                                                                    |                                                |
| 2. Buttons          | MENU                                                                                                                   | To enter into, move backward or leave the menu |
|                     | ▲ UP                                                                                                                   | To go backward or move up in the menu          |
|                     | ▼ DOWN                                                                                                                 | To go forward or move down in the menu         |
|                     | ENTER                                                                                                                  | To perform the desired functions               |
| 3. Firmware Upgrade | Used to upgrade fixture's firmware                                                                                     |                                                |
| 4. Ethernet         | For use with sACN or Art-Net controls                                                                                  |                                                |
| 5. DMX IN           | For DMX512 link, use 3-pin XLR cable to link the unit and DMX controller to input DMX signal (optional with 5-pin XLR) |                                                |
| 6. DMX OUT          | For DMX512 link, use 3-pin XLR cable to link the next units to output DMX signal (optional with 5-pin XLR)             |                                                |
| 7. POWER IN         | To connect to supply power                                                                                             |                                                |
| 8. POWER OUT        | To connect to the next fixture                                                                                         |                                                |

### 3.1 Battery Power

This product contains a rechargeable battery.

Battery type: 14500 Lithium-ion battery\*3 (3.7V, 800mAh, 2.96Wh), compliant with the new EU battery regulation EU2023/1542.



Do not expose the fixture or battery to excessive temperatures.

Be aware of the risk of terminals of the battery-operated fixture or battery being short-circuited by metal objects.

This fixture contains battery that is only replaceable by skilled persons.

Different types of batteries or new and used batteries are not to be mixed.

Exhausted batteries are to be removed from the fixture and safely disposed of.

If the fixture is to be stored unused for a long period, the batteries should be removed.

Do not use non-rechargeable batteries in place of rechargeable batteries.

Do not use modified or damaged batteries.

Replacing the battery with an incorrect type can defeat a safeguard and pose a risk of fire or explosion.

Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion.

Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.

#### Using the control panel with battery power:

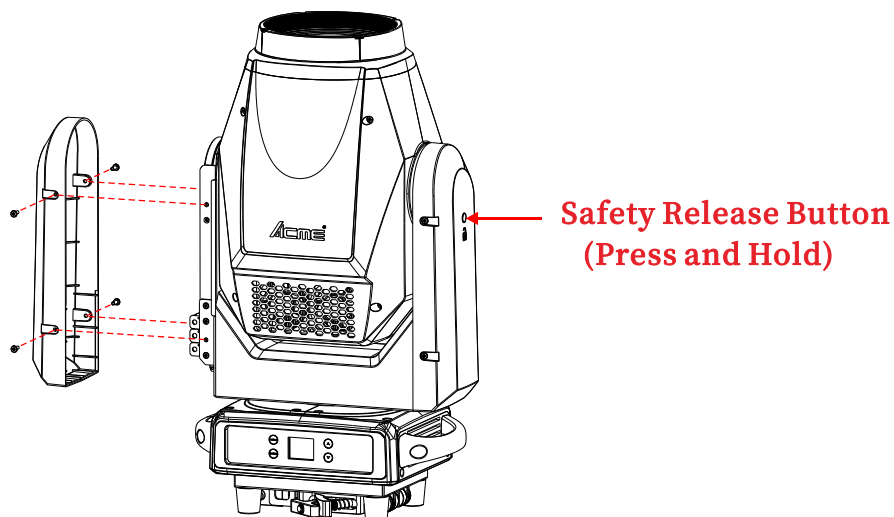
The fixture contains a battery that enables you to use the control panel to set up the fixture even when it is not connected to the main power supply. The battery charges during fixture operation. All of the main setup options in the control panel are accessible on battery power, but the 'Fixture Test' and 'Reset Function' are not available.

To activate the display when the fixture is not connected to power, press and hold the [▲ UP] button for 3 seconds. The display extinguishes after 30 seconds with no user input. Press and hold the [▲ UP] button for 3 seconds again to re-activate.

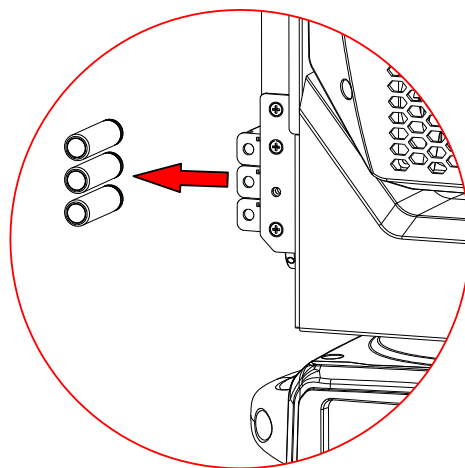
**Battery Replacement:**

***Warning! Disconnect the fixture from AC power before replacing its battery. Replace the battery with one of the same type only.***

1. Disconnect the fixture from AC mains power and allow to cool.
2. Remove four screws in the arm cover of the fixture and remove the arm cover.



3. Remove the exhausted battery and insert a new one (only the same type) into the battery holder (Negative (-) towards the spring, Positive (+) away from the spring).



4. Reinstall the arm cover and check that it is close securely before reapplying power.

## 04/ Connecting Power and Data

### 4.1 Connecting Power

This fixture can operate on any 100-240Vac; 50/60Hz AC mains power supply.

The maximum power consumption is 865W.

The fixture must be grounded/earthed and able to be isolated from AC power. The AC power supply must incorporate a fuse or circuit breaker for fault protection.

Wiring and connection work must be carried out by a qualified electrician.

The power cable color coding is given in the figure below:

| Wire                                                                              | Color (US) | Wire                                                                              | Color (EU)   | Symbol              | Conductor      |
|-----------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------|--------------|---------------------|----------------|
|  | black      |  | brown        | L                   | live           |
|  | white      |  | blue         | N                   | neutral        |
|  | green      |  | yellow/green | $\perp$ or $\oplus$ | ground (earth) |

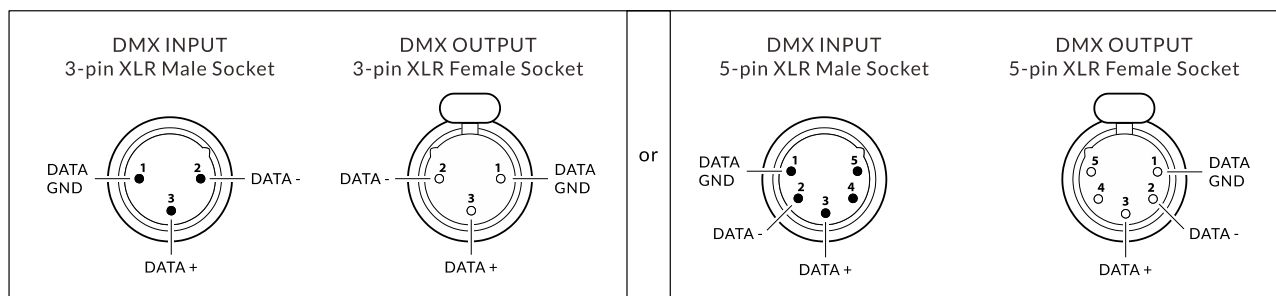
#### **CAUTION!**

**DO NOT CONNECT THE FIXTURE TO AN ELECTRICAL DIMMER SYSTEM AS DOING SO MAY CAUSE DAMAGE.**

## 4.2 Connecting Data

The fixture is equipped with 5-pin (or 3-pin) XLR sockets for DMX input and output. Use shielded twisted-pair high-quality DMX cable designed for RS-485 fixtures in order to connect the controller with the fixture and one fixture with another.

