ACME®

SABER
Mini

CONTENTS

1. Safety Instruction

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

WARNING

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

Important:

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

- Unpack and check carefully that there is no transportation damage before using the unit.
- This product is for indoor use only. Use only in a dry location.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots are blocked, otherwise the unit will be overheated.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA: 0℃. Maximum ambient temperature TA: 40℃.
- DO NOT connect the device to any dimmer pack.
- During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device 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 fire hazard.
- Examine the power wires carefully; replace them immediately if there is any damage.
- Unit's surface temperature may reach up to 85℃. DO NOT touch the housing bare-handed during its operation.
- Avoid any inflammable liquids, water or metal objects entering the unit. Once it happens, cut

off the mains power immediately.

- DO NOT operate in dirty or dusty environment, do clean fixtures regularly.
- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid power wires together twist other cables.
- The minimum distance between light output and the illuminated surface must be more than 8 meters.
- Disconnect mains power before fuse/lamp replacement or servicing.
- Replace fuse/lamp only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- DO NOT open the unit as there are no user serviceable parts inside.
- Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect the mains power if the fixture is has not been used for a long time.
- DO use the original packing materials before transporting it again.
- Hot lamp explosion hazard. DO NOT open the unit within 15 minutes after switching off.
- DO replace the bulb once it is damaged, deformed or life-expired.
- DO NOT look directly at the light while the bulb is on.
- Never touch bulb with bare fingers, as it is very hot after using.
- DO NOT start on the unit without bulb enclosure or when housing is damaged.

Installation:

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

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

2. Technical Specification

Power Voltage:

AC 100~240V, 50/60Hz

Power Consumption:

200W

Light Source:

OSRAM SIRIUS HRI 100W

Color Temperature:

9000K

Beam Angle:

3°

Movement:

Pan: 540°

Tilt: 270°

Color Wheel:

1 color wheel with 14 colors plus open

Gobo Wheel:

1 fixed gobo wheel with 15 gobos plus open

Control:

DMX Channel: 12 channels

Control Mode: DMX, Pri./Sec., Sound Active

Firmware Upgrade: Update via DMX link

Construction:

Display: LCD display

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

Power In/Out: Power Connector in/out

Protection Rating: IP20

Features:

Prism: 8 facet prism rotating in both directions
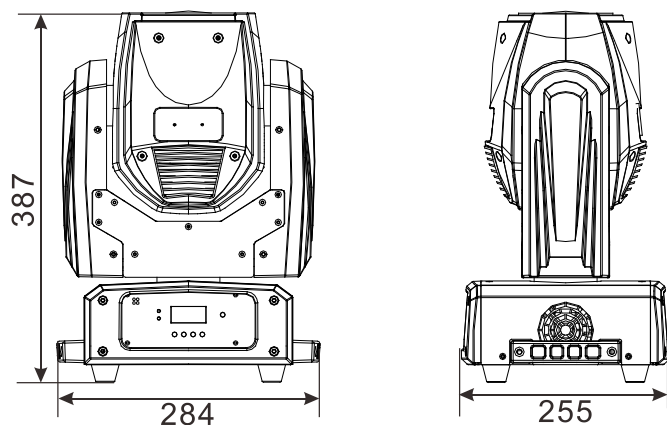
0~100% smooth dimming

Various strobe speeds

Dimension/Weight:
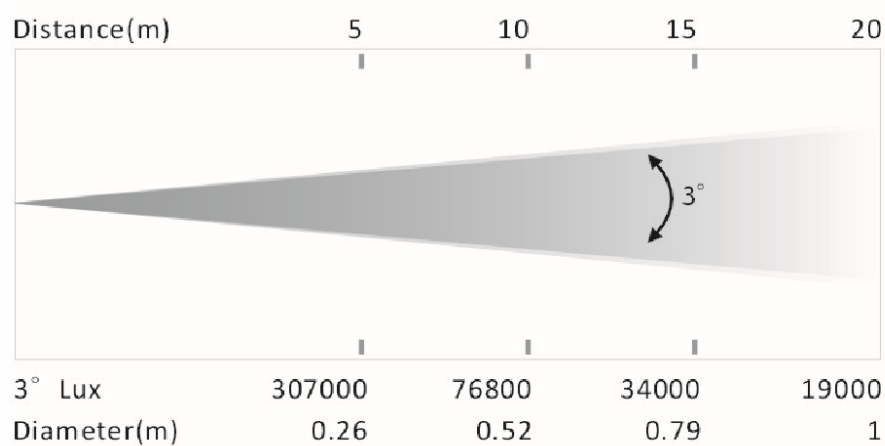
284x255x387mm, 9.2kgs

11.2"x10"x15.2"in, 20.3lbs

Photometrics Diagram:

