eLumen8

BEAM 2R

Order code: ELUM013

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1. Safety

⚠️
WARNING

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

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.
- The unit is for indoor use only. Use only in a dry location.
- Only install and operate with qualified operators.
- Do not allow children to operate the fixture.
- Use a safety wire when installing the unit. Handle the unit by carrying its base instead of its head only.
- The unit must be installed in a location with adequate ventilation.
- Be sure that no ventilation slots are blocked; otherwise the unit will be overheated.
- Before operating, ensure that the voltage and frequency of the 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.
- Maximum ambient temperature TA: 40 . Don't operate it when the temperature is higher.
- Do not connect the unit to a dimmer pack.
- During initial start-up after purchase some smoke or smell may arise. This is a normal process and does not necessarily mean that the unit is defective, and it will decrease gradually within 15 minutes.
- Make sure there are no flammable materials close to the unit while operating to avoid a fire hazard.
- Examine the power cable carefully; replace it immediately if there is any damage.
- The unit's surface temperature may reach up to 85 . Do not touch the housing with bare hands during operation, and allow 15 minutes for cooling before replacing the lamp.
- Avoid liquids or metal objects entering the unit. If this occurs disconnect the mains power immediately.

- Do not operate in a dirty or dusty environment; clean the fixture regularly.
- Do not touch any cables during operation as there may be a hazard of electric shock.
- Avoid twisted power cables.
- The minimum distance between light output and the illuminated surface must be more than 12 meters.
- Disconnect mains power before fuse/lamp replacement or servicing.
- Replace fuse/lamp only with the same type.
- In the event of a serious operating problem, stop using the unit immediately.
- 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.
- Disconnect the mains power if the fixture is not being used for a long period of time.
- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- Hot lamp explosion hazard. Do not open the unit within 15 minutes after switching off.
- Replace the lamp if it is damaged or deformed.
- Do not look directly at the light while the lamp is on.
- Never touch the lamp with bare hands.
- Do not start on the unit without the lamp 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 and 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 Specification

- DMX Channels: 14 & 16 channels

- Smooth 0~100% dimming and variable strobe speeds

- Motorized focus by DMX control

- Automatic Pan/Tilt position correction

- **Voltage:** AC 100~240V, 50/60Hz

- **Power Consumption:** 250W

- **Power Cable Daisy Chains:** 10 Fixtures Max. (230V, 50Hz)

    5 Fixtures Max. (120V, 60Hz)

- **Lamp:** PHILIPS MSD Platinum 2R

- **Beam Angle:** 3°

- **Dimension:** 311 x 256 x 476mm

- **Weight:** 15Kgs
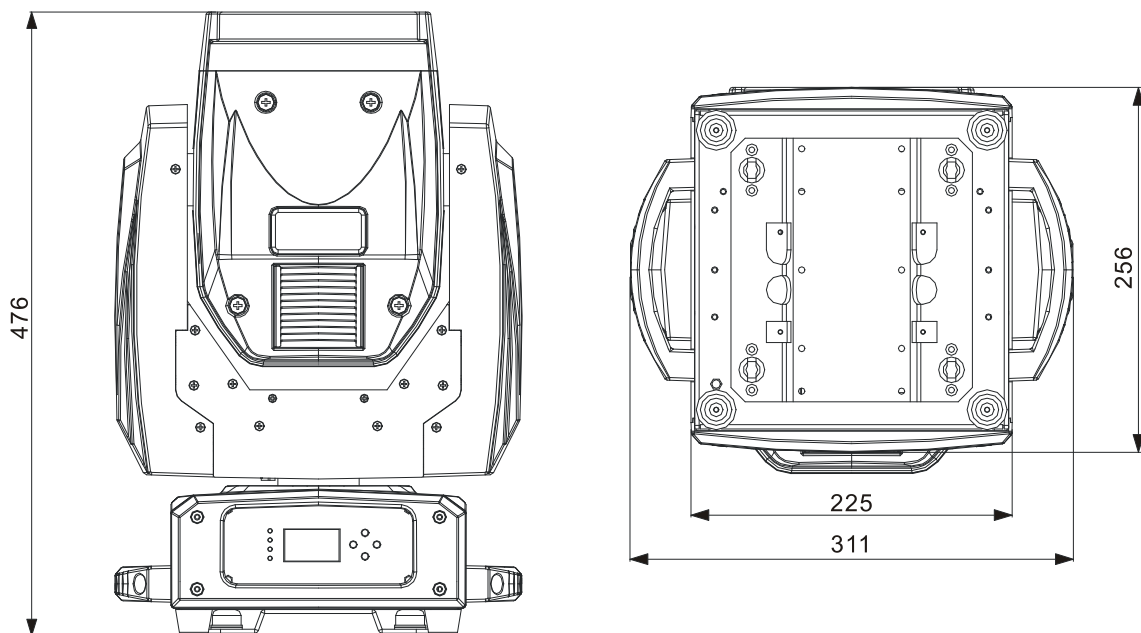
3. Description

3.1 Control Panel
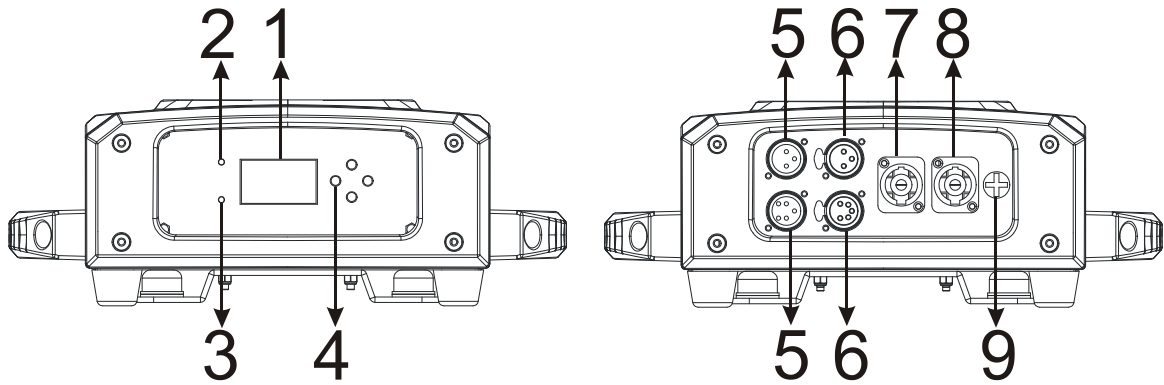
1. Display:

Show the various menus and the selected functions;

LED:

2. POWER	On	Power On
3. DMX	On	DMX input present

4. Button:

MENU	To enter into, move backward or leave the menu
▲	Move up in the menu
▼	Move down in the menu
ENTER	Enter the desired functions

5. DMX IN:

For DMX 512 operation, use 3/5-pin XLR cables to link the units together;

6. DMX OUT:

For DMX 512 operation, use 3/5-pin XLR cables to link the units together

7. POWER IN:

For connection to a power socket (100~240V, 50/60Hz) via the supplied mains cable.

8. POWER OUT:

Connect to supply power to the next unit.

9. Fuse (T 6.3 A):

Protects the unit from over current or short circuit.