The default pin-out on XLR sockets is as the following diagram:

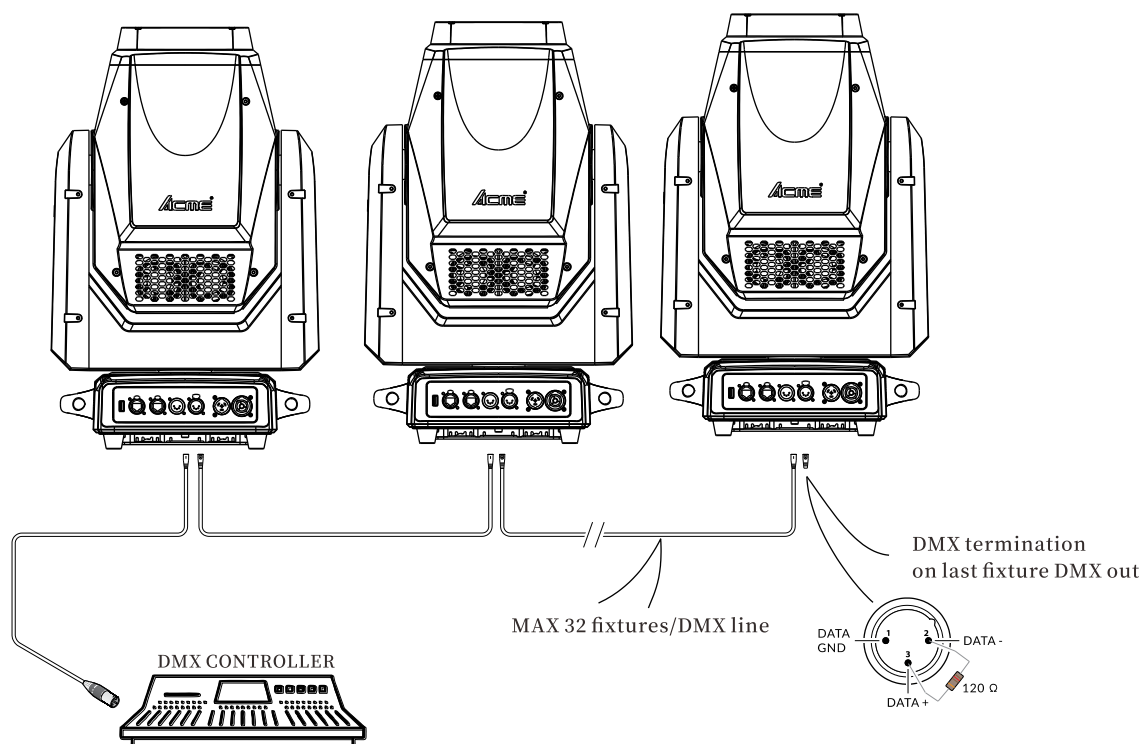


### Building a serial DMX chain:

1. Connect the DMX data output from the controller to the fixture's data input socket.
2. Connect the DMX output of the first fixture in the DMX chain with the DMX input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

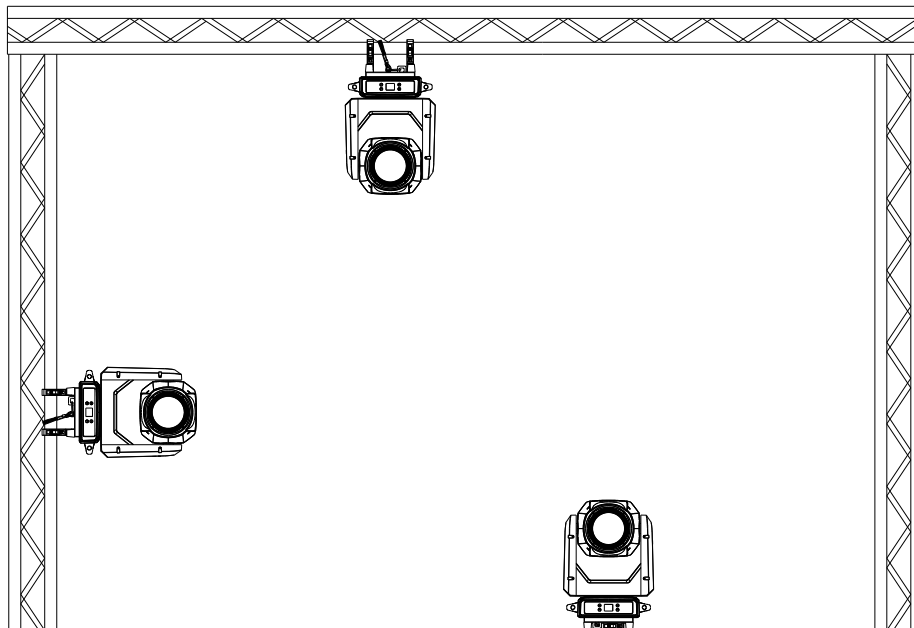
Note: Up to 32 fixtures can be connected to the same DMX link.

3. Terminate the DMX output of the last fixture in the data link with a DMX terminator which is an XLR plug with a 120  $\Omega$ , 1/4 watt resistor connected between pins 2 and 3.



## 05/ Fixture Installation

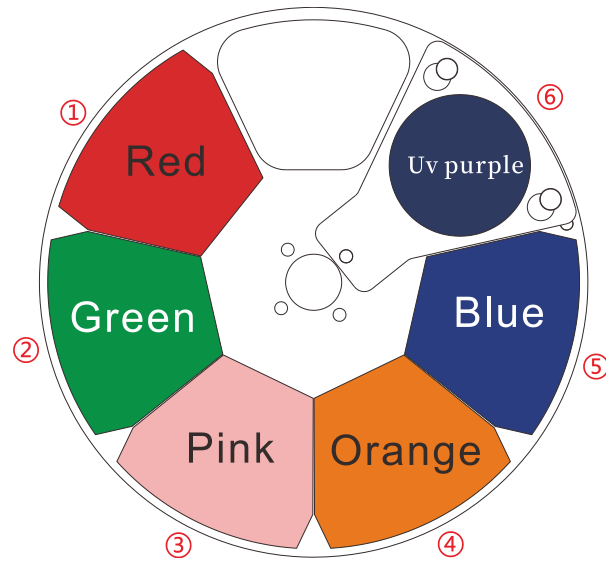
- ▶ DO install and operate by qualified operator. Fixture(s) should be installed in areas outside walking paths, seating areas, or away from areas where unauthorized personnel might reach the fixture by hand. NEVER stand directly below the fixture(s) when rigging, removing or servicing.
- ▶ Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always attach a safety cable that can hold at least 12 times the weight of the fixture whenever installing this fixture in a suspended environment to ensure that the fixture will not fall if the clamp fails.
- ▶ This fixture is fully operational in three different mounting positions: hanging upside-down, mounted sideways on truss, or base positioned on floor. Always use and install a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.



### Accessories:

This fixture can be used with different types of accessories such as barndoors, top hat, or concentric rings. Four M4 mounting holes for optional accessories by others are reserved.