Distance(m)	5	10	15	20
3° Lux	307000	76800	34000	19000
Diameter(m)	0.26	0.52	0.79	1

3. Control Panel
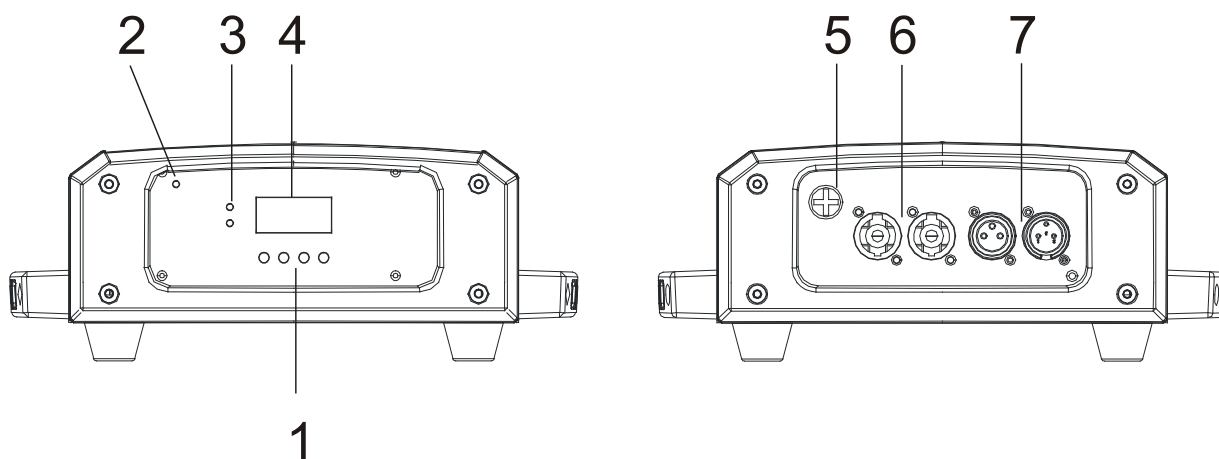
1. Button:

MENU	To select the programming functions
▼ DOWN	To go forward in the selected functions
▲ UP	To go backward in the selected functions
ENTER	To confirm the selected functions

2. MICROPHONE:

To receive music for sound active

3. LED:

DMX	On	DMX input present
SOUND	Flashing	Sound activation

4. DISPLAY:

Used to show the various menus and the selected function

5. FUSE(T 5A):

Protects the unit from over-voltage or short circuit

6. POWER IN/OUT:

Used to connect to supply power/Used to connect to the next fixture

7. DMX IN/OUT:

Use 3-pin XLR cable to link the units and input/output DMX signal (5-pin XLR is optional)

4. Color/Gobo and Lamp

4.1 Color/Gobo

COLOR WHEEL   GOBO WHEEL

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

4.2 Light Source
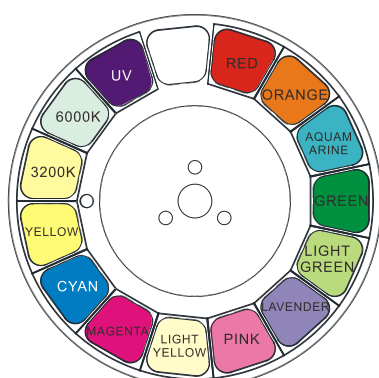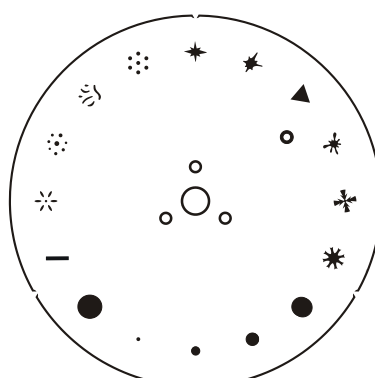
OSRAM SIRIUS HRI 100W

- Because of its high internal pressure, there might be a risk that the Discharge lamp would 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 off the lamp first (via control panel or DMX controller) and let the unit run 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 bulb with bare hands. If this happens, clean the lamp with denatured alcohol and wipe it with a lint free cloth before installation.