4. Gobo and Lamp

4.1 Gobo
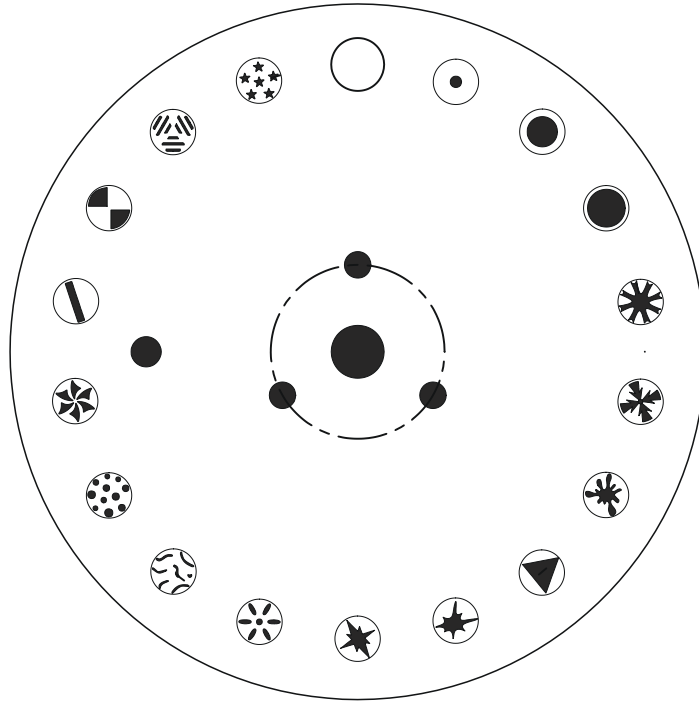
Open	Gobo 1	Gobo 2	Gobo 3	Gobo 4	Gobo 5	Gobo 6	Gobo 7	Gobo 8
Gobo 9	Gobo 10	Gobo 11	Gobo 12	Gobo 13	Gobo 14	Gobo 15	Gobo 16	Gobo 17

DANGER!

Only Install/change the gobo-wheel with the unit switched off.

4.2 Lamp

Philips MSD Platinum 2R

- Because of its high internal pressure, there is a risk that Discharge lamp can explode during operation. The lamp emits intense UV radiation which is harmful to the eyes and skin. The high luminance of the arc can cause severe damage to the retina if you take a close look at the lamp.

- To protect the lamp, always turn the lamp off first (via control panel or DMX controller) and let the unit run for at least five minutes to cool down before switching off the mains supply. Never handle the lamp or luminary when it is hot.

- Do not touch the lamp with bare hands. If this happens, clean the lamp with denatured alcohol and wipe it with a lint free cloth before use again.

- The lamp generates UV radiation. Never operate the lamp without appropriate shielding.

- When lighting up, the lamp operates at high pressure and there is a slight risk of arc tube rupture. The risk increases with age, temperature and improper handling of the lamp. Do not use the lamp longer than its lifespan.

- Make sure the lamp is located in the center of the reflector for the best projection.

4.3 Changing the Lamp
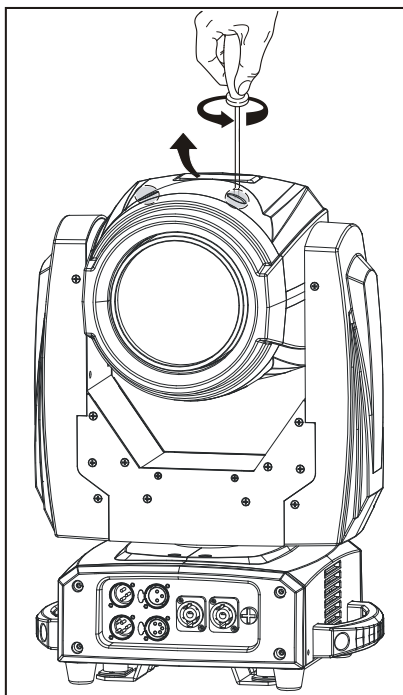
Fig.1 Rotate 1/4 turn to loosen the four screws and open the cover.
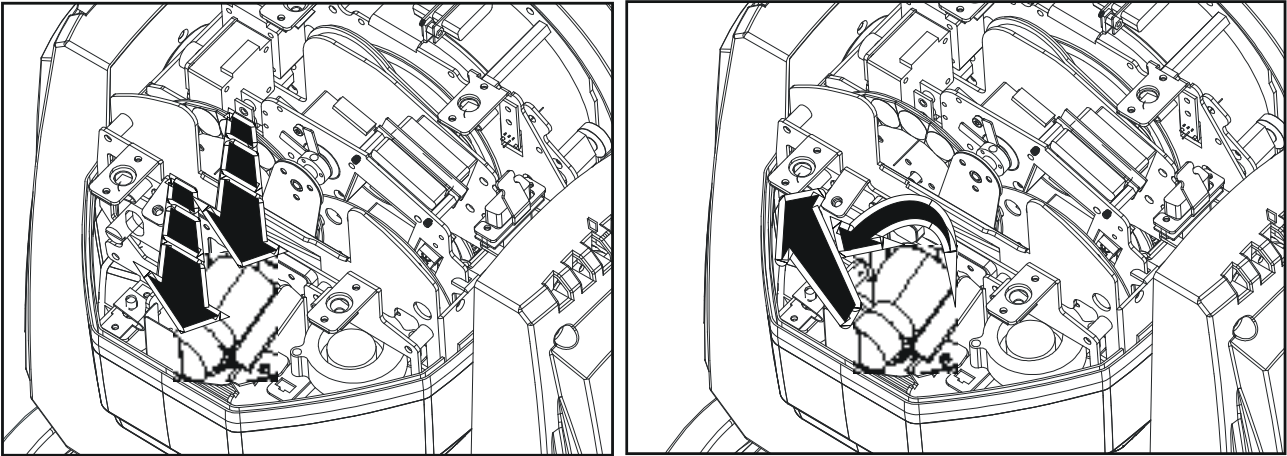
Fig.2 Remove the old lamp.
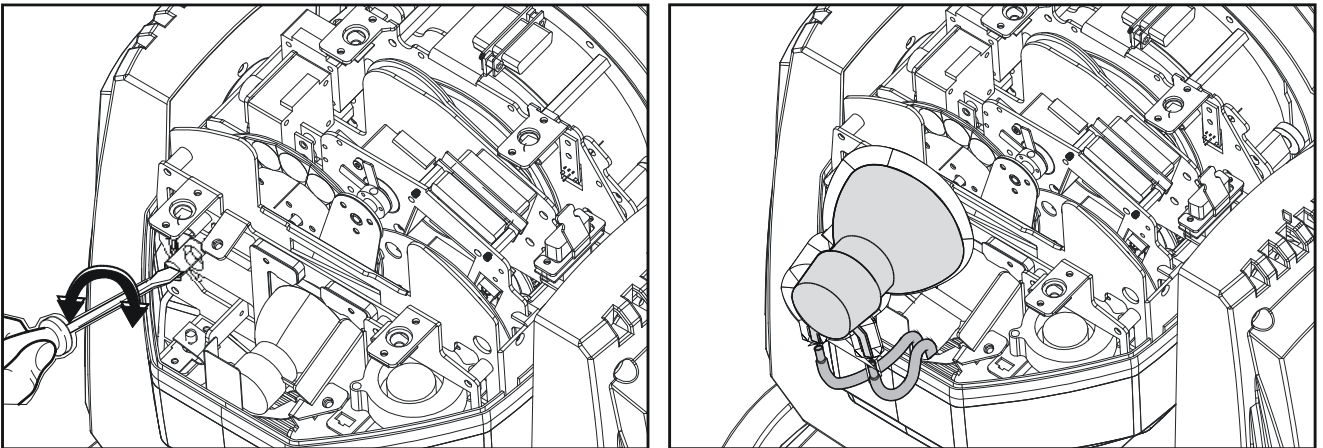
Fig.3 Unplug all the connection cables to the lamp. Wear anti-static gloves to take out the lamp.

and then replace with a new lamp.