## 06/ Color Wheel



## 07/ Operation

### 7.1 Control Menu

- ▶ To access the control menus, press the [MENU] button.
- ▶ Navigate the menu structure, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

The main functions are shown below:

| MAIN MENU        | SUBMENU               | CHOICES/VALUES |                           |               |
|------------------|-----------------------|----------------|---------------------------|---------------|
| DMX Settings     | DMX Address           | 1-512          | (Default=1)               |               |
|                  | DMX Channel Mode      | Mode 1 (25)    |                           |               |
|                  | No DMX Status         | Blackout       |                           |               |
|                  |                       | Hold           |                           |               |
|                  |                       | Manual         |                           |               |
|                  | View DMX Value        |                |                           |               |
|                  | Connect Option        | Auto           |                           |               |
|                  |                       | DMX            |                           |               |
|                  |                       | Art-Net        |                           |               |
|                  |                       | sACN           |                           |               |
|                  | Network               | IP Address     | Default 1:002.xxx.xxx.xxx |               |
|                  |                       |                | Default 2:010.xxx.xxx.xxx |               |
|                  |                       |                | Manual:xxx.xxx.xxx.xxx    |               |
|                  |                       | Subnet Mask    | xxx.xxx.xxx.xxx           |               |
|                  | Art-Net Settings      | Net            | 0-127                     | (Default=0)   |
|                  |                       | Subnet         | 0-15                      | (Default=0)   |
|                  |                       | Universe       | 0-15                      | (Default=0)   |
|                  | sACN Settings         | Universe       | 1-32000                   | (Default=1)   |
|                  |                       | Priority       | 0-200                     | (Default=100) |
|                  | Network to DMX        | No             |                           |               |
| Yes              |                       |                |                           |               |
| Fixture Settings | Pan Invert            | No             |                           |               |
|                  |                       | Yes            |                           |               |
|                  | Tilt Invert           | No             |                           |               |
|                  |                       | Yes            |                           |               |
|                  | P/T Feedback          | No             |                           |               |
|                  |                       | Yes            |                           |               |
|                  | Pan & Tilt Reset mode | Standard       |                           |               |
|                  |                       | Sequence       |                           |               |

| MAIN MENU        | SUBMENU             | CHOICES/VALUES |              |
|------------------|---------------------|----------------|--------------|
|                  | Dimmer Curve        | Linear         |              |
|                  |                     | Square Law     |              |
|                  |                     | Inv SQ Law     |              |
|                  |                     | S Curve        |              |
|                  | Dimmer Speed        | Fast           |              |
|                  |                     | Smooth         |              |
|                  | Refresh Rate        | 900Hz          |              |
|                  |                     | 1000Hz         |              |
|                  |                     | 1100Hz         |              |
|                  |                     | 1200Hz         |              |
|                  |                     | 1300Hz         |              |
|                  |                     | 1400Hz         |              |
|                  |                     | 1500Hz         |              |
|                  |                     | 2500Hz         |              |
|                  |                     | 4000Hz         |              |
|                  |                     | 5000Hz         |              |
|                  |                     | 6000Hz         |              |
|                  |                     | 10KHz          |              |
|                  |                     | 15KHz          |              |
|                  |                     | 20KHz          |              |
|                  |                     | 25KHz          |              |
|                  | Fan Mode            | Super Power    |              |
|                  |                     | Auto           |              |
|                  |                     | Quiet          |              |
|                  | Lock Mode           | Enable         |              |
|                  |                     | Disable        |              |
|                  | Color Short Cut     | Enable         |              |
|                  |                     | Disable        |              |
| Display Settings | Display Invert      | No             |              |
|                  |                     | Yes            |              |
|                  | Backlight Intensity | 1-10           | (Default=10) |
|                  | Temperature Unit    | °C             |              |
|                  |                     | °F             |              |
| Fixture Test     | Auto Test           | Single         |              |
|                  |                     | Cycle          |              |
|                  | Manual Test         | Clear          | No/Yes       |
|                  |                     | Pan            | 0-255        |
|                  |                     | Tilt           | 0-255        |
|                  |                     | Dimmer         | 0-255        |

| MAIN MENU        | SUBMENU          | CHOICES/VALUES      |              |              |  |
|------------------|------------------|---------------------|--------------|--------------|--|
|                  |                  | Strobe              |              | 0-255        |  |
|                  |                  | Zoom                |              | 0-255        |  |
|                  |                  | Focus               |              | 0-255        |  |
|                  |                  | CTO                 |              | 0-255        |  |
|                  |                  | Color               |              | 0-255        |  |
|                  |                  | Frost               |              | 0-255        |  |
|                  |                  | Blade Rot           |              | 0-255        |  |
|                  |                  | Blade DW 1          |              | 0-255        |  |
|                  |                  | Blade DW 2          |              | 0-255        |  |
|                  |                  | Blade UP 1          |              | 0-255        |  |
|                  |                  | Blade UP 2          |              | 0-255        |  |
|                  |                  | Blade LF 1          |              | 0-255        |  |
|                  |                  | Blade LF 2          |              | 0-255        |  |
|                  |                  | Blade RG 1          |              | 0-255        |  |
|                  |                  | Blade RG 2          |              | 0-255        |  |
|                  |                  | Fixture Information | Use Hour     | Fixture      |  |
| Light Source     | Total Hour       |                     |              |              |  |
|                  | Light On         |                     |              |              |  |
|                  | Reset            |                     |              | Password=050 |  |
| Temperature      |                  |                     | Current      | Max temp     |  |
|                  | Light Source     |                     |              |              |  |
| Fan State        | Base Fan 1-2     |                     |              |              |  |
|                  | Head Fan 1-6     |                     |              |              |  |
| Firmware Version |                  |                     |              |              |  |
| RDM UID          |                  |                     |              |              |  |
| Error Logs       | Fixture Errors   |                     |              |              |  |
|                  | Reset Error Logs |                     | No           |              |  |
|                  |                  | Yes                 | Password=050 |              |  |
| Reset Function   | Pan/Tilt Reset   | No                  |              |              |  |
|                  |                  | Yes                 |              |              |  |
|                  | Effect Reset     | No                  |              |              |  |
|                  |                  | Yes                 |              |              |  |
|                  | All Reset        | No                  |              |              |  |
|                  |                  | Yes                 |              |              |  |
| Special Function | USB Upgrade      | No                  |              |              |  |
|                  |                  | Yes                 |              |              |  |
|                  | Send Upgrade     | No                  |              |              |  |
|                  |                  | Yes                 |              |              |  |
|                  | Firmware Restore | No                  |              |              |  |

| MAIN MENU | SUBMENU          | CHOICES/VALUES |              |
|-----------|------------------|----------------|--------------|
|           |                  | Yes            |              |
|           | Factory Settings | No             |              |
|           |                  | Yes            | Password=011 |

## DMX Settings

Enter the control menu and select **DMX Settings**, press ENTER. Use the UP/DOWN button to select **DMX Address**, **DMX Channel Mode**, **No DMX Status**, **View DMX Value**, **Connect Option**, **Network**, **Art-Net Settings**, **sACN Settings** or **Network To DMX**

## DMX Address

Select **DMX Address**, press ENTER.

Use UP/DOWN button to select an address, confirm your selection with ENTER.

| CHANNEL MODE | DMX ADDRESS |
|--------------|-------------|
| Mode 1 (25)  | 1-488       |

To exit the menu, press MENU, or wait 30 seconds.

## DMX Channel Mode

Select **DMX Channel Mode**, press ENTER.

