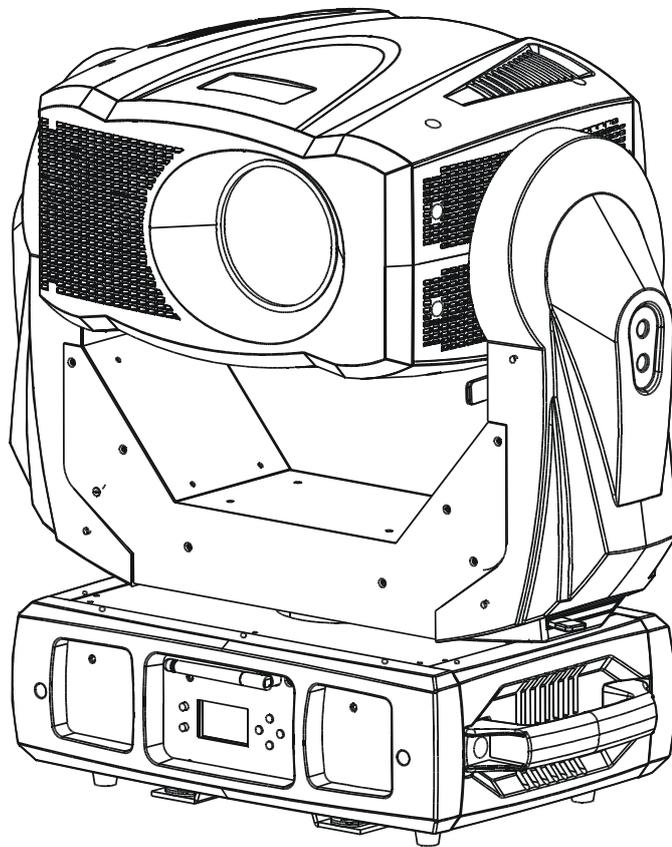




Stage Line[®]

Moving Beamer



BEAM-1800

User Guide

Please read these instructions carefully before use

CONTENTS

1. Safety Instruction	3
2. Installation	5
3. Technical Specification	7
4. Description	11
4.1 Description of the fixture	11
4.2 Control Panel	12
5. Lamp	13
6. How To Set The Unit	14
6.1 Display Status When Power On	14
6.2 Main Function	15
6.3. Home Position Adjustment	25
6.4. Memory card	26
6.5. Error Information	28
7. Control By Universal DMX Controller	28
7.1 Connection	28
7.2 Channel Mode Setting	29
7.3 Address Setting	30
7.4 DMX 512 Configuration	30
8. Update Software	38
9. Troubleshooting	38
10. Fixture Cleaning	40

1. Safety Instruction



WARNING

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

G

Please keep this User Manual 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.
- 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 only by carrying its base instead of head .
- 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 matches the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Don't 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°C. Don't touch the housing bare-handed during its operation, and allow about 15 minutes for cooling the unit down before

replacing bulb or maintenance as it could be very hot.

- 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 the fixture regularly.
- Do not touch any wire during operation as there might be a hazard of electric shock.
- Avoid power wires and other cables twisted.
- The minimum distance between light output and the illuminated surface must be more than 2.5 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 has not been used for a long time.
- Do use the original packing materials before transporting it once again.

Caution

- 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.
- 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.

WARNING!

Maximum ambient temperature TA: 40 °C. Don't operate it when the temperature is higher.

Product Items

- Moving Beamer BEAM-1800
- User manual
- 2 x Omega clamps
- 8GB memory SD card (packaged with user manual)

2. Installation

1. Bolt each clamp (1) to the Omega holder with screw and lock nut through the hole in the holder.
2. Fasten the omega holders (2) on the bottom of the base by inserting quick-lock fasteners (3) into the holes of the base and tighten fully clockwise.
3. Hang the fixture to the support (4) through clamp and fasten the screws (5). Fasten the safety cable (6) through the bottom of the base and over the support.