- 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 Change The Lamp

Do not use this lamp more than 6000 hours, using the lamp any longer than its set life could seriously damage your unit. Periodically checking the lamp running time, when the lamp reaches the 6000 hour mark, or close to it, we strongly suggest you switch the lamp out. Clear the RESET TIME after you have replaced the lamp.

To replace the lamp:

1. Ensure that the fixture is detached from power and has cooled down completely. It is a good idea to allow the fixture to run for 10 minutes after the lamp has been turned off, so that the cooling fans have time to works.

2. Loosen the screws on the head of the fixture and open the fixture head covers. Remove the fan.
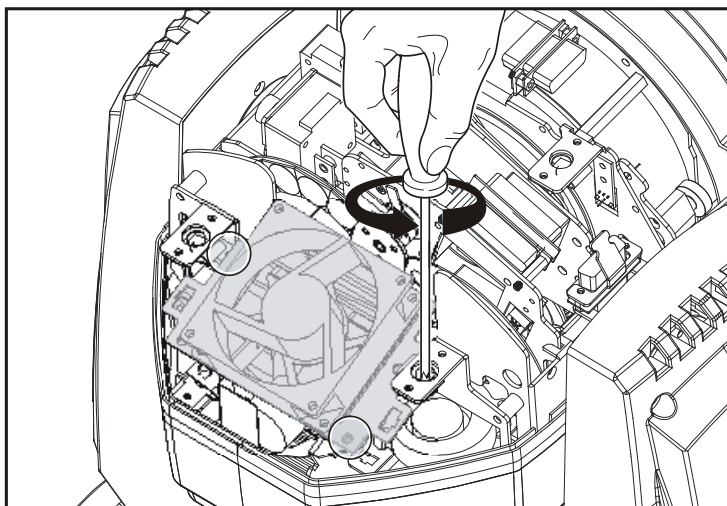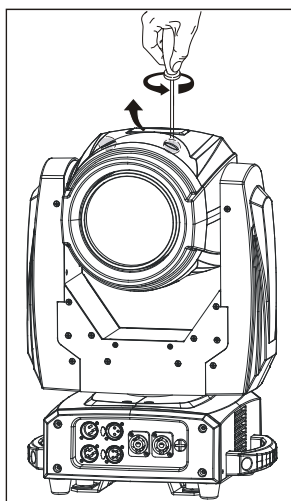
3. Lift the lamp out of its recess, disconnect the lamp and connect a new lamp that must be the same type with the old one. And then place the new lamp into the lamp recess.
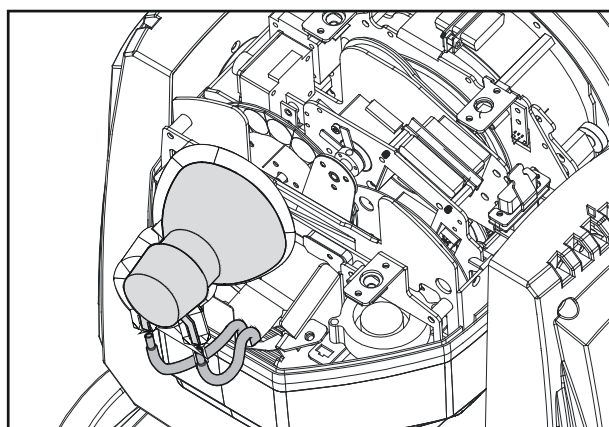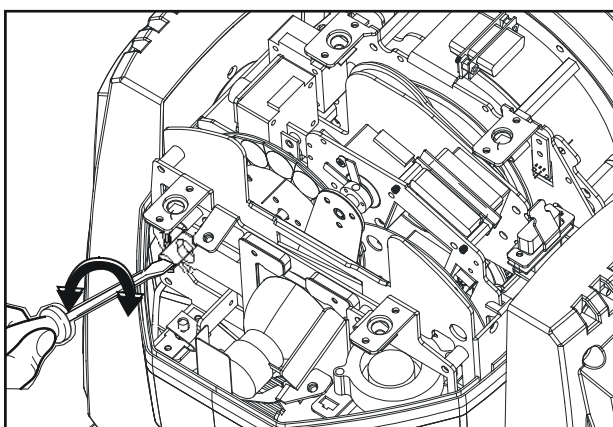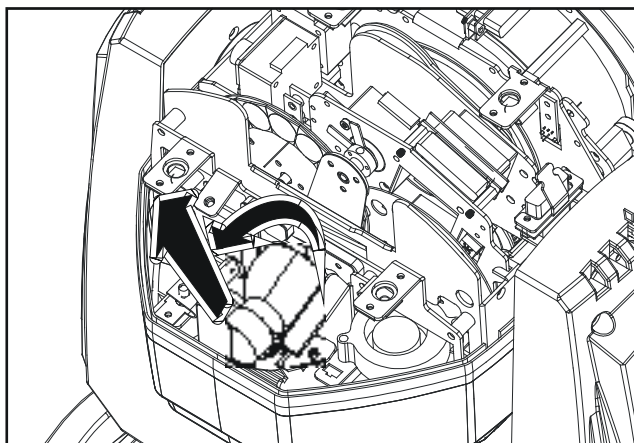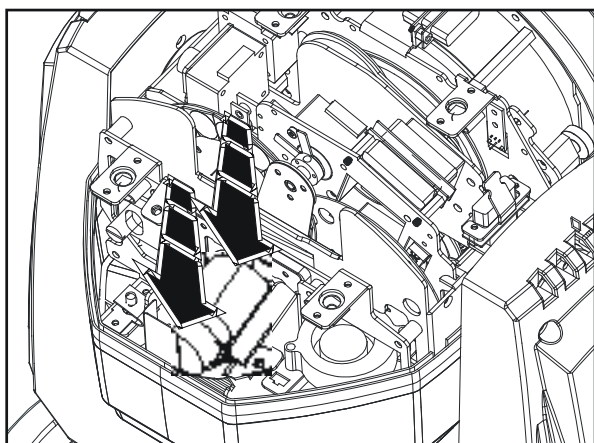
Finally reinstall the head cover, fastening it securely before reapplying power.