Use UP/DOWN button to select **Mode 1 (29)**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## View DMX Value

Select **View DMX Value**, press ENTER.

Use UP/DOWN button to select the desired DMX channel, for which the value is to be displayed.

To exit the menu, press MENU, or wait 30 seconds.

## No DMX Status

Select **No DMX Status**, press ENTER.

Use UP/DOWN button to select one of the following status:

**Blackout** (Fixture blacks out if DMX signal stops)

**Hold** (The device continues to operate in the current mode with the last active DMX values until the signal returns)

**Manual** (The device accepts the DMX value stored in the 'Manual Test' menu)

Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Connect Option

Select **Connect Option**, press ENTER.

Use UP/DOWN button to select Auto, DMX, Art-Net or sACN, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Network

Select **Network**, press ENTER.

Use UP/DOWN button to select IP Address or Subnet Mask, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Art-Net Settings

Select **Art-Net Settings**, press ENTER.

Use UP/DOWN button to select Net, Subnet or Universe, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## sACN Settings

Select **sACN Settings**, press ENTER.

Use UP/DOWN button to select Universe or Priority, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Network To DMX

Select **Network to DMX**, press ENTER.

Use UP/DOWN button to select No or Yes, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Fixture Settings

Enter the control menu and select **Fixture Settings**, press ENTER. Use the UP/DOWN button to select **Pan Invert**, **Tilt Invert**, **P/T Feedback**, **Pan & Tilt Reset mode**, **Dimmer Speed**, **Dimmer Curve**, **LED Refresh Rate**, **Fan Mode**, **Lock Mode** or **Color Short Cut** .

### Pan Invert

Select **Pan Invert**, press ENTER.

Use UP/DOWN button to select **No** (pan invert deactivated) or **Yes** (pan invert activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

### Tilt Invert

Select **Tilt Invert**, press ENTER.

Use UP/DOWN button to select **No** (tilt invert deactivated) or **Yes** (tilt invert activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## P/T Feedback

Select **P/T Feedback**, press ENTER.

Use UP/DOWN button to select No (pan/tilt feedback deactivated) or Yes (pan/tilt feedback activated), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Pan & Tilt Reset mode

Select Pan & Tilt Reset mode, press ENTER.

Use UP/DOWN button to select **Standard** or **Sequence**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Dimmer Speed

Select **Dimmer Speed**, press ENTER.

Use UP/DOWN button to select **Fast** or **Smooth**, confirm your selection with ENTER.

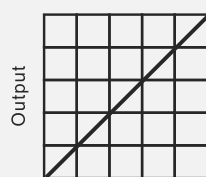
To exit the menu, press MENU, or wait 30 seconds.

## Dimmer Curve

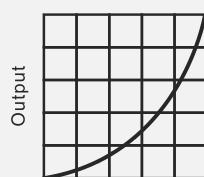
Select **Dimmer Curve**, press ENTER.

Use UP/DOWN button to select **Linear**, **Square Law**, **Inv SQ Law** or **S Curve**, confirm your selection with ENTER.

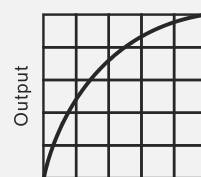
### Dimmer Modes



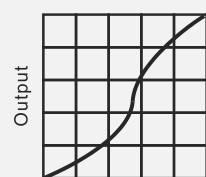
Optically Linear



Square Law



Inverse Square Law



S-curve

To exit the menu, press MENU, or wait 30 seconds.

## Refresh Rate

Select **Refresh Rate**, press ENTER.

Use UP/DOWN button to select **900Hz, 1000Hz, 1100Hz, 1200Hz, 1300Hz, 1400Hz, 1500Hz, 2500Hz, 4000Hz, 5000Hz, 6000Hz, 10KHz, 15KHz, 20KHz or 25KHz**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Fan Mode

Select **Fan Mode**, press ENTER.

Use UP/DOWN button to select **Super Power, Auto or Quiet**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Lock Mode

Select **Lock Mode**, press ENTER.

Use UP/DOWN button to select **Enable or Disable**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Color Short Cut

Select **Color Short Cut**, press ENTER.

Use UP/DOWN button to select **Enable or Disable**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Display Settings

Enter the control menu and select **Display Settings**, press ENTER. Use the UP/DOWN button to select **Display Invert**, **Backlight Intensity** or **Temperature Unit**.

### Display Invert

Select **Display Invert**, press ENTER.

Use UP/DOWN button to select **No** (display normal) or **Yes** (display inverted), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

### Backlight Intensity

Select **Backlight Intensity**, press ENTER.

Use UP/DOWN button to select a value between **1** (dark) and **10** (bright), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

### Temperature Unit

Select **Temperature Unit**, press ENTER.

Use UP/DOWN button to select **°C** or **°F**, confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Fixture Test

Enter the control menu and select **Fixture Test**, press ENTER. Use the UP/DOWN button to select **Auto Test** or **Manual Test**.

### Auto Test

Select **Auto Test**, press ENTER.

Use UP/DOWN button to select **Single** (the device immediately performs a single automatic self-test) or **Cycle** (the device immediately performs a cyclic automatic self-test), confirm your selection with ENTER.

To exit the menu, press MENU.

### Manual Test

Select **Manual Test**, press ENTER.

Use UP/DOWN button to select the channel for which the manual test is to be performed, confirm your selection with ENTER.

Use UP/DOWN button to select a value, confirm your selection with ENTER.

To exit the menu, press MENU.

(The device returns to its original DMX state after the manual test. The test values are saved automatically when the device is switched off.)

## Fixture Information

Enter the control menu and select **Fixture Information**, press ENTER. Use the UP/DOWN button to select **Use Hour**, **Temperature**, **Fan State**, **Firmware Version**, **RDM UID** or **Error Logs**.

### Use Hour

Select **Use Hour**, Use UP/DOWN button to select **Fixture** or **Light Source**, press ENTER.

Select **Light Source**, Use UP/DOWN button to select **Total (total time)** or **Light On (current switch-on time)**, confirm your selection with ENTER.

The total time or current switch-on time is displayed.

Use UP/DOWN button to select **Reset**, confirm your selection with ENTER. If you wish to reset the Light Source operating hours, select Yes. If you do not wish to reset anything, select No. Confirm your selection with ENTER. If you select Yes, use UP/DOWN button to set the password 050, confirm your selection with ENTER. The Light Source operating hours is reset.

To exit the menu, press MENU, or wait 30 seconds.

### Temperature

Select **Temperature**, press ENTER.

The device temperature is displayed.

To exit the menu, press MENU, or wait 30 seconds.

### Fan State

Select **Fan State**, press ENTER.

The fan status is displayed.

To exit the menu, press MENU, or wait 30 seconds.

### Firmware Version

Select **Firmware Version**, press ENTER.

The firmware version is displayed.

To exit the menu, press MENU, or wait 30 seconds.

## RDM UID

Select **RDM UID**, press ENTER.

The RDM UID is displayed.

To exit the menu, press MENU, or wait 30 seconds.

## Error Logs

Select **Error Logs**, press ENTER.

Use UP/DOWN button to select **Fixture Errors**, confirm your selection with ENTER.

The error list is displayed.

Use UP/DOWN button to select **Reset Error Logs**, confirm your selection with ENTER.

If you wish to reset the relevant error logs, select **Yes**. If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

If you select **Yes**, use UP/DOWN button to set the password 050, confirm your selection with ENTER. The relevant error logs are reset.