5. How To Set The Unit

5.1 Main Function

To select any of the given functions, press the **MENU** button until the required function is showing on the display. Select the function by pressing the **ENTER** button and the display will blink. Use the **DOWN/UP** buttons to change the mode. Once the required mode has been selected, press the **ENTER** button to setup. To go back to the functions without any changes press the **MENU** button again. Press and hold the **MENU** button for about one second or wait for one minute to exit the menu mode.

The main functions are shown overleaf:

```
                                                                    ┌─────────┐
                                          ┌──────────────┐    ┌────│   001   │
                                      ┌──│ DMX  Address │────┤    └─────────┘
                                      │   └──────────────┘    └────│   512   │
                                      │                            └─────────┘
                                      │                            ┌─────────┐
             ┌──────────────┐         │   ┌──────────────────┐ ┌──│ Mode1(16)│
          ┌─│ DMX Functions │─────────┼──│ DMX Channel Mode │─┤   └─────────┘
          │  └──────────────┘         │   └──────────────────┘ └──│ Mode2(14)│
          │                           │                           └─────────┘
          │                           │   ┌──────────────────┐
          │                           └──│ View DMX Value    │
          │                               └──────────────────┘
```

			No

DMX Functions
- DMX Address → 001 / 512
- DMX Channel Mode → Mode1(16) / Mode2(14)
- View DMX Value

Fixture Setting
- Pan Inverse → No / Yes
- Tilt Inverse → No / Yes
- P/T Feedback → No / Yes
- Bl.o. P/T Moving → No / Yes
- Bl.o. Color Change → No / Yes
- Bl.o. Gobo Change → No / Yes

MENU

Lamp Setting
- On/Off → Off / On
- State/Power On → Off / On
- Off via DMX → No / Yes
- On if DMX On → No / Yes
- Off if DMX Off → No / Yes
- Ignition Delay → 0~255s
- Low Power Delay → 0~255s

Display Setting
- Display Inverse → No / Yes
- Backlight Auto Off → No / Yes
- Backlight Intensity → 1~10
- Contrast Ratio → 1~30
- Temperature Unit → ℃ / ℉
- Display Warning → No / Yes