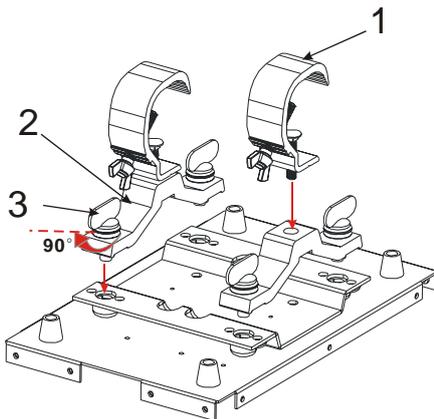


Fig.1

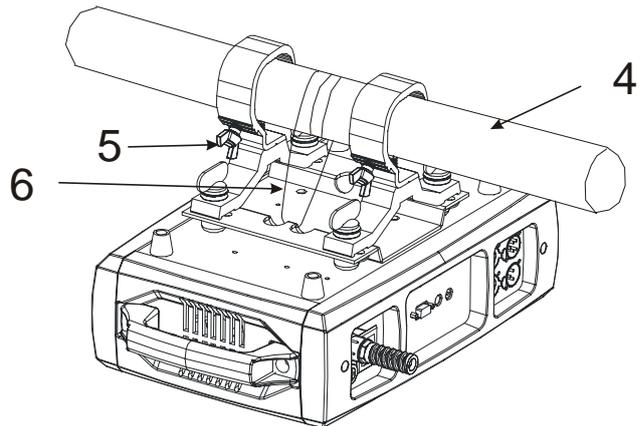


Fig.2

4. Please refer to the diagram to know how to install the fixture in correct position.

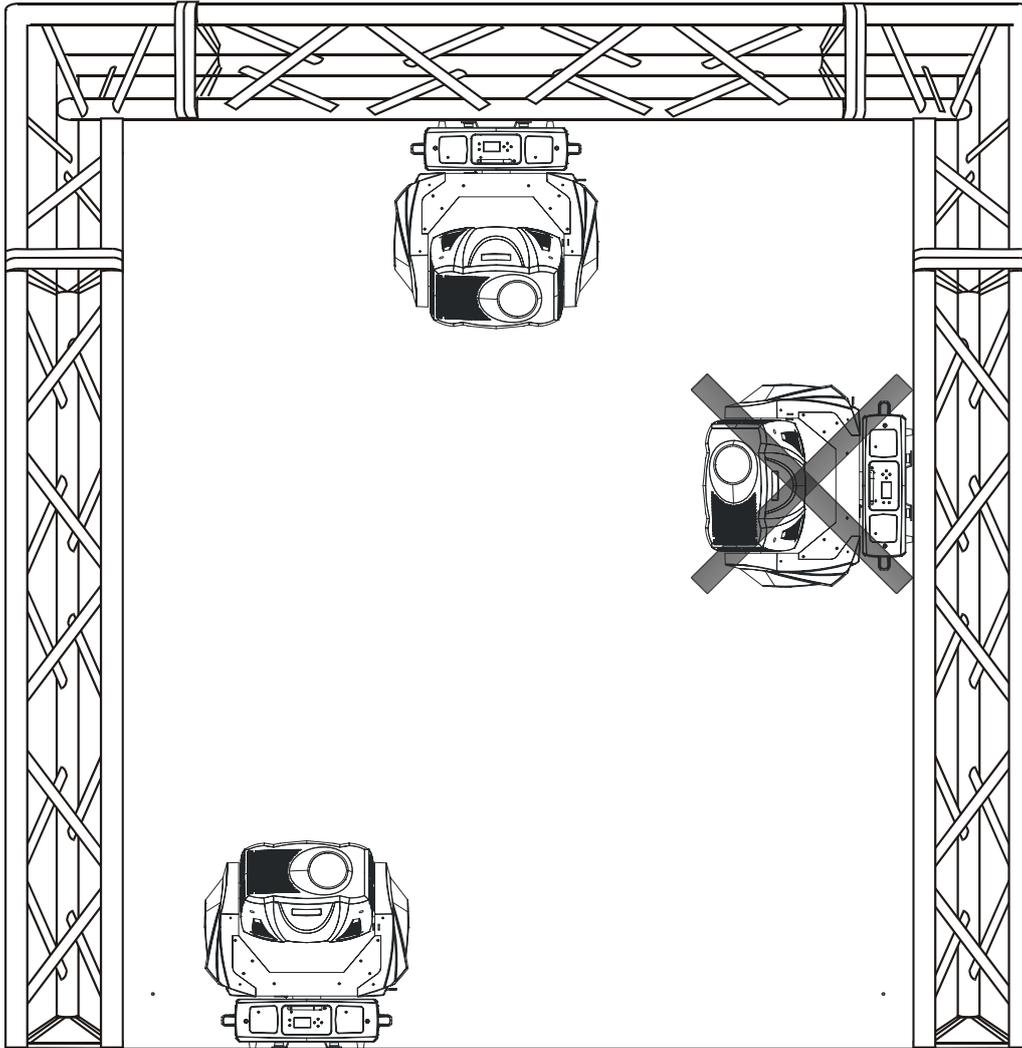


Fig.3

Attention:

- Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight.
- Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.
- Make absolute sure that the unit is firmly fixed in a way that no vibrating or slipping would occur during operation.
- The equipment must be installed beyond the areas where persons may walk by or be seated.
- The rigging has to be operated by a skilled person.

3. Technical Specification

Power supply

- AC 120V~240V 50/60Hz

Power Consumption

- 250W at 230V 50Hz
- 260W at 120V 60Hz

Fuse

- T 5A

Projector

- Display technology: DLP by Texas Instruments
- Lamp: Osram E20.8 180W Lamp
- Lamp life time: 1,000 hrs (In the moving head)
- Beam angle: 24 degree
- Brightness(ANSI Lumens): 2500
- Contrast Ratio (Full on/ Full off): 1800:1 (typical)
- Resolution: SVGA 800 x 600
- Built-in Image size: 720 x 480

Wireless control

- Wirelessly controlled by W-DMX (option).
- Each W-DMX is sending out 512 channels of DMX.
- License free band of 2.45 GHz

Movement

- Pan: 540°
- Tilt: 270°
- Pan/Tilt moving speed adjustable.
- Automatic Pan/Tilt position correction.
- Built-in Pan/Tilt macro effects
- Easy calibration and maintenance by magnetic home positioning.
- Pan/Tilt position lock for transporting protection.