To exit the menu, press MENU, or wait 30 seconds.

## Reset Function

Enter the control menu and select **Reset Function**, press ENTER. Use the UP/DOWN button to select **Pan/Tilt Reset**, **Effect Reset** or **All Reset**.

## Pan/Tilt Reset

Select **Pan/Tilt Reset**, press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset pan/tilt to their home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Effect Reset

Select **Effect Reset**, press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset effect to their home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## All Reset

Select **All Reset**, press ENTER.

Use UP/DOWN button to select **No** or **Yes** (the device will run built-in program to reset all to their home positions), confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Special Function

Enter the control menu and select **Special Function**, press ENTER. Use the UP/DOWN button to select **USB Upgrade**, **Send Upgrade**, **Firmware Restore** or **Factory Settings**.

## USB Upgrade

Select **USB Upgrade**, press ENTER.

The upgrade files are displayed. (See the 'Updating Software' section for details.)

To exit the menu, press MENU, or wait 30 seconds.

## Send Upgrade

Select **Send Upgrade**, press ENTER.

If you wish to send upgrade files from this fixture to other fixtures to upgrade their firmware, select **Yes**. Then use UP/DOWN button to select **DMX** (send upgrade via DMX) or **NET** (send upgrade via Ethernet), confirm your selection with ENTER. Once selected, the display of this fixture will show "**Sending Packet, Please Wait...**" while the display of other fixtures will show "**Upgrading, Please Wait...**". A percentage bar will also be displayed. After the update is complete, fixtures will perform a reset (this can take some time).

If you do not wish to send anything, select **No**. Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

**Firmware Restore**(After replacing fixture's vice board(s), this function allows you to synchronize the main board's software to all vice board(s), as the software version of the replaced vice board(s) may not consistent with that of the main board.)

Select **Firmware Restore**, press ENTER.

If you wish to restore fixture's firmware, select **Yes**. Once Yes is selected, the display will show "**Upgrading, Please Wait...**". A percentage bar will also be displayed. After the update is complete, the fixture will perform a reset (this can take some time).

If you do not wish to restore anything, select **No**. Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

## Factory Settings

Select **Factory Settings**, press ENTER.

If you wish to reset the device to the factory settings, select **Yes**.

If you select **Yes**, use UP/DOWN button to set the password 011, confirm your selection with ENTER.

If you do not wish to reset anything, select **No**. Confirm your selection with ENTER.

To exit the menu, press MENU, or wait 30 seconds.

**RDM functions:** Certain menus of the device and functions can be called up via the RDM protocol.

The parameter IDs are implemented as follows for different commands:

### Standard RDM Parameter ID

| PID    | Parameter ID                | Discovery command | SET command | GET command |
|--------|-----------------------------|-------------------|-------------|-------------|
| 0x0001 | DISC_UNIQUE_BRANCH          | ✓                 |             |             |
| 0x0002 | DISC_MUTE                   | ✓                 |             |             |
| 0x0003 | DISC_UN_MUTE                | ✓                 |             |             |
| 0x0050 | SUPPORTED_PARAMETERS        |                   |             | ✓           |
| 0x0051 | PARAMETER_DESCRIPTION       |                   |             | ✓           |
| 0x0060 | DEVICE_INFO                 |                   |             | ✓           |
| 0x0080 | DEVICE_MODEL_DESCRIPTION    |                   |             | ✓           |
| 0x0081 | MANUFACTURER_LABEL          |                   |             | ✓           |
| 0x0082 | DEVICE_LABEL                |                   | ✓           | ✓           |
| 0x0090 | FACTORY_DEFAULTS            |                   | ✓           | ✓           |
| 0x00C0 | SOFTWARE_VERSION_LABEL      |                   |             | ✓           |
| 0x00C1 | BOOT_SOFTWARE_VERSION_ID    |                   |             | ✓           |
| 0x00C2 | BOOT_SOFTWARE_VERSION_LABEL |                   |             | ✓           |
| 0x00E0 | DMX_PERSONALITY             |                   | ✓           | ✓           |
| 0x00E1 | DMX_PERSONALITY_DESCRIPTION |                   |             | ✓           |
| 0x00F0 | DMX_START_ADDRESS           |                   | ✓           | ✓           |
| 0x0120 | SLOT_INFO                   |                   |             | ✓           |
| 0x0121 | SLOT_DESCRIPTION            |                   |             | ✓           |
| 0x0200 | SENSOR_DEFINITION           |                   |             | ✓           |
| 0x0201 | SENSOR_VALUE                |                   |             | ✓           |

|        |                   |  |   |   |
|--------|-------------------|--|---|---|
| 0x0343 | CURVE             |  | ✓ | ✓ |
| 0x0344 | CURVE_DESCRIPTION |  |   | ✓ |
| 0x0400 | DEVICE_HOURS      |  |   | ✓ |
| 0x0401 | LAMP_HOURS        |  |   | ✓ |
| 0x0600 | PAN_INVERT        |  | ✓ | ✓ |
| 0x0601 | TILT_INVERT       |  | ✓ | ✓ |
| 0x1000 | IDENTIFY_DEVICE   |  | ✓ | ✓ |
| 0x1001 | RESET_DEVICE      |  | ✓ | ✓ |

✓ -Command implemented for the respective parameter ID

### Manufacturer-specific RDM Parameter ID

| PID    | Parameter ID      | Discovery command | SET command | GET command | Note                                                                                                                                                                              |
|--------|-------------------|-------------------|-------------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0xA004 | DMX_STATUS        |                   | ✓           | ✓           | 0:Blackout<br>1:Hold<br>2:Manual                                                                                                                                                  |
| 0xA008 | DIMMER_SPEED      |                   | ✓           | ✓           | 0:Fast<br>1:Smooth                                                                                                                                                                |
| 0xA010 | FAN_MODE          |                   | ✓           | ✓           | 0:Standard<br>1:Quiet                                                                                                                                                             |
| 0xA018 | ERROR_LOG         |                   |             | ✓           |                                                                                                                                                                                   |
| 0xA020 | OFFSET            |                   | ✓           | ✓           |                                                                                                                                                                                   |
| 0xA021 | PAN_TILT_FEEDBACK |                   | ✓           | ✓           | 0:No<br>1:Yes                                                                                                                                                                     |
| 0xA025 | DIMMER_CURVE      |                   | ✓           | ✓           | 1:Linear<br>2:Square Law<br>3:Inv SQ Law<br>4:S Curve                                                                                                                             |
| 0xA026 | DIMMER_FREQUENCY  |                   | ✓           | ✓           | 1:900Hz<br>2:1000Hz<br>3:1100Hz<br>4:1200Hz<br>5:1300Hz<br>6:1400Hz<br>7:1500Hz<br>8:2500Hz<br>9:4000Hz<br>10:5000Hz<br>11:6000Hz<br>12:10KHz<br>13:15KHz<br>14:20KHz<br>15:25KHz |

✓ -Command implemented for the respective parameter ID

## 7.2 Home Position Adjustment

- ▶ To access the control menus, press the [MENU] button.
- ▶ To access the offset menus, long-press the [ENTER] button.
- ▶ Navigate the offset menus, using the [ENTER], [▲ UP] and [▼ DOWN] buttons.
- ▶ To select a menu option or to confirm a selection, press the [ENTER] button.
- ▶ To return to a higher level in the menu structure without making a change, press the [MENU] button, or wait 30 seconds.

| OFFSET MENU   | VALUES    |
|---------------|-----------|
| Dimming       | 0~9999    |
| Frequency(Hz) | 1072~1327 |
| Pan           | -128~127  |
| Tilt          | -128~127  |
| Cto           | -128~127  |
| Frost         | -128~127  |
| Focus         | -128~127  |
| Zoom          | -128~127  |
| Blade DW 1    | 0~255     |
| Blade DW 2    | 0~255     |
| Blade UP 1    | 0~255     |
| Blade UP 2    | 0~255     |
| Blade LF 1    | 0~255     |
| Blade LF 2    | 0~255     |
| Blade RG 1    | 0~255     |
| Blade RG 2    | 0~255     |
| Framing       | -128~127  |

### Dimming

Select **Dimming**, press ENTER.