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```
                                         ┌─────────────────────┐
                                         │ Auto Test           │
                          ┌─────────────┐│─────────────────────┘
                          │Fixture Test │┤
                          └─────────────┘│┌─────────────────────┐
                                         └│ Manual Test         │
                                          └─────────────────────┘
                                          ┌─────────────────────┐
                                          │ Fixture Use time    │
                                          └─────────────────────┘          ┌───────────┐
                          ┌──────────────┐┌─────────────────────┐          │  Exit     │
                          │Fixture       ││ Lamp On time        │──────────┤───────────┘
                          │Information   │┤─────────────────────┘          │┌───────────┐
                          └──────────────┘│                                └│Reset Time │
                                          │┌─────────────────────┐          └───────────┘
                                          └│ Firmware Version    │
                                           └─────────────────────┘
                                           ┌─────────────────────┐
                                           │ Pan /Tilt           │
                                           └─────────────────────┘
                                           ┌─────────────────────┐
                                           │ Shutter/Prism       │
                                           └─────────────────────┘
                                           ┌─────────────────────┐
   ┌────────┐                              │ Color               │          ┌───────────┐
   │ MENU   │─────────┐  ┌──────────────┐  └─────────────────────┘          │   No      │
   └────────┘         │  │Reset         │  ┌─────────────────────┐──────────┤───────────┘
                      ├──│Functions     │──│ Gobo                │          │┌───────────┐
                         └──────────────┘  └─────────────────────┘          └│   Yes     │
                                           ┌─────────────────────┐           └───────────┘
                                           │ Focus               │
                                           └─────────────────────┘
                                           ┌─────────────────────┐
                                           │ All                 │
                                           └─────────────────────┘
                                                                             ┌───────────┐
                                           ┌─────────────────────┐           │ Interval  │
                                           │ Fixture Maintenance │───────────┤───────────┘
                          ┌──────────────┐ └─────────────────────┘           │┌───────────┐
                          │Special       │                                   └│Remain Time│
                          │Functions     │─┐                                  └───────────┘
                          └──────────────┘ │┌─────────────────────┐          ┌───────────┐
                                           ││ Factory Setting     │          │   No      │
                                           └│─────────────────────┘──────────┤───────────┘
                                                                             │┌───────────┐
                                                                             └│   Yes     │
                                                                              └───────────┘
```

DMX Functions

Enter menu mode, select *DMX Functions*, press ENTER button to confirm, use the **DOWN/UP** buttons to select *DMX Address, DMX Channel Mode* or *View DMX Value*

DMX Address

Select **DMX Address**, press the **ENTER** button to confirm, the current address will blink on the display, use the **DOWN/UP** buttons to adjust the address from **001** to **512**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

DMX Channel Mode

Select **DMX Channel Mode**, press the **ENTER** button to confirm, the current channel mode will blink on the display, use the **DOWN/UP** buttons to select **Mode 1 (16)** or **Mode 2 (14)**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

View DMX Value

Select **View DMX Value**, press the **ENTER** button to confirm. Channel function and its value will show on the display, use the **DOWN/UP** buttons to view other DMX values. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

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Fixture Setting

Enter menu mode, select *Fixture Setting,* press the **ENTER** button to confirm, use the **DOWN**/**UP** buttons to select *Pan Inverse, Tilt Inverse, P/T Feedback, BL.O. P/T Moving, BL.O. Color Change or BL.O. Gobo Change.*

Pan Inverse

Select **Pan Inverse**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN**/**UP** buttons to select **No** (normal) or **Yes** (pan inverse), press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Tilt Inverse

Select **Tilt Inverse**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN**/**UP** buttons to select **No** (normal) or **Yes** (tilt inverse), press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Pan/Tilt Feedback

Select **P/T Feedback**, press the **ENTER** button to confirm, the current mode will blink on the display, press the **DOWN**/**UP** buttons 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 wait one minute to exit menu mode.

Backout during Pan/Tilt

Select **BL.O. P/T Moving**, Press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN**/**UP** buttons to select **No** (normal while pan/tilt moving) or **Yes** (blackout while pan/tilt moving), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit wait to exit menu mode.

Blackout during Colour Change

Select **BL.O. Color Change**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN**/**UP** buttons to select **No** (normal while change color) or **Yes** (blackout while change color), press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Blackout during Gobo Change

Select **BL.O. Gobo Change**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons to select **No** (normal while changing gobo) or **Yes** (blackout while changing gobo), press **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Lamp Setting

Enter menu mode, select *Fixture Setting*, press the **ENTER** button to confirm, use the **DOWN**/**UP** buttons to select *On/Off State/Power on/Off Via DMX, On If DMX on/Off If DMX off* or *Ignition Delay* and *Low Power Delay.*

On/Off

Select **On/Off**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons to select **On** (lamp on) or **Off** (lamp off), press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

State/Power On

Select **State/Power On**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons to select **On** (Lamp on while power on) or **Off** (Lamp off while power on), press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Off Via DMX

Select **Off Via DMX**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons to select **Yes** (turn off the unit via DMX controller) or **No** (turn off the unit via DMX controller), press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

(When you operate the unit via a DMX controller, set the value of "special function" channel to "lamp off", and wait for 5 seconds then the lamp will be off if you have selected "yes" mode).

On If DMX On

Select **On If DMX On**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons to select **Yes** (Lamp turns on when DMX signal is detected) or **No** (keep the present state), press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode *(If the lamp is off via DMX signal, you can reconnect the DMX controller to make the lamp on).*

Off If DMX Off

Select **Off If DMX Off**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons to select **Yes** (Lamp turns off when DMX signal is cut off), press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Ignition Delay

Select **Ignition Delay**, press the **ENTER** button to confirm, present mode will blink on the display, use the **DOWN/UP** button to adjust the delay time from 0S to 255S, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle one minute to exit menu mode.

Low Power Delay

Select **Low Power Delay**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons to adjust the delay time from 0S to 255S, press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Display Setting

Enter menu mode, select *Display Setting*, press the **ENTER** button to confirm, use the **DOWN**/**UP** button to select *Display Inverse, Backlight Auto Off, Backlight Intensity,Contrast Ratio* or *Temperature unit, Display Warning* and *Language.*

Display Inverse

Select **Display Inverse**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons to select **No** (normal display) or **Yes** (inverse display),

press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Backlight Auto Off

Select **Backlight Auto Off**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons to select **No** (display always on) or **Yes** (display goes off one minute after exiting menu mode), press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Backlight Intensity

Select **Backlight Intensity**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons 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 wait one minute to exit menu mode.

Contrast Ratio

Select *Contrast Ratio*, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** button to adjust the intensity ratio from **1** (dark) to **30** (bright), press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Unit Temperature

Select **Temperature Unit**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons to select ℃ or ℉, press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Display Warning

Select **Display Warning**, press the **ENTER** button to confirm, the current mode will blink on the display, use the **DOWN/UP** buttons to select **No** (do not show the error warning information) or **Yes** (display will show the error warning for when the unit went wrong), press the **ENTER** button to store. Press the **MENU** button back to the last menu or wait one minute to exit menu mode.

Fixture Test

Enter menu mode, select *Fixture Test*, press the **ENTER** button to confirm, use the **DOWN/UP**

buttons 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, shutter, dimmer, prism, prism rotation, focus, and lamp on/off. . 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 current channel will show on the display, use the **DOWN/UP** buttons to select the channel, press the **ENTER** button to confirm, then use the **DOWN/UP** buttons 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 or wait one minute to exit menu mode.
(All channel values will become 0 after exiting Manual Test menu)

Fixture Information

Enter menu mode, select *Fixture Information*, press the **ENTER** button to confirm, use the **DOWN**/UP buttons to select *Fixture use time, Lamp On time* or *Firmware Version.*

Fixture use time

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

Lamp On time

Select **Lamp On time**, press the **ENTER** button to confirm, lamp on time will show on the display, press the **ENTER** button to confirm, use the **DOWN/UP** buttons to select **Exit** or **Reset Time**, press the **ENTER** button to confirm. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

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.

Reset Functions

Enter menu mode, select *Reset Function*, press the **ENTER** button to confirm, use the **DOWN**/**UP** buttons to select *Pan/Tilt, Shutter/Prism, Color, Gobo, Focus* or *All.*

Pan/Tilt

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

Shutter/Prism

Select **Shutter/Prism**, press the **ENTER** button to confirm, use the **DOWN/UP** buttons to select **Yes** (the unit will run built-in program to reset shutter and prism to their home positions) or **No**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

Colour

Select **Color**, press the **ENTER** button to confirm, use the **DOWN/UP** buttons to select **Yes** (the unit will run a built-in program to reset the colours to their home positions) or **No**, press the **ENTER** button to store Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

Gobo

Select **Gobo**, press the **ENTER** button to confirm, use the **DOWN/UP** buttons to select **Yes** (the unit will run built-in program to reset the Gobo wheels to their home positions) or **No**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

Focus

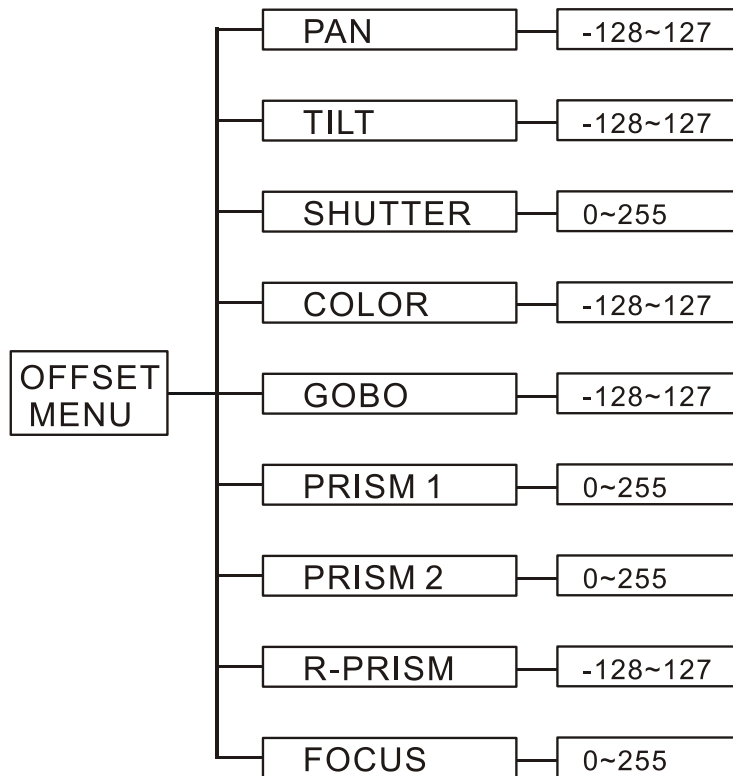Select **Focus,** press the **ENTER** button to confirm, use the **DOWN/UP** buttons to select **Yes** (the unit will run a built-in program to reset the focus to its home positions) or **No**, and press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

All

Select **All,** press the **ENTER** button to confirm, use the **DOWN/UP** buttons to select **Yes** (the unit will run a built-in program to reset all the motors to their home positions) or **No**, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

Special Functions

Enter menu mode, select *Special Functions*, press the **ENTER** button to confirm, select **Fixture Maintenance** or *Factory Setting.*

Fixture Maintenance

Select **Fixture Maintenance**, press the **ENTER** button to confirm, use the **DOWN/UP** buttons to select **Interval** or **Remain Time**.

Interval

Select **Interval,** press the **ENTER** button to confirm, the interval time will show on the display. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

Remain Time

Select **Remain Time,** press the **ENTER** button to confirm, the remaining time will show on the display, press the **ENTER** button to confirm, use the **DOWN/UP** buttons to select **Exit** or **Reset time**, Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

Factory Setting

Select **Factory Setting**, press the **ENTER** button to confirm, use the **DOWN/UP** buttons to select **No** (keep the current setting) or **Yes** (the fixture will reset to factory settings and exit menu mode).

5.2 Home Position Adjustment

Press the **MENU** button into menu mode, then press the **ENTER** button for about 3 seconds to enter into offset mode to adjust the home position. Select the function with the **ENTER** button. Use the **DOWN/UP** buttons to choose the submenu, press the **ENTER** button to store and

automatically return to the last menu. Press the **MENU** button to exit.