Warning:

The installing direction of lamp:
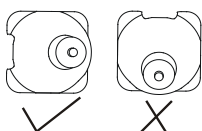
5. How To Set The Unit

5.1 Main Function

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

```
                                        ┌─── 001
         ┌─── DMX Address ──────────────┤    ⋮
         │                              └─── 512

         │                              ┌─── Show 1
         │                              ├─── Show 2
         ├─── Show Mode ────────────────┤
         │                              ├─── Show 3
         │                              └─── Show 4

         │                              ┌─── Pri.
         ├─── Pri./Sec. Mode ───────────┼─── Sec.1
         │                              └─── Sec.2

         │                              ┌─── Pri.Sec.
         ├─── DMX State ────────────────┼─── Hold
         │                              └─── BlackOut

         │                              ┌─── Off
         ├─── Sound State ──────────────┴─── On

         │                              ┌─── 0
         ├─── Sound Sense ──────────────┤    ⋮
         │                              └─── 100

MENU ────┤
         ├─── Pan Inverse ─────┐        ┌─── No
         │                     ├────────┴─── Yes
         ├─── Tilt Inverse ────┘

         │                              ┌─── Off
         ├─── Back Light ───────────────┴─── On

         ├─── Auto Test

         ├─── Fixture Time

         ├─── Lamp Time

         ├─── Lamp On ─────────┐        ┌─── Off
         │                     ├────────┴─── On
         ├─── Lamp Power On ───┘

         ├─── Firmware Version

         │                              ┌─── No
         ├─── Defaults ─────────────────┴─── Yes

         └─── Reset
```