Use UP/DOWN button to select a value between 0 and 9999, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Frequency(Hz)**

Select **Frequency(Hz)**, press ENTER.

Use UP/DOWN button to select a value, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

| Frequency | VALUES      |
|-----------|-------------|
| 900Hz     | 772~1027    |
| 1000Hz    | 872~1127    |
| 1100Hz    | 972~1227    |
| 1200Hz    | 1072~1327   |
| 1300Hz    | 1172~1427   |
| 1400Hz    | 1272~1527   |
| 1500Hz    | 1372~1627   |
| 2500Hz    | 2372~2627   |
| 4000Hz    | 3872~4127   |
| 5000Hz    | 4872~5127   |
| 6000Hz    | 5872~6127   |
| 10KHz     | 9872~10127  |
| 15KHz     | 14872~15127 |
| 20KHz     | 19872~20127 |
| 25KHz     | 24872~25127 |

**Pan**

Select **Pan**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Tilt**

Select **Tilt**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Cto**

Select **Cto**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Frost**

Select **Frost**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Focus**

Select **Focus**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Zoom**

Select **Zoom**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Blade DW1**

Select **Blade DW 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Blade DW 2**

Select **Blade DW 2**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Blade UP 1**

Select **Blade UP 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Blade UP 2**

Select **Blade UP 2**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Blade LF 1**

Select **Blade LF 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Blade LF 2**

Select **Blade LF 2**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Blade RG 1**

Select **Blade RG 1**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

**Blade RG 2**

Select **Blade RG 2**, press ENTER.

Use UP/DOWN button to select a value between 0 and 255, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

## Framing

Select **Blade RG 2**, press ENTER.

Use UP/DOWN button to select a value between -128 and 127, confirm your selection with ENTER.

To exit the offset menu, press MENU, or wait 30 seconds.

## 08/ Configuring the Device for DMX Control

### 8.1 Address Setting

All fixtures should be given a DMX starting address when operating with a DMX controller, in order to ensure that the correct fixture responds to the correct control signal. Incorrect settings will result in unpredictable responses from the lighting controller.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture.

Setting all fixtures to the same DMX address will cause all fixtures to react in the same way. In this case, please note that changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will “listen” starting at the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture.

For example, if the first fixture is set to 25 ch DMX mode with a start DMX address of 1, the following fixture in the DMX chain should then be set to a DMX address of 26. As the first fixture uses all the first 25 DMX channels, the next available channel is 26 ( $25+1=26 >> 26$ ).

See the chart below for more details:

| Channel Mode | Unit 1<br>Address | Unit 2<br>Address | Unit 3<br>Address | Unit 4<br>Address | Unit xxx<br>Address |
|--------------|-------------------|-------------------|-------------------|-------------------|---------------------|
| 25 channels  | 1                 | 26                | 51                | 76                | .....               |

## 8.2 DMX Protocol

Valid from firmware version: V1.1

| CHANNEL | VALUE                                                                                                                                                                                                                                                                           | FUNCTION                                                                                                                                                                                                                                                                                                                                                                      |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 25ch    |                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                               |
| 1       | 000-255                                                                                                                                                                                                                                                                         | PAN<br>0°→540°                                                                                                                                                                                                                                                                                                                                                                |
| 2       | 000-255                                                                                                                                                                                                                                                                         | PAN FINE                                                                                                                                                                                                                                                                                                                                                                      |
| 3       | 000-255                                                                                                                                                                                                                                                                         | TILT<br>0°→260°                                                                                                                                                                                                                                                                                                                                                               |
| 4       | 000-255                                                                                                                                                                                                                                                                         | TILT FINE                                                                                                                                                                                                                                                                                                                                                                     |
| 5       | 000-255                                                                                                                                                                                                                                                                         | PAN/TILT SPEED<br>Fast to Slow                                                                                                                                                                                                                                                                                                                                                |
| 6       | 000-255                                                                                                                                                                                                                                                                         | CTO<br>0%→100%                                                                                                                                                                                                                                                                                                                                                                |
| 7       | 000-007<br>008-016<br>017-025<br>026-034<br>035-043<br>044-052<br>053-063<br>064-067<br>068-071<br>072-075<br>076-079<br>080-083<br>084-087<br>088-091<br>092-095<br>096-099<br>100-103<br>104-107<br>108-111<br>112-115<br>116-119<br>120-127<br>128-189<br>190-193<br>194-255 | COLOR<br>Open<br>Color 1<br>Color 2<br>Color 3<br>Color 4<br>Color 5<br>Color 6<br>Open<br>Open+ Color1<br>Color1<br>Color1+ Color2<br>Color2<br>Color2+ Color3<br>Color3<br>Color3+ Color4<br>Color4<br>Color4+ Color5<br>Color5<br>Color5+ Color6<br>Color6<br>Color6+ Open<br>Open<br>Counter-Clockwise rotation, fast to slow<br>Stop<br>Clockwise rotation, slow to fast |
| 8       | 000-007                                                                                                                                                                                                                                                                         | FROST<br>Close                                                                                                                                                                                                                                                                                                                                                                |

| CHANNEL | VALUE                                                                                                      | FUNCTION                                                                                                                                                                                                          |
|---------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|         | 000-255                                                                                                    | Open                                                                                                                                                                                                              |
| 9       | 000-255                                                                                                    | <b>ZOOM</b><br>Wide→Narrow                                                                                                                                                                                        |
| 10      | 000-255                                                                                                    | <b>ZOOM FINE</b>                                                                                                                                                                                                  |
| 11      | 000-255                                                                                                    | <b>FOCUS</b><br>0%→100%                                                                                                                                                                                           |
| 12      | 000-255                                                                                                    | <b>FOCUS FINE</b>                                                                                                                                                                                                 |
| 13      | 000-007<br>008-015<br>016-131<br>132-139<br>140-181<br>182-189<br>190-231<br>232-239<br>240-247<br>248-255 | <b>STROBE</b><br>Close<br>Open<br>Strobe from Slow to Fast<br>Open<br>Fast Open Slow Close from Slow to Fast<br>Open<br>Slow Open Fast Close from Slow to Fast<br>Open<br>Random Strobe from Slow to Fast<br>Open |
| 14      | 000-255                                                                                                    | <b>DIMMER</b><br>0%→100%                                                                                                                                                                                          |
| 15      | 000-255                                                                                                    | <b>DIMMER FINE</b>                                                                                                                                                                                                |
| 16      | 000-255                                                                                                    | <b>BLADE</b><br>0°→180°                                                                                                                                                                                           |
| 17      | 000-255                                                                                                    | <b>BLADE DW 1</b><br>0%→100%                                                                                                                                                                                      |
| 18      | 000-255                                                                                                    | <b>BLADE DW 2</b><br>0%→100%                                                                                                                                                                                      |
| 19      | 000-255                                                                                                    | <b>BLADE UP 1</b><br>0%→100%                                                                                                                                                                                      |
| 20      | 000-255                                                                                                    | <b>BLADE UP 2</b><br>0%→100%                                                                                                                                                                                      |
| 21      | 000-255                                                                                                    | <b>BLADE LF 1</b><br>0%→100%                                                                                                                                                                                      |
| 22      | 000-255                                                                                                    | <b>BLADE LF 2</b><br>0%→100%                                                                                                                                                                                      |
| 23      | 000-255                                                                                                    | <b>BLADE RG 1</b><br>0%→100%                                                                                                                                                                                      |
| 24      | 000-255                                                                                                    | <b>BLADE RG 2</b><br>0%→100%                                                                                                                                                                                      |
| 25      |                                                                                                            | <b>SPECIAL FUNCTION</b><br>(To activate following functions,<br>stop in DMX value for at least 3 seconds.)                                                                                                        |