```
                ┌──────────────────┐     ┌──────────────┐
            ┌───┤      PAN         ├─────┤  -128~127    │
            │   └──────────────────┘     └──────────────┘
            │   ┌──────────────────┐     ┌──────────────┐
            ├───┤      TILT        ├─────┤  -128~127    │
            │   └──────────────────┘     └──────────────┘
            │   ┌──────────────────┐     ┌──────────────┐
            ├───┤    SHUTTER       ├─────┤   0~255      │
            │   └──────────────────┘     └──────────────┘
            │   ┌──────────────────┐     ┌──────────────┐
            ├───┤     COLOR        ├─────┤  -128~127    │
┌────────┐  │   └──────────────────┘     └──────────────┘
│ OFFSET │  │   ┌──────────────────┐     ┌──────────────┐
│  MENU  ├──┼───┤     GOBO         ├─────┤  -128~127    │
└────────┘  │   └──────────────────┘     └──────────────┘
            │   ┌──────────────────┐     ┌──────────────┐
            ├───┤    PRISM 1       ├─────┤   0~255      │
            │   └──────────────────┘     └──────────────┘
            │   ┌──────────────────┐     ┌──────────────┐
            ├───┤    PRISM 2       ├─────┤   0~255      │
            │   └──────────────────┘     └──────────────┘
            │   ┌──────────────────┐     ┌──────────────┐
            ├───┤    R-PRISM       ├─────┤  -128~127    │
            │   └──────────────────┘     └──────────────┘
            │   ┌──────────────────┐     ┌──────────────┐
            └───┤     FOCUS        ├─────┤   0~255      │
                └──────────────────┘     └──────────────┘
```

PAN - *pan home position adjustment*

Enter offset mode, Select **PAN**, press the **ENTER** button to confirm, the current position will blink on the display, use the **DOWN/UP** buttons to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

TILT - *Tilt home position adjustment*

Enter offset mode, Select **TILT**, press **ENTER** button to confirm, the current position will blink on the display, use the **DOWN/UP** buttons to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

SHUTTER - *Shutter home position adjustment*

Enter offset mode, Select **SHUTTER**, press the **ENTER** button to confirm, the current position will blink on the display, use the **DOWN/UP** buttons to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

COLOUR - *Color home position adjustment*

Enter offset mode, Select **COLOR**, press the **ENTER** button to confirm, the current position will blink on the display, use the **DOWN/UP** buttons to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

GOBO - *Gobo home position adjustment*

Enter offset mode, Select **GOBO**, press the **ENTER** button to confirm, the current position will blink on the display, use the **DOWN/UP** buttons to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

PRISM 1 – *Prism 1 rotation home position adjustment*

Enter offset mode, Select **PRISM 1**, press the **ENTER** button to confirm, the current position will blink on the display, use the **DOWN/UP** buttons to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

PRISM 2 – *Prism 2 home position adjustment*

Enter offset mode, Select **PRISM 2**, press the **ENTER** button to confirm, the current position will blink on the display, use the **DOWN/UP** buttons to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

R-PRISM – *Prism1 rotation home position adjustment*

Enter offset mode, Select **R-PRISM,** press the **ENTER** button to confirm, the current position will blink on the display, use the **DOWN/UP** buttons to offset the value from -128 to 127, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

FOCUS - *Focus home position adjustment*

Enter offset mode, Select **FOCUS**, press the **ENTER** button to confirm, the current position will blink on the display, use the **DOWN/UP** buttons to offset the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.
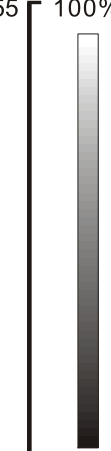
5.3 Error Information

Lamp Startup Failure

It appears when there is no lamp or cables are damaged.

Temperature Sense Error

Temperature sensor PCB is damaged.

Lamp Too Hot Power Off

When the temperature detected is higher than 110℃. Check if the unit is properly ventilated, or if the fans are functioning.

Lamp Too Hot Low Power

When the temperature detected higher than 105℃ the unit will run on a low power level.

Maintenance Fixture

Maintenance remaining time is 0, please enter menu mode and reset the time.