10C
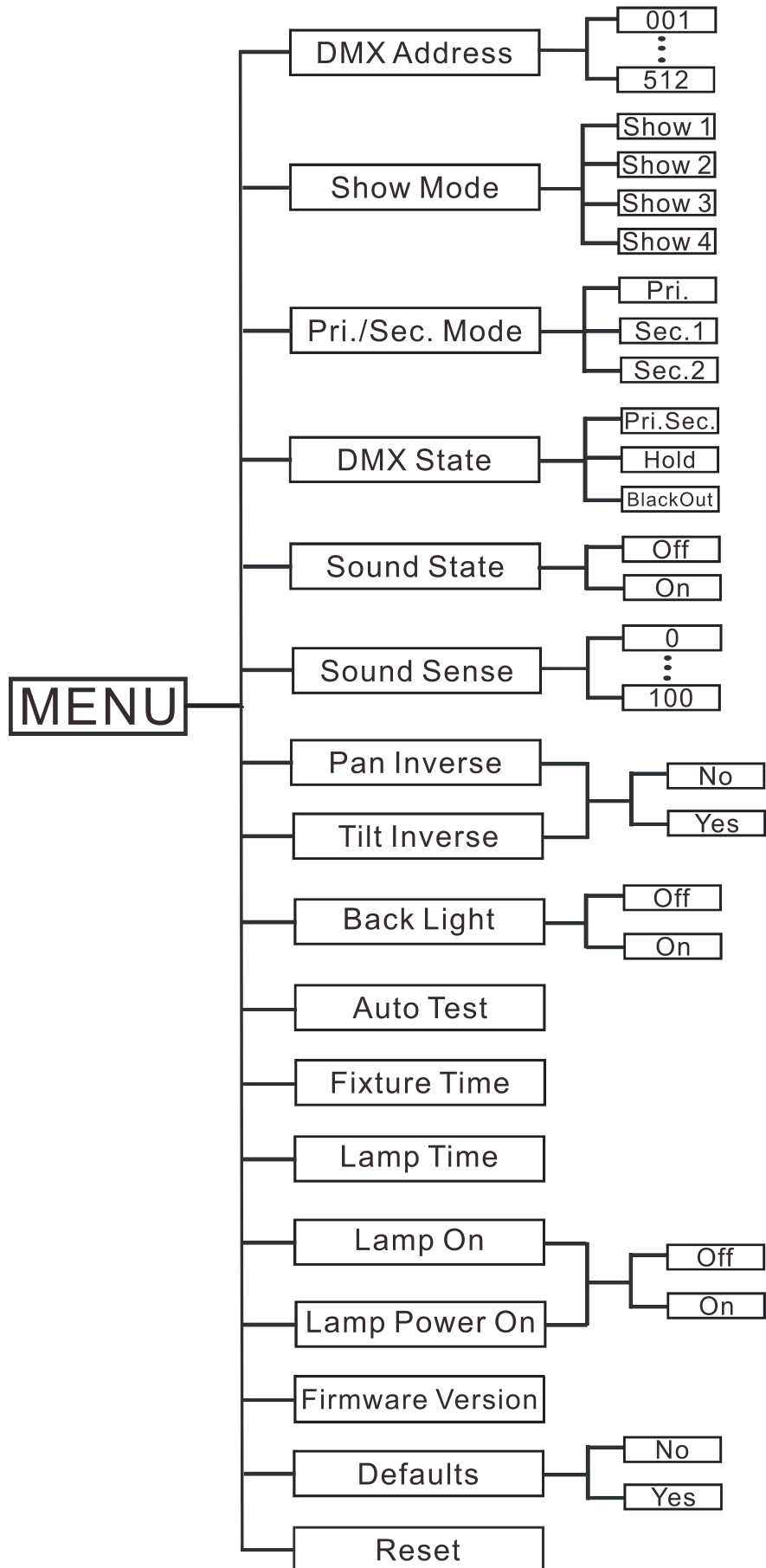
DMX Address

To select **DMX Address**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust the address from **001** to **512**. Once the address has been selected, press the **ENTER** button to setup. Press and hold the **MENU** button for about one second or wait for 30 seconds to exit the menu mode.

Show Mode

To select **Show Mode**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **Show 1, Show 2, Show 3** or **Show 4**. Once the mode has been selected, press the **ENTER** button to setup. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Pri./Sec. Mode

To select **Pri./Sec. Mode**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **Pri., Sec. 1** or **Sec. 2**. Once the mode has been selected, press the **ENTER** button to setup. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

DMX State

To select **DMX State**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **Pri.Sec.**, **Hold** or **Blackout**. Once selected, press the **ENTER** button to setup. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Sound State

To select **Sound State**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **On**(sound on) or **Off**(sound off). Once the mode has been selected, press the **ENTER** button to setup. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Sound Sense

To select **Sound Sense**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to adjust the value from **0** to **100**. Once selected, press the **ENTER** button to setup. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Pan Inverse

To select **Pan Inverse**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **No** or **Yes**. Once the mode has been selected, press the **ENTER** button to setup. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Tilt Inverse

To select **Tilt Inverse**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **No** or **Yes**. Once the mode has been selected, press the **ENTER** button to setup. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Back Light