| CHANNEL | VALUE   | FUNCTION                               |
|---------|---------|----------------------------------------|
|         | 000-009 | No Function                            |
|         | 010-029 | No Function                            |
|         | 030-039 | Linear                                 |
|         | 040-049 | Square law                             |
|         | 050-059 | Inv SQ law                             |
|         | 060-069 | S curve                                |
|         | 070-079 | Fan Mode Super Power                   |
|         | 080-089 | Fan Mode Auto                          |
|         | 090-099 | Fan Mode Quiet                         |
|         | 100-109 | Light Source Frequency Setting Enable  |
|         | 110-119 | Light Source Frequency Setting Disable |
|         | 120-122 | No Function                            |
|         | 123     | 900Hz                                  |
|         | 124     | 1000Hz                                 |
|         | 125     | 1100Hz                                 |
|         | 126     | 1200Hz                                 |
|         | 127     | 1300Hz                                 |
|         | 128     | 1400Hz                                 |
|         | 129     | 1500Hz                                 |
|         | 130     | 2500Hz                                 |
|         | 131     | 4000Hz                                 |
|         | 132     | 5000Hz                                 |
|         | 133     | 6000Hz                                 |
|         | 134     | 10000Hz                                |
|         | 135     | 15000Hz                                |
|         | 136     | 20000Hz                                |
|         | 137     | 25000Hz                                |
|         | 138-139 | No Function                            |
|         | 140-149 | Pan/tilt Reset                         |
|         | 150-159 | Effect Reset                           |
|         | 160-169 | No Function                            |
|         | 170-179 | No Function                            |
|         | 180-199 | No Function                            |
|         | 200-209 | Reset all                              |
|         | 210-219 | Dimmer Speed Fast                      |
|         | 220-229 | Dimmer Speed Smooth                    |
|         | 230-231 | Lock Mode Enable                       |
|         | 232-233 | Lock Mode Disable                      |
|         | 234-235 | Color Short Cut Enable                 |
|         | 236-237 | Color Short Cut Disable                |
|         | 238-255 | No Function                            |

## 09/ Error Information

Error codes are shown continuously in the display when the fixture fails and they will not disappear until the fixture is repaired.

### 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 related 485 (DATA) signal circuit on the PCB board is damaged.

### Pan Reset Error

Check whether the position of the pan where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the pan operating range.

Check whether the Hall element on the pan is damaged.

Check whether the lead connecting the Hall element on the pan and the PCB board is in poor contact or disconnected.

Check whether the motor on the pan is damaged.

Check whether the related circuit of the motor drive board on the pan is damaged.

### Pan Encode Error

Check whether the encoder on the pan is damaged.

Check whether the lead connecting the encoder on the pan and the PCB board is in poor contact or disconnected.

### Pan Encode No Find

Check whether the lead connecting the encoder on the pan and the PCB board is in poor contact or disconnected.

### Pan Encode Disable

Check whether the encoder on the pan is damaged.

### Tilt Reset Error

Check whether the position of the tilt where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the tilt operating range.

Check whether the Hall element on the tilt is damaged.

Check whether the lead connecting the Hall element on the tilt and the PCB board is in poor contact or disconnected.

Check whether the motor on the tilt is damaged.

Check whether the related circuit of the motor drive board on the tilt is damage.

### Tilt Encode Error

Check whether the encoder on the tilt is damaged.

Check whether the lead connecting the encoder on the tilt and the PCB board is in poor contact or disconnected.

### Tilt Encode No Find

Check whether the lead connecting the encoder on the tilt and the PCB board is in poor contact or disconnected.

### Tilt Encode Disable

Check whether the encoder on the tilt is damaged.

## Cto Reset Error

Check whether the position of the cto where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the cto operating range.

Check whether the Hall element on the cto is damaged.

Check whether the lead connecting the Hall element on the cto and the PCB board is in poor contact or disconnected.

Check whether the motor on the cto is damaged.

Check whether the related circuit of the motor drive board on the cto is damage.

## Blade Reset Error

Check whether the position of the blade where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the blade operating range.

Check whether the Hall element on the blade is damaged.

Check whether the lead connecting the Hall element on the blade and the PCB board is in poor contact or disconnected.

Check whether the motor on the blade is damaged.

Check whether the related circuit of the motor drive board on the blade is damage.

## Focus Reset Error

Check whether the position of the focus where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the focus operating range.

Check whether the Hall element on the focus is damaged.

Check whether the lead connecting the Hall element on the focus and the PCB board is in poor contact or disconnected.

Check whether the motor on the focus is damaged.

Check whether the related circuit of the motor drive board on the focus is damage.

## Zoom Reset Error

Check whether the position of the zoom where the magnet is installed falls off or is damaged.

Check whether there are obstacles in the zoom operating range.

Check whether the Hall element on the zoom is damaged.

Check whether the lead connecting the Hall element on the zoom and the PCB board is in poor contact or disconnected.

Check whether the motor on the zoom is damaged.

Check whether the related circuit of the motor drive board on the zoom is damage.

## Led Temp. Error

Check whether the temperature detecting board is normal.

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

Check whether the lead on the temperature detecting board is installed in place or disconnected.

**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.

**Memory Error**

When the memory IC keeps reporting errors, please replace the motherboard.

**External Flash Error**

When this IC keeps reporting errors, please replace the motherboard.