Image/ Video inputs:

- Data projector: 1x15-pin VGA port, 1xS-Video (NTSC or PAL) port, 1xComposite (CVBS) port
- Supported image file types: JPG (Image resolution is 720 x 480px)

- Supported video file types: AVI, MJPEG

(From SD card: video resolution is 720 x 480)

(From computer: video resolution is 800 x 600)

Shutter

- Blackout

Cool

- Fan cooled

Protocols

- DMX 512
- Date input/output: 3/5 Pin XLR socket

Memory card

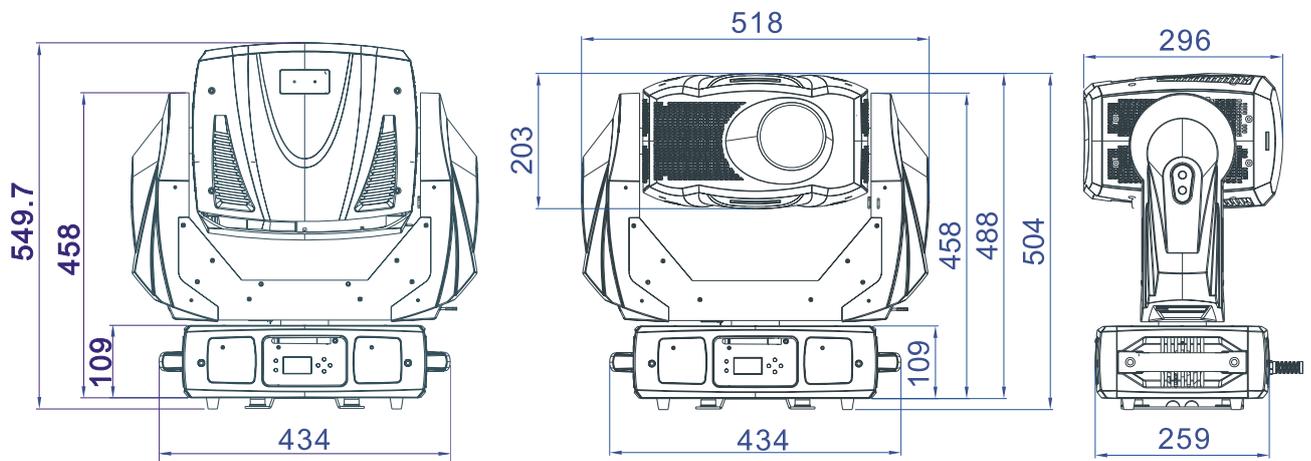
- Memory card slot, hot swappable, max. 32 GB (Built in 8GB)

Weight

- 17.5kgs

Dimension

- 550 × 296 × 518 mm



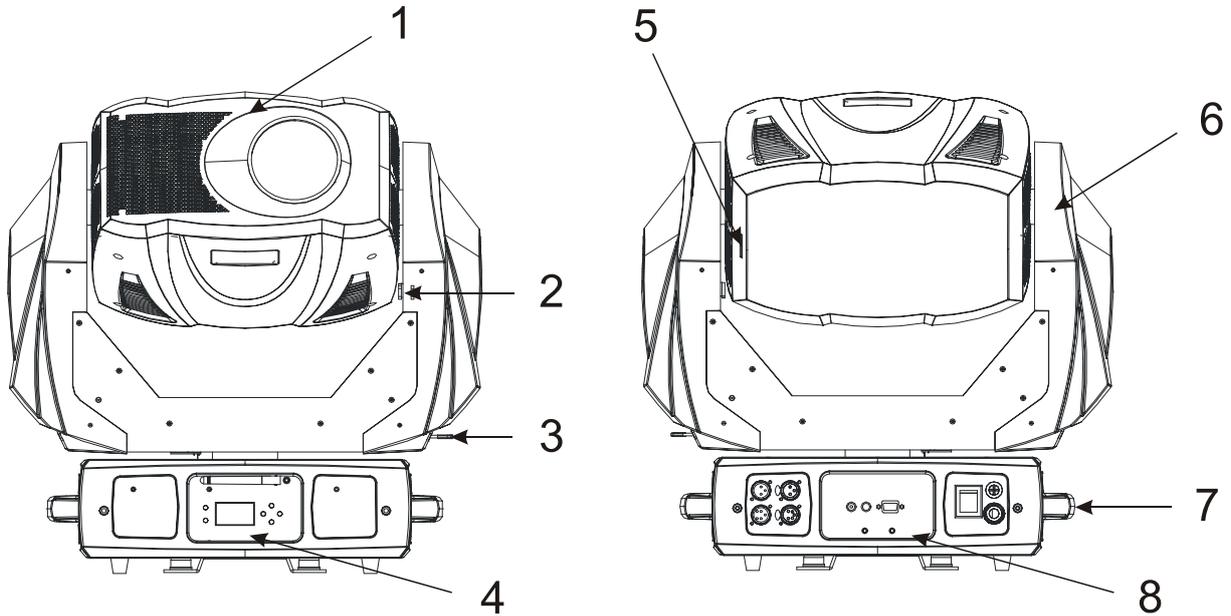
DMX Channels

Mode Channel	Mode 1 54-CH	Mode 2 29-CH
1	Pan	Pan
2	Pan Fine	Pan Fine
3	Tilt	Tilt
4	Tilt Fine	Tilt Fine
5	Pan/Tilt Speed	Pan/Tilt Speed
6	Pan/Tilt Macro	Shutter
7	Shutter	Picture/Video
8	Picture/Video	Video Number
9	Video Number	Video Speed
10	Video Speed	Layer1 Picture Directory /Color
11	Red	Layer1 Picture Number/Preset Color
12	Green	Layer2 Picture Directory
13	Blue	Layer2 Picture Number
14	Layer1 Picture Directory /Color	Layer3 Picture Directory/Filter Picture
15	Layer1 Picture Number/Preset Color	Layer3 Picture Number
16	Layer1 Center Offset	Picture Macro
17	Layer1 Center Rotation	Picture Macro Center Offset
18	Layer1 X Zoom	Picture Macro Center Rotation
19	Layer1 Y Zoom	Picture Macro X Zoom
20	Layer1 Zoom Macro	Picture Macro Y Zoom
21	Layer1 Rotation	Picture Macro Zoom Macro
22	Layer2 Picture Directory	Picture Macro Rotation
23	Layer2 Picture Number	Focus
24	Layer2 Center Offset	Color mode
25	Layer2 Center Rotation	Screen Format
26	Layer2 X Zoom	Mirror
27	Layer2 Y Zoom	Keystone
28	Layer2 Zoom Macro	Source
29	Layer2 Rotation	Special Function
30	Layer3 Picture Directory/Filter Picture	
31	Layer3 Picture Number	