Lamp On Over 700 Hours

The lamp has been on for over 700 hours, please turn off the lamp.

Memory Initial Fail

Memory IC is damaged.

CPU-B Error, CPU-C Error, CPU-D Error

PCB or cables are damaged.

Pan Reset Error, Pan Encode Error, Tilt Reset Error, Tilt Encode Error, Shutter Reset Fail, Dimmer Reset Fail, Color Reset Fail, Gobo Reset Fail, Focus Reset fail.

They may appear when turning on or resetting the unit, for some parts such as board P.C are damaged.

6. Control By Universal DMX Controller

6.1 Connection
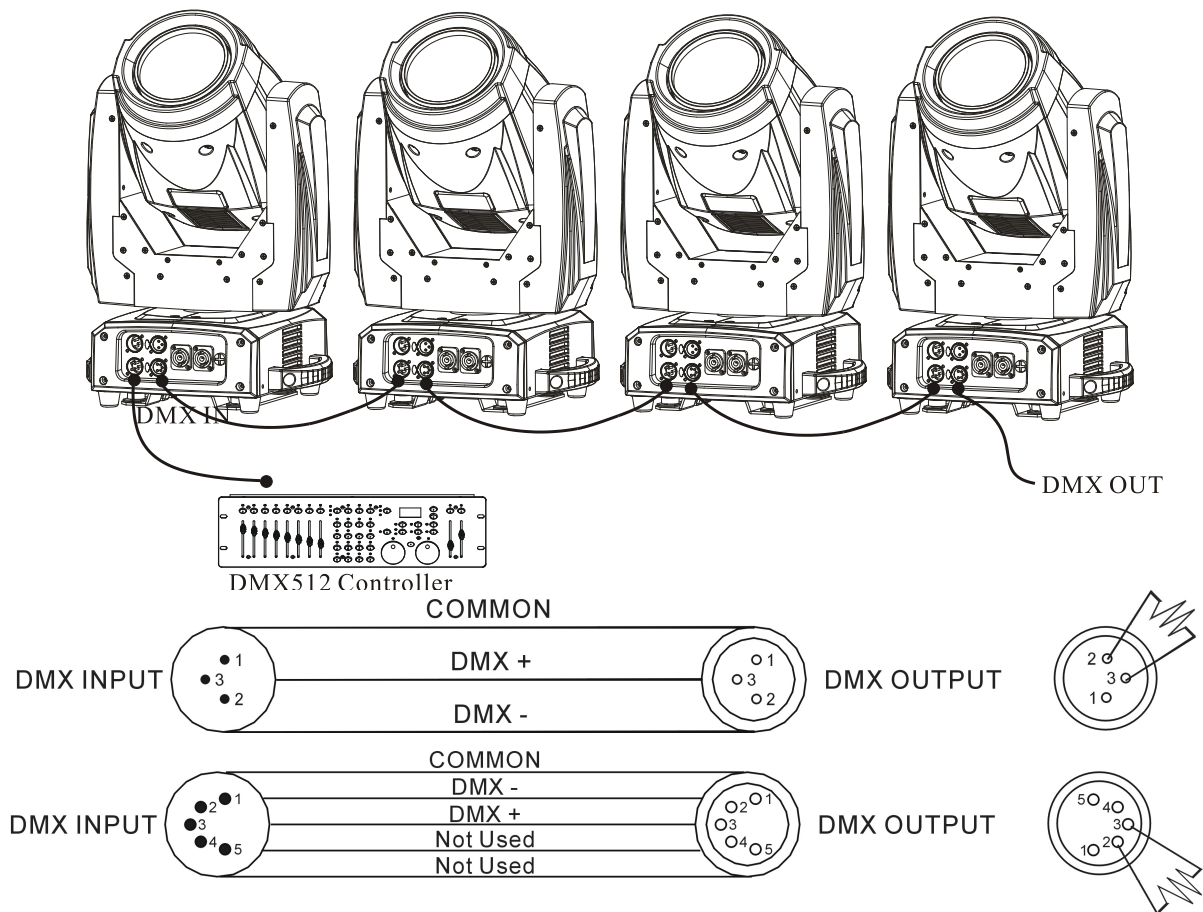
1. Connect the unit together in a "daisy chain" by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be branched or split to a "Y" cable. DMX 512 is a very high-speed signal.

2. The DMX output and input connectors are pass-through type to maintain the DMX circuit even when one of the units' power is disconnected.

3. Each unit needs to have a DMX address to receive the data by the controller. The address number is between 0-512 (usually 0 & 1 are equal to 1).

4. The end of the DMX 512 system should be terminated to reduce signal errors.

5. DMX cable pin configuration

   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 Channel Mode Setting

Enter the menu mode, select *DMX Functions*, press the **ENTER** button to confirm, use the **DOWN/UP** buttons to select **DMX Channel Mode**, press the **ENTER** button to confirm, the current channel mode will blink on the display, use the **DOWN/UP** buttons to select **Mode 1 (16)** or **Mode 2 (14)** channel Mode, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

6.3 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 a DMX signal.

Press the MENU button to enter menu mode, select *DMX Functions*, press the ENTER button to confirm, use UP and DOWN buttons to select *DMX Address*, press the ENTER button to confirm, the current address will blink on the display, use UP and DOWN buttons to adjust the address from 1 to 512, press the ENTER button to store. Press the **MENU** button back to the last menu or exit menu mode or wait one minute to exit menu mode.

6.4 DMX 512 Configuration
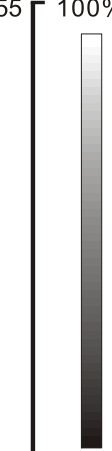
16 Channels Mode:

16 Channels(Mode 1)

Ch1	Ch2	Ch3	Ch4	Ch5	Ch6
Pan	Pan Fine	Tilt	Tilt Fine	P/T Speed	Special Functions

Ch1: Pan — 255 / 540°, 0 / 0°
Ch2: Pan Fine — 255, 0
Ch3: Tilt — 255 / 270°, 0 / 0°
Ch4: Tilt Fine — 255, 0
Ch5: P/T Speed — 255 / Slow, 0 / Fast

Ch6: Special Functions
- 240-255 Open
- 230-239 Lamp Off
- 220-229 Disable blackout while P/T moving, or Color/Gobo changing
- 210-219 Enable blackout while P/T moving, or Color/Gobo changing
- 200-209 Reset All
- 190-199 Focus Reset
- 180-189 No Function
- 170-179 Shutter/Prism Reset
- 160-169 Gobo Reset
- 150-159 Color Reset
- 140-149 Pan/Tilt Reset
- 130-139 Lamp On
- 120-129 Disable blackout while Gobo changing
- 110-119 Enable blackout while Gobo changing
- 100-109 Disable blackout while Color changing
- 090-099 Enable blackout while Color changing
- 080-089 Disable blackout while P/T moving
- 070-079 Enable blackout while P/T moving
- 060-069 P/T normal Mode
- 050-059 P/T fast Mode
- 040-049 Dimmer linear Mode
- 030-039 Dimmer conventional Mode
- 000-029 Open

Ch7	Ch8	Ch9	Ch10
P/T Macro	P/T Macro Speed	Color	Gobo

Ch7: P/T Macro
- 248-255 Macro 31
- 240-247 Macro 30
- 232-239 Macro 29
- 224-231 Macro 28
- 216-223 Macro 27
- 208-215 Macro 26
- 200-207 Macro 25
- 192-199 Macro 24
- 184-191 Macro 23
- 176-183 Macro 22
- 168-175 Macro 21
- 160-167 Macro 20
- 152-159 Macro 19
- 144-151 Macro 18
- 136-143 Macro 17
- 128-135 Macro 16
- 120-127 Macro 15
- 112-119 Macro 14
- 104-111 Macro 13
- 096-103 Macro 12
- 088-095 Macro 11
- 080-087 Macro 10
- 072-079 Macro 9
- 064-071 Macro 8
- 056-063 Macro 7
- 048-055 Macro 6
- 040-047 Macro 5
- 032-039 Macro 4
- 024-031 Macro 3
- 016-023 Macro 2
- 008-015 Macro 1
- 000-007 Off

Ch8: P/T Macro Speed — 255 / Slow, 0 / Fast

Ch9: Color
- 255 Rotation Fast
- 194 Rotation Slow
- 190-193 Stop
- 189 Rotation Slow
- 128 Rotation Fast
- 064-127 Color Index
- 061-063 Color 14 + White
- 059-060 Color 14
- 057-058 Color 13 + Color 14
- 055-056 Color 13
- 053-054 Color 12 + Color 13
- 051-052 Color 12
- 049-050 Color 11 + Color 12
- 047-048 Color 11
- 045-046 Color 10 + Color 11
- 043-044 Color 10
- 040-042 Color 9 + Color 10
- 038-039 Color 9
- 036-037 Color 8 + Color 9
- 034-035 Color 8
- 032-033 Color 7 + Color 8
- 030-031 Color 7
- 028-029 Color 6 + Color 7
- 026-027 Color 6