To select **Back Light**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **On**(LED display always on) or **Off**(LED display off when not use). Once selected, press the **ENTER** button to setup. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Auto Test

To select **Auto Test**, press the **ENTER** button and the unit will run self-test by built-in program. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Fixture Time

To select **Fixture Time**, press the **ENTER** button and the display will show the number of working hours of the unit. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Lamp Time

To select **Lamp Time**, press the **ENTER** button and the display will show the number of working hours of the lamp. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Lamp On

To select **Lamp On**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **On**(Lamp on) or **Off**(Lamp off). Once selected, press the **ENTER** button to setup. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Lamp Power On

To select **Lamp Power On**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **On**(Lamp on when power on) or **Off**(Lamp off when power on). Once selected, press the **ENTER** button to setup. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Firmware Version

To select **Firmware Version**, press the **ENTER** button and the display will show the version of software of the unit. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Defaults

To select **Defaults**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to select **No** or **Yes**. Once selected, press the **ENTER** button to setup. Press and hold the **MENU** button about one second or wait for 30 seconds to exit the menu mode.

Reset

To select **Reset**, press the **ENTER** button and all channels of the unit will return to their standard position.

5.2 Home Position Adjustment

Press the **MENU** button for at least 3 seconds then press the **ENTER** button for at least 5 seconds into offset mode to adjust the home position for the motors. Use **Up** and **Down** button to adjust the value, press the **ENTER** button to setup. Back to the functions without any change press **MENU** button.

```
                              ┌──────────────┐
                        ┌─────┤  Pan Offset  ├─────┐
                        │     └──────────────┘     │   ┌──────────┐
                        │                          ├───┤ -127-127 │
                        │     ┌──────────────┐     │   └──────────┘
                        ├─────┤ Tilt  Offset ├─────┘
                        │     └──────────────┘
                        │
                        │     ┌──────────────┐         ┌──────────┐
                        ├─────┤ Dimmer Offset├─────────┤  0-255   │
┌──────────────┐        │     └──────────────┘         └──────────┘
│              │        │
│ OFFSET MENU  ├────────┤     ┌──────────────┐
│              │        ├─────┤ Color Offset ├─────┐
└──────────────┘        │     └──────────────┘     │   ┌──────────┐
                        │                          ├───┤ -127-127 │
                        │     ┌──────────────┐     │   └──────────┘
                        ├─────┤ Gobo Offset  ├─────┘
                        │     └──────────────┘
                        │
                        │     ┌──────────────┐         ┌──────────┐
                        └─────┤ Prism Offset ├─────────┤  0-255   │
                              └──────────────┘         └──────────┘
```
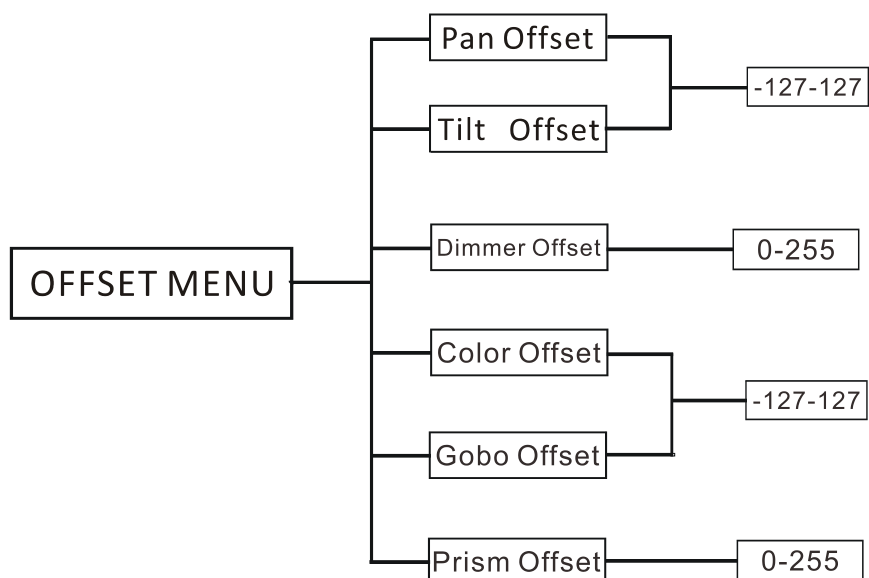
PAN OFFSET

To select the **Pan Offset**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to adjust the value from -127 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

TILT OFFSET

To select the **Tilt Offset**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to adjust the value from -127 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

DIMMER OFFSET

To select the **Dimmer Offset**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to adjust the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

COLOR OFFSET

To select the **Color Offset**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to adjust the value from -127 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.