32	Layer3 Center Offset	
33	Layer3 Center Rotation	
34	Layer3 X Zoom	
35	Layer3 Y Zoom	
36	Layer3 Zoom Macro	
37	Layer3 Rotation	
38	Picture Macro	
39	Picture Macro Center Offset	
40	Picture Macro Center Rotation	
41	Picture Macro X Zoom	
42	Picture Macro Y Zoom	
43	Picture Macro Zoom Macro	
44	Picture Macro Rotation	
45	Focus	
46	Color mode	
47	Screen Format	
48	Mirror	
49	Keystone	
50	Brightness	
51	Contrast	
52	Freeze	
53	Source	
54	Special Function	

4. Description

4.1 Description of the fixture

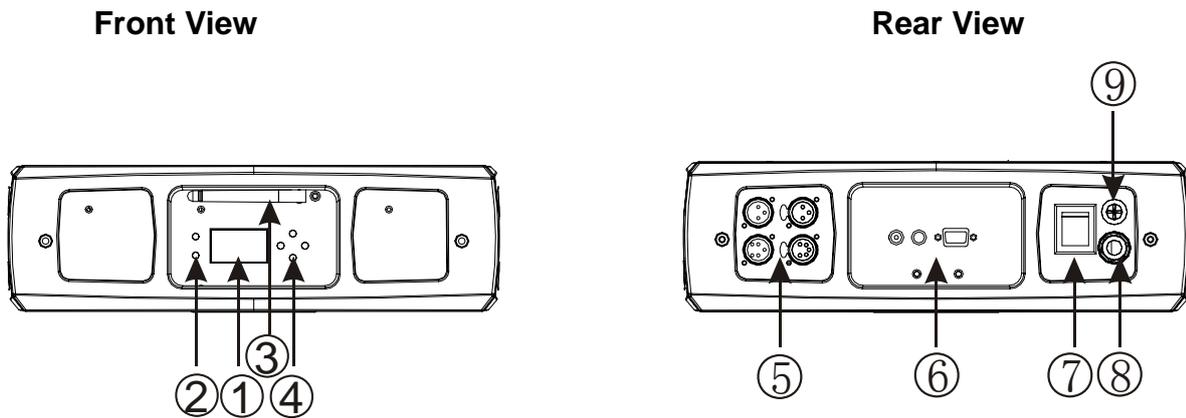


- 1. Head
- 2. Tilt lock
- 3. Pan lock
- 4. Front panel
- 5. Memory card slot
- 6. Arm
- 7. Handle
- 8. Back panel

For transportation protection, please set the tilt lock/unlock (2) and the pan lock/unlock lever (3) in the lock position before any transportations. To unlock the head, move the tilt lock/unlock (2) and the pan lock/unlock lever (3) to unlock position.

Caution: The head and arm must be unlocked before operation!

4.2 Control Panel



① **LCD Display:** shows the various menus and the selected functions.

② **LED**

POWER	On	Power on
DMX	On	DMX input present

③ **Antenna**

W-DMX wireless receiver receive signal from a wide range.

④ **Button**

MENU	Used to select the different menu items
UP	To go up in the menu and to increase the values shown on the display
DOWN	To go back in the menu and to lower the values shown on the display
ENTER	Used to confirm your choice.

⑤ **DMX input/output sockets:**

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

⑥ **Video input sockets:**

Composite video in (CVBS): (the length limit to 3 meters in normal operation.)

S-Video in (NTSC or PAL): (the length limit to 3 meters in normal operation.)

15-pin VGA in: (the length limit to 10 meters in normal operation.)

⑦ **Power Switch:**

Turns On/Off the power

⑧ Power Cable:

To connect to the mains AC outlet

⑨ Fuse (T 5 A):

Protect the unit from damage of over current.