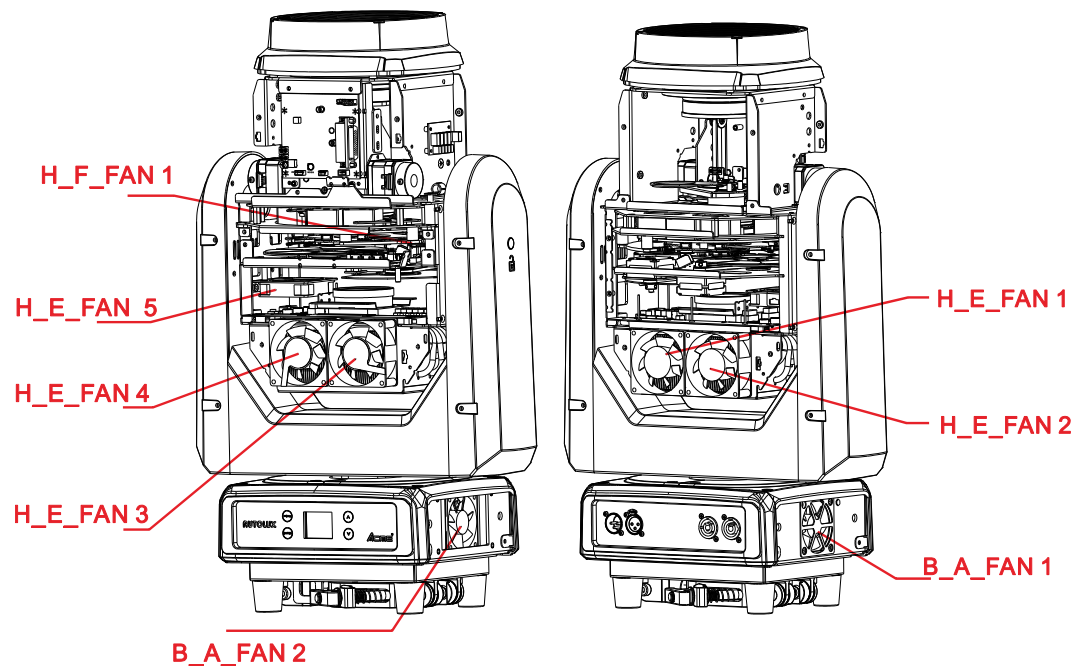
**Base Fan 1/2 Start Err**

Check whether the fan is not running.  
Check whether the fan leads are installed in place or disconnected.  
Check whether the fan is damaged.  
Check whether there are obstacles in the fan operating range.

**Head Fan 1/2/3/4/5/6 Start Err**

Check whether the fan is not running.  
Check whether the fan leads are installed in place or disconnected.  
Check whether the fan is damaged.  
Check whether there are obstacles in the fan operating range.

## Position of cooling fans:



| Cooling Fans | Part Number | V      | W    | Position |
|--------------|-------------|--------|------|----------|
| Base Fan 1   | 3014001251  | DC 24V | 3.6W | Base - A |
| Base Fan 2   |             |        |      |          |
| Head Fan 1   | 3014001256  | DC 24V | 4.8W | Head - E |
| Head Fan 2   |             |        |      |          |
| Head Fan 3   |             |        |      |          |
| Head Fan 4   |             |        |      |          |
| Head Fan 5   | 3014001251  | DC 24V | 3.6W | Head - E |
| Head Fan 6   | 3014001300  | DC 24V | 2.9W | Head - F |

## 10/ Troubleshooting

| Problem                                        | Potential cause(s)                                                                | Remedies                                                                                                                               |
|------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Fixture does not respond or appears to be off. | No power to the fixture.                                                          | Confirm that the power is switched on and cables are plugged in.                                                                       |
|                                                | No output from PSU.                                                               | Replace the PSU.                                                                                                                       |
| Fixture suddenly turned off.                   | Power was turned off.                                                             | Check the power supply, switches and breakers.                                                                                         |
| Light output cuts out intermittently.          | Fixture is too hot.                                                               | Check fixture's stored error messages for more information.<br>Allow fixture to cool.<br>Clean fixture.<br>Reduce ambient temperature. |
| Fixture suddenly stopped responding.           | DMX cables were disconnected.                                                     | Inspect DMX cables.                                                                                                                    |
| Fixture operates irregularly / abnormal.       | Incorrect DMX address or DMX mode.                                                | Inspect and enter the correct DMX address or mode.                                                                                     |
|                                                | DMX link is not terminated.                                                       | Install a XLR 120ohm DMX termination at the end of the DMX link.                                                                       |
|                                                | Bad data link.                                                                    | Replace or repair defective cables and/or connections.                                                                                 |
|                                                | One of the fixtures is defective and is disturbing data transmission on the link. | Track and isolate the corrupted fixture.<br>Have the fixture serviced by a qualified technician.                                       |
| Pan / tilt is skipping / shuddering            | Obstacles are within the required pan / tilt clearance.                           | Inspect and remove any obstacles constraining free operation of the pan / tilt.                                                        |
|                                                | The Hall element is damaged.                                                      | Replace the Hall element.                                                                                                              |
|                                                | The magnetic steel fell out.                                                      | Replace the magnetic steel.                                                                                                            |

## 11/ Fixture Cleaning

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Regular cleaning is very important for fixture life and performance. Buildup of dust, dirt, smoke particles, fog fluid residues, etc. degrades the fixture's light output and cooling ability. Cleaning schedules for lighting fixtures vary greatly depending on the operating environment. It is therefore impossible to specify precise cleaning intervals for the fixture. Environmental factors that may result in a need for frequent cleaning include:

- ▶ Use of smoke or fog machines.
- ▶ High airflow rates (near air conditioning vents, for example).
- ▶ Airborne dust (from stage effects, building structures and fittings or the natural environment at outdoor events, for example).

If one or more of these factors is present, inspect fixtures within their first few hours of operation to see whether cleaning is necessary. Check again at frequent intervals. This procedure will allow you to assess cleaning requirements in your particular situation.

Follow these precautions when cleaning the fixture:

- ▶ Work in a clean, dry, well-lit area.
- ▶ Use gentle pressure only. A soft lint-free cloth dampened with a solution of water and a mild detergent is recommended, under no circumstances should alcohol, solvents or abrasives be used! Use care when cleaning optical components: surfaces are fragile and easily scratched.

## 12/ Cleaning and Maintenance

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- To ensure the normal and stable operation of the luminaire, the fixture should be kept clean. Acetone may be used to clean the lens. It is recommended to clean the body, fan, and air intake vents every 15 days. The lens and dichroic filters should also be cleaned regularly to maintain optimal lighting effects. When cleaning the dichroic filters, do not use any solvent-based cleaners to avoid damage to the luminaire.
- When the luminaire is used continuously, it is recommended not to exceed 4 hours per session, otherwise the service life of the luminaire will be significantly shortened. This issue can be addressed by using a rotation/rest method.
- Before performing maintenance or disassembly on the luminaire, always disconnect the power supply and never operate with live electricity. After disconnecting the power, all components of the luminaire must cool down for approximately 10 minutes before disassembly or assembly. If the bulb needs to be replaced, wait an additional 20 minutes or more for the bulb to cool completely to avoid burns.
- The lenses, optics, and other rotating parts of the luminaire must be inspected regularly to ensure they remain clean and stable. If any obvious damage or looseness is found, they must be replaced or reinforced promptly to prevent accidents.
- This luminaire product employs forced-air cooling and tends to accumulate dust. It must be cleaned at least once every two weeks, especially at the air intake and exhaust vents for heat dissipation.
- After performances using color gels, check whether any paper debris is stuck in or has been drawn into the air intake and exhaust vents. Such debris must be removed completely; otherwise, it may damage the fan and cause a fire hazard.

## 13/ Approvals and Certifications

This product has been tested and found to comply with the following standards:

- 2014/30/EU - Electromagnetic Compatibility (EMC)
- 2014/35/EU - Low Voltage Directive (LVD)
- cETLus Approved (Control #5000057)
- UK SI 2016 No. 1091: Electromagnetic Compatibility Regulations 2016
- UK SI 2016 No. 1101: The Electric Equipment (Safety) Regulations 2016



The information in this document is subject to change without notice.

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