GOBO OFFSET

To select the **Gobo 1 Offset**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to adjust the value from -127 to 127, press the **ENTER** button to store. Press the **MENU** button to exit.
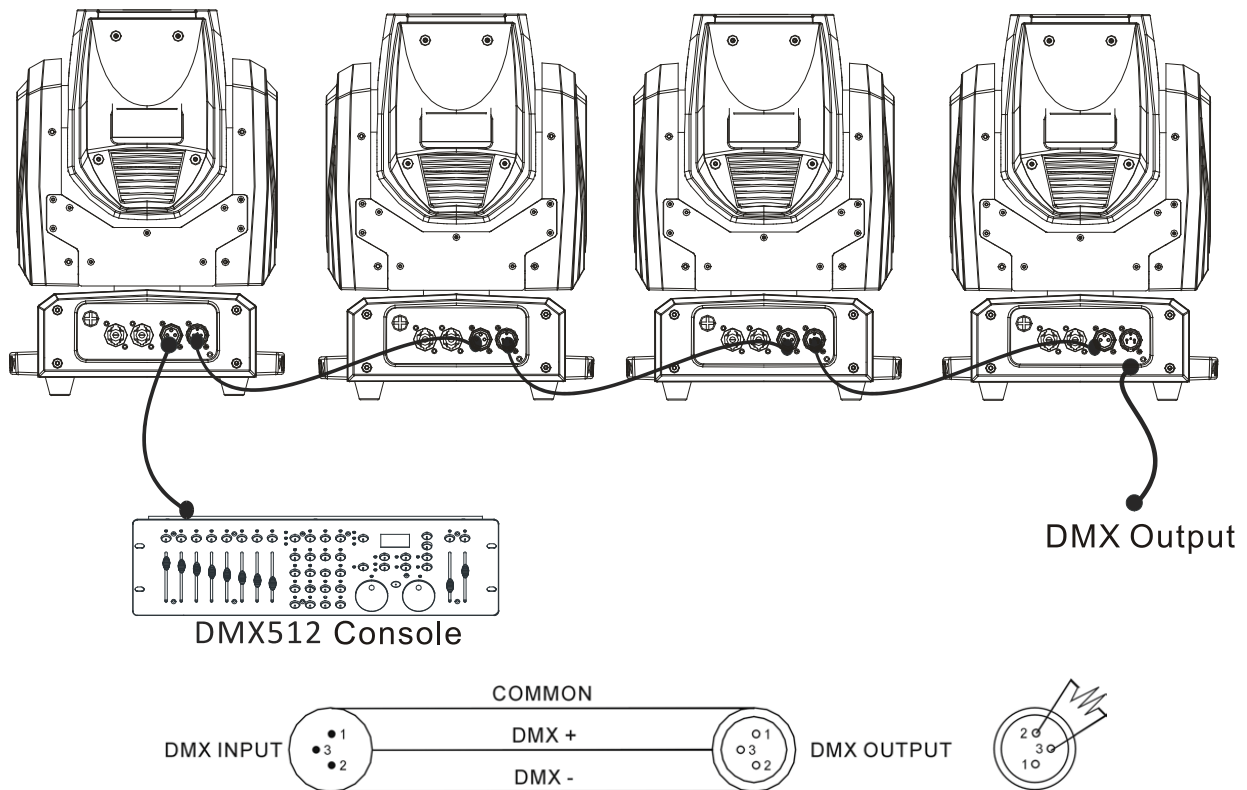
Prism OFFSET

To select the **Prism Offset**, press the **ENTER** button to confirm. Use the **DOWN/UP** button to adjust the value from 0 to 255, press the **ENTER** button to store. Press the **MENU** button to exit.

6. Control By Universal DMX Controller

6.1 DMX512 Connection

1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120-ohm 1⁄4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.

2. Connect the unit together in a "daisy chain" by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be branched or split to a "Y" cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.

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

4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.

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

6. 3 pin XLR connectors are more popular than 5 pins XLR.

    3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

    5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

15C

6.2 Address Setting

If you use a universal DMX controller to control the units, you have to set DMX address from 1 to 512 so that the units can receive DMX signal.