5. Lamp

Osram E20.8 180W Lamp

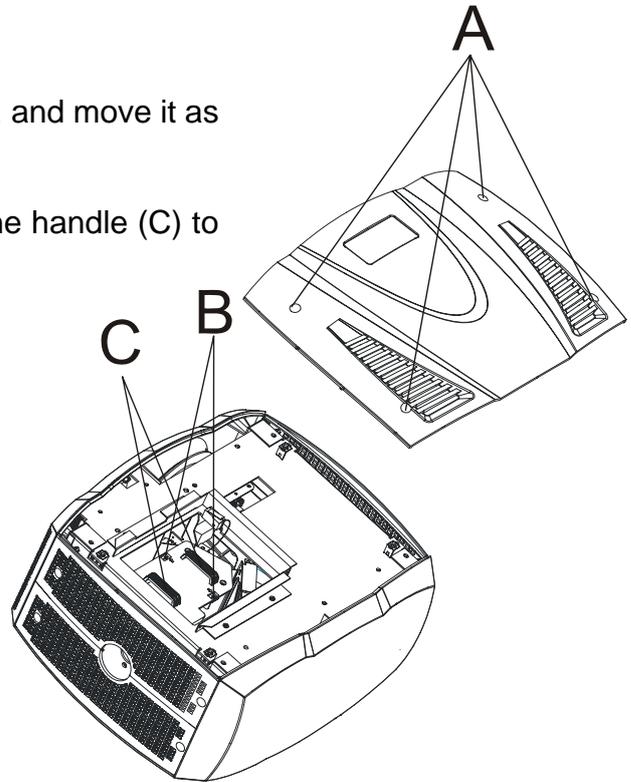
- Because of its high internal pressure, there might be a risk that the discharge lamp would explode during operation. The lamp emits intense UV radiation which is harmful to the eyes and skin. The high luminance of the arc can cause severe damage to the retina if you take a close look at the lamp.
- To protect the lamp, always turn off the lamp first (via control panel or DMX controller) and let the unit's fan run at least five minutes to cool down before switching off the mains supply. Never handle the lamp or luminarie 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 right position of the unit for the best projection.

Change Lamp



In case of replacement of the lamp or maintenance, do not open the fixture within 15 minutes until the unit cools down after switching off.

1. Turn off the power.
2. Unscrew the four screws (A), open the cover, and move it as the sketch shown.
3. Unscrew the two screws (B), hold and pull the handle (C) to remove the lamp. (If you want to change a lamp, you must change the lamp-socket together)
4. Inset a new lamp follow the groove.
5. Tighten the screws (B) to fix the lamp.
6. Put the cover back to the device and Tighten the screws (A) to finish changing lamp.



6. How To Set The Unit

6.1 Display Status When Power On

Every time you turn on the unit, it will run built-in program to reset all motors to their home position, the display will show as fig.4, you may hear some noises for about 20 seconds. It will show warning sign if it goes wrong during resetting and you can press the MENU button to view the error information. After that the unit will be ready to receive DMX signal and the display will show as fig.5.



Fig.4



Fig.5

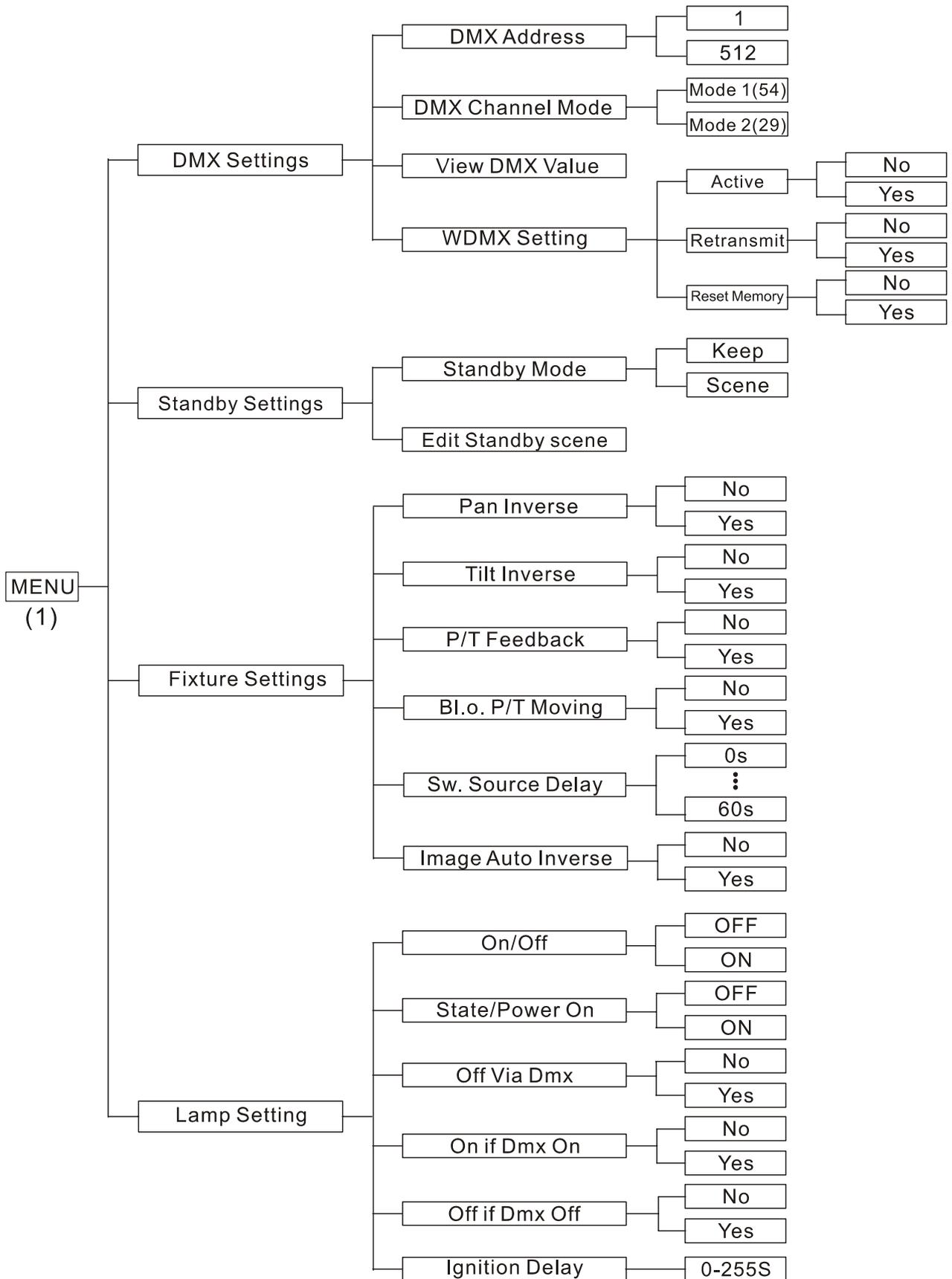
Explanation of fig.5:

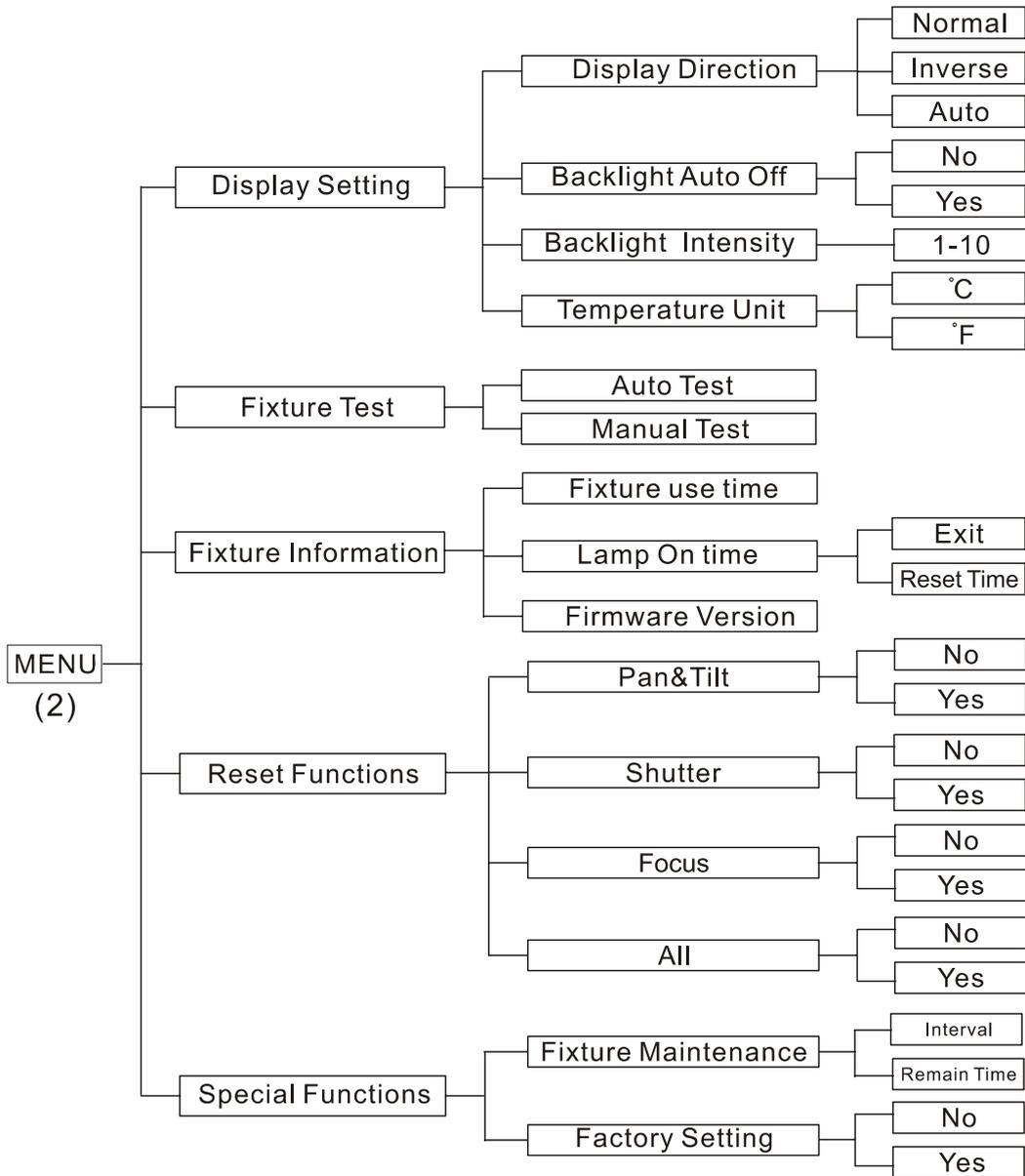
Base 30° C	Present temperature of base CPU is 30° C
001	Present DMX start address
Md.1 54Ch	Present channel mode is mode 1 (54 channels mode)
	Warning signal blinking indicates resetting error, press Enter for more details.

6.2 Main Function

Turn on the unit, press **MENU** button into menu mode, press **UP** and **DOWN** button until the required function is shown on the monitor. Select the function by **ENTER** button. Use **UP** and **DOWN** button to choose the submenu, press the **ENTER** button to store and automatically return to the last menu. Press **MENU** button or let the unit idle one minute to exit menu mode.