- 024-025 Color 5 + Color 6
- 022-023 Color 5
- 019-021 Color 4 + Color 5
- 017-018 Color 4
- 015-016 Color 3 + Color 4
- 013-014 Color 3
- 011-012 Color 2 + Color 3
- 009-010 Color 2
- 007-008 Color 1 + Color 2
- 005-006 Color 1
- 003-004 White + Color 1
- 000-002 White

Ch10: Gobo
- 255 Rotation Fast
- 194 Rotation Slow
- 190-193 Stop
- 189 Rotation Slow
- 128 Rotation Fast
- 124-127 Gobo 17 Shaking
- 120-123 Gobo 16 Shaking
- 116-119 Gobo 15 Shaking
- 112-115 Gobo 14 Shaking
- 108-111 Gobo 13 Shaking
- 104-107 Gobo 12 Shaking
- 100-103 Gobo 11 Shaking
- 096-099 Gobo 10 Shaking
- 092-095 Gobo 9 Shaking
- 088-091 Gobo 8 Shaking
- 084-087 Gobo 7 Shaking
- 080-083 Gobo 6 Shaking
- 076-079 Gobo 5 Shaking
- 072-075 Gobo 4 Shaking
- 068-071 Gobo 3 Shaking
- 064-067 Gobo 2 Shaking
- 060-063 Gobo 1 Shaking
- 056-059 Open Shaking
- 052-055 Gobo 17
- 049-051 Gobo 16
- 046-048 Gobo 15
- 043-045 Gobo 14
- 040-042 Gobo 13
- 037-039 Gobo 12
- 034-036 Gobo 11
- 031-033 Gobo 10
- 028-030 Gobo 9
- 025-027 Gobo 8
- 022-024 Gobo 7
- 019-021 Gobo 6
- 016-018 Gobo 5
- 013-015 Gobo 4
- 010-012 Gobo 3
- 007-009 Gobo 2
- 004-006 Gobo 1
- 000-003 Open

16 Channels(Mode 1)

Ch11	Ch12	Ch13	Ch14	Ch15	Ch16
Prism 1	Prism 2	Prism Rotation	Focus	Shutter	Dimmer

Ch11 — Prism 1

- 251-255 Rotation Effect 28
- 247-250 Rotation Effect 27
- 242-246 Rotation Effect 26
- 237-241 Rotation Effect 25
- 233-236 Rotation Effect 24
- 228-232 Rotation Effect 23
- 224-227 Rotation Effect 22
- 219-223 Rotation Effect 21
- 215-218 Rotation Effect 20
- 210-214 Rotation Effect 19
- 206-209 Rotation Effect 18
- 201-205 Rotation Effect 17
- 197-200 Rotation Effect 16
- 192-196 Rotation Effect 15
- 188-191 Rotation Effect 14
- 183-187 Rotation Effect 13
- 178-182 Rotation Effect 12
- 174-177 Rotation Effect 11
- 169-173 Rotation Effect 10
- 165-168 Rotation Effect 9
- 160-164 Rotation Effect 8
- 156-159 Rotation Effect 7
- 151-155 Rotation Effect 6
- 147-150 Rotation Effect 5
- 142-146 Rotation Effect 4
- 138-141 Rotation Effect 3
- 133-137 Rotation Effect 2
- 128-132 Rotation Effect 1
- 008-127 Prism 1 Effect
- 000-007 No Function

Ch12 — Prism 2

- 128-255 No Function
- 008-127 Prism 2 Effect
- 000-007 No Function

Ch13 — Prism Rotation

- 255 Rotation Fast
- 194 Rotation Slow
- 190-193 Stop
- 189 Rotation Slow
- 128 Rotation Fast
- 000-127 Index Rotation

Ch14 — Focus

- 255 100%
- 0 0%

Ch15 — Shutter

- 248-255 Open
- 240-247 Random Strobe
- 204-239 Slow open slow close
- 168-203 Fast open slow close
- 132-167 Slow open fast close
- 016-131 (strobe)
- 008-015 Open
- 000-007 Blackout

Ch16 — Dimmer

- 255 100%
- 0 0%

14 Channels Mode:

14 Channels(Mode 2)

Ch1	Ch2	Ch3	Ch4	Ch5
Pan	Tilt	P/T Speed	Special Functions	P/T Macro

Ch1	Ch2	Ch3	Ch4	Ch5
255 ⌐ 540° 0 └ 0°	255 ⌐ 270° 0 └ 0°	255 ⌐ Slow ↑ 0 └ Fast	240-255 Open 230-239 Lamp Off 220-229 Disable blackout while P/T moving, 　　　　　or Color/Gobo changing 210-219 Enable blackout while P/T moving, 　　　　　or Color/Gobo changing 200-209 Reset All 190-199 Focus Reset 180-189 No Function 170-179 Shutter/Prism Reset 160-169 Gobo Reset 150-159 Color Reset 140-149 Pan/Tilt Reset 130-139 Lamp On 120-129 Disable blackout while Gobo changing 110-119 Enable blackout while Gobo changing 100-109 Disable blackout while Color changing 090-099 Enable blackout while Color changing 080-089 Disable blackout while P/T moving 070-079 Enable blackout while P/T moving 060-069 P/T normal Mode 050-059 P/T fast Mode 040-049 Dimmer linear Mode 030-039 Dimmer conventional Mode 000-029 Open	248-255 Macro 31 240-247 Macro 30 232-239 Macro 29 224-231 Macro 28 216-223 Macro 27 208-215 Macro 26 200-207 Macro 25 192-199 Macro 24 184-191 Macro 23 176-183 Macro 22 168-175 Macro 21 160-167 Macro 20 152-159 Macro 19 144-151 Macro 18 136-143 Macro 17 128-135 Macro 16 120-127 Macro 15 112-119 Macro 14 104-111 Macro 13 096-103 Macro 12 088-095 Macro 11 080-087 Macro 10 072-079 Macro 9 064-071 Macro 8 056-063 Macro 7 048-055 Macro 6 040-047 Macro 5 032-039 Macro 4 024-031 Macro 3 016-023 Macro 2 008-015 Macro 1 000-007 Off

Ch6	Ch7	Ch8	Ch9
P/T Macro Speed	Color	Gobo	Prism 1

Ch6	Ch7	Ch8	Ch9