Press the MENU button to enter menu mode, select DMX Address, press the ENTER button to confirm, the present address will blink on the display, use the UP/DOWN button to adjust the address from 1 to 512, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle 30 seconds to exit menu mode.

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

Channel mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
12 channels	1	13	25	37

6.3 DMX512 Configuration

Please refer to below configurations to control the fixtures

Attentions:

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

12 Channels Mode:

CHANNEL	VALUE	FUNCTION
1	000-255	**PAN** 0°→540°
2	000-255	**PAN FINE**
3	000-255	**TILT** 0°→270°
4	000-255	**TILT FINE**
5	000-255	**PAN/TILT SPEED** fast to slow
6	000-255	**DIMMER** 0%→100%
7	000-007 008-015 016-131	**STROBE** Standby Open Strobe, Slow to Fast

	132-139	Open
	140-181	Fast Close Slow Open
	182-189	Open
	190-231	Fast Open Slow Close
	232-239	Open
	240-247	Random Strobe
	248-255	Open
8		**COLOR**
	000-008	Open
	009-016	Color1
	017-025	Color2
	026-033	Color3
	034-042	Color4
	043-050	Color5
	051-059	Color6
	060-067	Color7
	068-076	Color8
	077-084	Color9
	085-093	Color10
	094-101	Color11
	102-110	Color12
	111-118	Color13
	119-127	Color14
	128-189	Rotation: Fast to Slow
	190-193	Stop
	194-255	Rotation: Slow to Fast
9		**GOBO**
	000-003	Open
	004-007	Gobo1
	008-011	Gobo2
	012-015	Gobo3
	016-019	Gobo4
	020-023	Gobo5
	024-027	Gobo6
	028-031	Gobo7
	032-035	Gobo8
	036-039	Gobo9
	040-043	Gobo10
	044-047	Gobo11
	048-051	Gobo12
	052-055	Gobo13
	056-059	Gobo14
	060-063	Gobo15
	064-068	Gobo1 Shaking
	069-072	Gobo2 Shaking
	073-076	Gobo3 Shaking
	077-080	Gobo4 Shaking

	081-084	Gobo5 Shaking
	085-089	Gobo6 Shaking
	090-093	Gobo7 Shaking
	094-097	Gobo8 Shaking
	098-101	Gobo9 Shaking
	102-105	Gobo10 Shaking
	106-110	Gobo11 Shaking
	111-114	Gobo12 Shaking
	115-118	Gobo13 Shaking
	119-122	Gobo14 Shaking
	123-126	Gobo15 Shaking
	128-189	Rotation: Fast to Slow
	190-193	Stop
	194-255	Rotation: Slow to Fast
10		**PRISM**
	000-007	No Effect
	008-255	Prism Effect
11		**R-PRISM**
	000-127	Index: 0°→360°
	128-189	Rotation: Fast to Slow
	190-193	Stop
	194-255	Rotation: Slow to Fast
12		**FUNCTION**
	000-079	Null
	080-084	Pan/Tilt Motors reset
	085-089	Color motor reset
	090-094	Gobo motor reset
	095-099	Shutter/Dimmer/Prism reset
	100-109	Enable blackout while pan/tilt move
	110-119	Enable blackout while color change
	120-129	Enable blackout while gobo change
	130-139	Lamp On
	140-199	Null
	200-209	Reset All
	210-229	Null
	230-239	Lamp Off
	240-249	Null
	250-255	Sound Function

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 connect power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED to see if it can be light up or not.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if they are linked properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check to see if the DMX cables run near or run alongside high voltage cables that may cause damage or interference to DMX interface circuit.

C. One of the channels is not working well

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

D. The lamp is cutting out intermittently

1. The lamp is not working well. Check the mains voltage either too high or too low.
2. Internal temperature may be too high. Check if replacement of fan is needed on the head.

8. Fixture Cleaning

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

• Clean with soft cloth and use normal glass to clean fluid.

• Always dry the parts carefully.

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

Declaration of Conformity

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 2014/30/EU.

EN 55103-1: 2009+A1: 2012; EN 55103-2: 2009;
EN 61000-3-2: 2014; EN 61000-3-3: 2013.

&
Harmonized Standard

EN 60598-2-17: 1989+A2: 1991; EN 60598-1: 2008+A11: 2009;
EN 62471: 2008; EN 62493: 2010.
Safety of household and similar electrical appliances
Part 1: General requirements

Innovation, Quality, Performance