The main functions are shown below:





DMX Settings

Enter menu mode, select **DMX Settings**, press ENTER button to confirm, press UP/DOWN button to select **DMX Address**, **DMX Channel Mode**, **View DMX Value** or **WDMX Setting**

DMX Address—DMX512 address setting

Select **DMX Address**, press ENTER button to confirm, the present address will blink on the display, press UP/DOWN button to adjust the address from 1 to 512, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

DMX Channel Mode—channel mode

Select **DMX Channel Mode**, press ENTER button to confirm, present channel mode will blink on the display, press UP/DOWN button to select **Mode1 (54 channels mode)** or **Mode 2 (29 channels mode)**, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

View DMX Value

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

WDMX Setting—wireless control setting

Select **WDMX Setting**, press ENTER button to confirm. Press UP/DOWN button to select **Active**, **Retransmit** or **Reset Memory**, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Active

Select **Active**, press ENTER button to confirm, press UP/DOWN button to select **Yes** (wireless control available) or **No** (wireless control unavailable), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

(Set wireless control to be available, the power indicate LED will blink)

Retransmit

Select **Retransmit**, press ENTER button to confirm, press UP/DOWN button to select **Yes** (Retransmit DMX signal to the next units in the same line) or **No** (No Retransmit), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Reset Memory

Select **Reset Memory**, press ENTER button to confirm, press UP/DOWN button to select **Yes** (Clear original learning code, and save the new learning code.) or **No** (No Reset), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Standby Settings

Enter menu mode, select **Stand Settings**, press ENTER button to confirm, press UP/DOWN button to select **Standby Mode** or **Eidt Standby Scene**, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Standby Mode

Select **Standby Mode**, press ENTER button to confirm, press UP/DOWN button to select **Keep** (When the DMX signal is cut off, the fixture will remain on its last status.) or **Scene** (You can edit your own scene for the Standby Mode, when the DMX signal is off, the fixture will remain on the scene that you edited), and press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Fixture Settings

Enter menu mode, select **Fixture Settings**, press ENTER button to confirm, press UP/DOWN button to select **Pan Inverse**, **Tilt Inverse**, **BL.O. P/T Moving**, or **Image Auto Inverse**.

Pan Inverse

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

Tilt Inverse

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

P/T Feedback — *pan/tilt Feedback*

Select **P/T Feedback**, press ENTER button to confirm, present mode will blink on the display, press UP/DOWN button to select **No** (Pan or tilt's position will not feedback while out of step.) or **Yes** (Feedback while pan/tilt out of step.), press ENTER button to

store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

BL.O. P/T Moving—Blackout while pan/tilt moving

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

Sw. Source Delay—Delay while switch the sources

Select **Sw. Source Delay**, press ENTER button to confirm, present mode will blink on the display, press UP/DOWN button to select from **0s** (No delay) to **60s** (Delay 60 seconds to show the new source output while switching sources.), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Image Auto Inverse

Select **Image Auto Inverse**, press ENTER button to confirm, present mode will blink on the display, press UP/DOWN button to select **No** (normal) or **Yes** (Image auto inverse while the DMX value of tilt is over 128), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Lamp Setting

Attention: The lamp will not be on until detected temperature is lower than 45 ° C.

Enter menu mode, select **Lamp Setting**, press ENTER button to confirm, press UP/DOWN button to select **On/Off, State/Power on, Off Via Dmx, On if Dmx on, Off if Dmx off, or Ignition Delay.**

On/Off—Turn on/off the lamp

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

State/Power On—Lamp state while power on

Select **State/Power On**, press ENTER button to confirm, present mode will blink on the

display, press UP/DOWN button to select **On** (Lamp on while power on) or **Off** (Lamp off while power on), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Off Via Dmx—*Turn off the unit via Dmx controller*

Select **Off Via Dmx**, press ENTER button to confirm, present mode will blink on the display, press UP/DOWN button to select **Yes** (Enable the function of turning off the unit via Dmx controller) or **No** (Disable the function of turning off the unit via Dmx controller), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

(When you operate the unit via DMX controller, set the value of channel “special function” to “lamp off”, waiting for 8 seconds, then the lamp will be off if you choose “yes” mode).

On If DMX On—Lamp turns on when DMX signal is detected

Select **On If Dmx On**, press ENTER button to confirm, present mode will blink on the display, press UP/DOWN button to select **Yes** (Lamp turns on when DMX signal is detected) or **No** (Lamp off when DMX signal is detected), press ENTER button to store. Press 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—Lamp turns off when DMX signal is cut off

Select **Off If Dmx Off**, press ENTER button to confirm, present mode will blink on the display, press UP/DOWN button to select **Yes** (Lamp turns off when DMX signal is cut off) or **No** (Normal), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Ignition Delay—*Delay time between power on and lamp on*

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

Display Setting

Enter menu mode, select **Display Setting**, press ENTER button to confirm, press UP/DOWN button to select **Display Direction**, **Backlight Auto Off**, **Backlight Intensity** or **Temperature unit**.

Display Direction

Select **Display Direction**, press ENTER button to confirm, present mode will blink on the display, press UP/DOWN button to select **Normal**, **Inverse** or **Auto**(Adjust automatically display direction) press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Backlight Auto Off

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

Backlight Intensity

Select **Backlight Intensity**, press ENTER button to confirm, present mode will blink on the display, press UP/DOWN button to adjust backlight intensity from **1** (darkest) to **10** (brightest), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Temperature Unit

Select **Temperature Unit**, press ENTER button to confirm, present mode will blink on the display, press UP/DOWN button to select **°C** or **°F**, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Fixture Test

Enter menu mode, select **Fixture Test**, press ENTER button to confirm, press UP/DOWN button to select **Auto Test** or **Manual Test**

Auto Test

Select **Auto Test**, press ENTER button to confirm, the unit will run built-in programs to automatically test pan, tilt, shutter, focus. Press MENU button back to the last menu or exit menu mode after auto test.