255 ⌐ Slow ↑ 0 └ Fast	255 Rotation Fast ↺ 194 Rotation Slow 190-193 Stop 189 Rotation Slow ↻ 128 Rotation Fast 064-127 Color Index 061-063 Color 14 + White 059-060 Color 14 057-058 Color 13 + Color 14 055-056 Color 13 053-054 Color 12 + Color 13 051-052 Color 12 049-050 Color 11 + Color 12 047-048 Color 11 045-046 Color 10 + Color 11 043-044 Color 10 040-042 Color 9 + Color 10 038-039 Color 9 036-037 Color 8 + Color 9 034-035 Color 8 032-033 Color 7 + Color 8 030-031 Color 7 028-029 Color 6 + Color 7 026-027 Color 6 024-025 Color 5 + Color 6 022-023 Color 5 019-021 Color 4 + Color 5 017-018 Color 4 015-016 Color 3 + Color 4 013-014 Color 3 011-012 Color 2 + Color 3 009-010 Color 2 007-008 Color 1 + Color 2 005-006 Color 1 003-004 White + Color 1 000-002 White	255 Rotation Fast ↺ 194 Rotation Slow 190-193 Stop 189 Rotation Slow ↻ 128 Rotation Fast 124-127 Gobo 17 Shaking 120-123 Gobo 16 Shaking 116-119 Gobo 15 Shaking 112-115 Gobo 14 Shaking 108-111 Gobo 13 Shaking 104-107 Gobo 12 Shaking 100-103 Gobo 11 Shaking 096-099 Gobo 10 Shaking 092-095 Gobo 9 Shaking 088-091 Gobo 8 Shaking 084-087 Gobo 7 Shaking 080-083 Gobo 6 Shaking 076-079 Gobo 5 Shaking 072-075 Gobo 4 Shaking 068-071 Gobo 3 Shaking 064-067 Gobo 2 Shaking 060-063 Gobo 1 Shaking 056-059 Open Shaking 052-055 Gobo 17 049-051 Gobo 16 046-048 Gobo 15 043-045 Gobo 14 040-042 Gobo 13 037-039 Gobo 12 034-036 Gobo 11 031-033 Gobo 10 028-030 Gobo 9 025-027 Gobo 8 022-024 Gobo 7 019-021 Gobo 6 016-018 Gobo 5 013-015 Gobo 4 010-012 Gobo 3 007-009 Gobo 2 004-006 Gobo 1 000-003 Open	251-255 Rotation Effect 28 247-250 Rotation Effect 27 242-246 Rotation Effect 26 237-241 Rotation Effect 25 233-236 Rotation Effect 24 228-232 Rotation Effect 23 224-227 Rotation Effect 22 219-223 Rotation Effect 21 215-218 Rotation Effect 20 210-214 Rotation Effect 19 206-209 Rotation Effect 18 201-205 Rotation Effect 17 197-200 Rotation Effect 16 192-196 Rotation Effect 15 188-191 Rotation Effect 14 183-187 Rotation Effect 13 178-182 Rotation Effect 12 174-177 Rotation Effect 11 169-173 Rotation Effect 10 165-168 Rotation Effect 9 160-164 Rotation Effect 8 156-159 Rotation Effect 7 151-155 Rotation Effect 6 147-150 Rotation Effect 5 142-146 Rotation Effect 4 138-141 Rotation Effect 3 133-137 Rotation Effect 2 128-132 Rotation Effect 1 008-127 Prism 1 Effect 000-007 No Function

14 Channels(Mode 2)				
Ch10	Ch11	Ch12	Ch13	Ch14
Prism 2	Prism Rotation	Focus	Shutter	Dimmer
128-255 No Function	255 Rotation Fast	255 ⌐ 100%	248-255 Open	255 ⌐ 100%
			240-247 Random Strobe	
			204-239 Slow open slow close	
			168-203 Fast open slow close	
	194 Rotation Slow		132-167 Slow open fast close	
	190-193 Stop		⚡⚡⚡	
008-127 Prism 2 Effect	189 Rotation Slow		016-131 ⚡⚡	
			⚡	
			008-015 Open	
			000-007 Blackout	
	128 Rotation Fast	0 ⌐ 0%		0 ⌐ 0%
000-007 No Function	000-127 Index Rotation			

7. 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 power connection and main fuse.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors and cables.
2. If the DMX LED is on and no response to the controller, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the DMX cables to the unit or the previous one.
4. Try another DMX controller.

E. Pan belt is broken

1. Turn off the mains power.

2. Loosen the screws (A), open the cover (B).

3. Loosen the screws (C).

4. Unplug all the connection cables over the belt.

5. Change belt (D), put the belt around the axis gear and motor gear.

6. Plug all the connection cables back in.

7. Tighten all the screws.
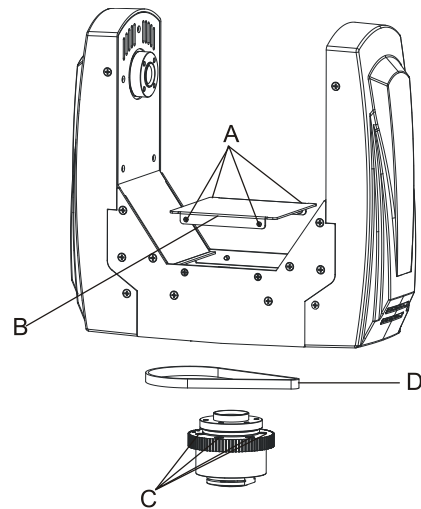
F. Tilt belt is broken

1. Turn off the mains power.

2. Loosen all the screws (A) and open the right arm cover (B).

3. Loosen the screws (C)

4. Change belt (D). Please adjust the tension of the belt properly. Note: do not over-tighten the belt as it can easily snap.

5. Reverse the procedures from step 3 to 2.
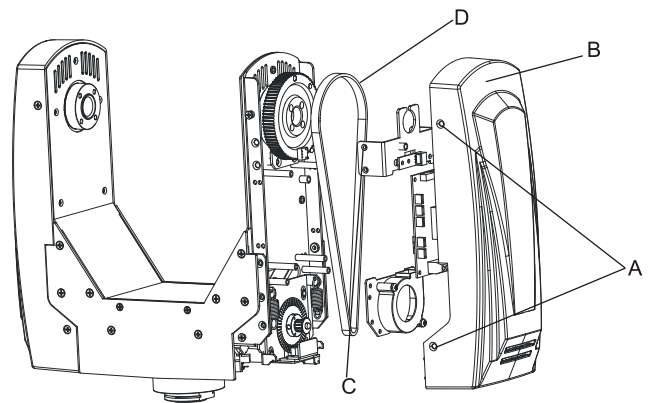
8. Maintenance and Cleaning

Maintenance:
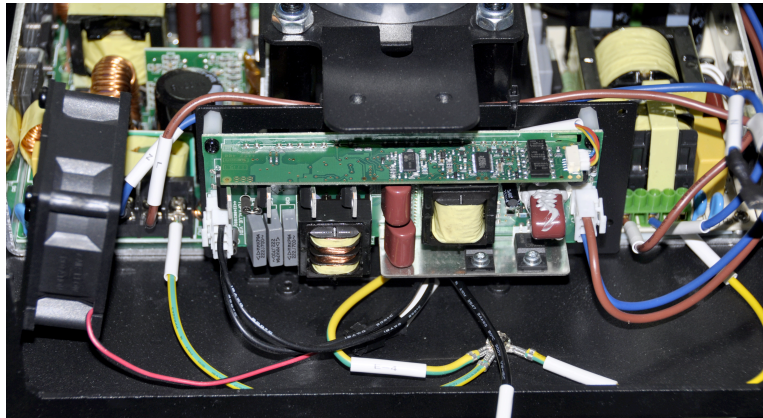
Ballast

A. As the pictures shown above, please replace the cable or cable joints immediately once they've turned yellow.

B. Maintain the fixtures every two months and make sure that all the screws and terminals have been locked firmly. Negligence of maintenance may cause malfunction of the 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 a greater accumulation of dirt on the unit's optics.

• Clean with soft cloth and use normal glass to clean fluid or mild soapy water.

• Always dry the parts carefully.

• Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

English

Correct Disposal of This Product
(Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with seperate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please seperate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Innovation, Quality, Performance