Manual Test

Select **Manual Test**, press ENTER button to confirm, the present channel will show on the display, press UP/DOWN button to select channel, press ENTER button to confirm, then press UP/DOWN button to adjust the value, press ENTER button to store, the fixture will run as the channel value selected. Press MENU button back to the last menu or exit menu mode let the unit idle one minute.

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

Fixture Information

Enter menu mode, select **Fixture Information**, press ENTER button to confirm, press UP/DOWN button to select **Fixture Use Time, Lamp On Time** or **Firmware Version**.

Fixture Use Time

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

Lamp On Time

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

Exit

Select **Exit**, press ENTER button will back to the last menu or exit menu mode let the unit idle one minute.

Reset Time

Select **Reset Time**, press ENTER button to confirm, and the lamp on time will clear to 0.

Firmware Version

Select **Firmware Version**, press ENTER button to confirm, firmware version will show on the display, press MENU button back to exit.

Reset Functions

Enter menu mode, select **Reset Functions**, press ENTER button to confirm, press UP/DOWN button to select **Pan&Tilt,, Shutter, Focus, or All**.

Pan/Tilt—Reset Pan/Tilt

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

Shutter—Reset Shutter

Select **Shutter**, press ENTER button to confirm, press UP/DOWN button to select **Yes** (the unit will run built-in program to reset shutter to its home positions) or **No**, press ENTER button to store. Press MENU button to exit.

Focus—Reset Focus

Select **Focus**, press ENTER button to confirm, press UP/DOWN button to select **Yes** (the unit will run built-in program to reset Focus to home positions) or **No**, press ENTER button to store. Press MENU button to exit.

All—Reset All

Select **All**, press ENTER button to confirm, press UP/DOWN button to select **Yes** (the unit will run built-in program to reset all motors to their home positions) or **No**, press ENTER button to store. Press MENU button to exit.

Attention: The lamp will not be on until detected temperature is lower than 45 ° C.

Special Functions

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

Fixture Maintenance

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

Interval

Select **Interval**, press ENTER button to confirm, the interval time will show on the display. Press MENU button to exit.

Remain Time

Select **Remain Time**, press ENTER button to confirm, the remaining time will show on the display, press ENTER button to confirm, press UP/DOWN button to

select **Exit** or **Reset time**, press MENU button to exit.

Factory Setting

Select **Factory Setting**, press ENTER button to confirm, press UP/DOWN button to select **Yes** (the fixture will reset to factory settings) or **No**, and press ENTER button to store. Press MENU button to exit.

6.3. Home Position Adjustment

Press **MENU** button into menu mode, then hold **ENTER** button for about 3 seconds into offset mode to adjust the home position. Select the function by **ENTER** button. Use **UP/DOWN** button to choose the submenu, press the **ENTER** button to store and automatically return to the last menu. Press **MENU** button to exit.



Pan—pan home position adjust

Enter offset mode, Select **Pan**, press **ENTER** button to confirm, the present position will blink on the display, use **UP/DOWN** button to offset the value from -128 to 127, press **ENTER** button to store. Press **MENU** button to exit.

Tilt—Tilt home position adjust

Enter offset mode, Select **Tilt**, press **ENTER** button to confirm, the present position will blink on the display, use **UP/DOWN** button to offset the value from -128 to 127, press **ENTER** button to store. Press **MENU** button to exit.

Shutter—Shutter home position adjust

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

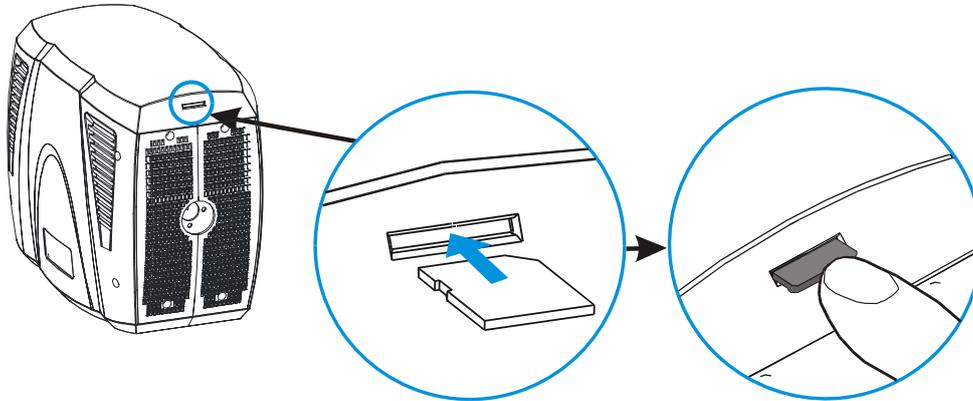
Focus—Focus home position adjust

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

6.4. Memory SD card

Insert the memory SD card

A memory SD card is included with this user manual. Please insert a compatible memory card in the slot of the device. Ensure that the contact area is facing up. Push the card in. You can hear a click when the card locks into place.



Remove the memory card

Important: Do not remove the memory card in the middle of an operation when the card is being accessed. Removing the card in the middle of an operation may damage the memory card as well as the device, and data stored on the card may be corrupted.

1. Power off the device, or put all of the channels' value to "0".
2. Press the memory card to release it from the slot.
3. Pull out the memory card.

Memory card files

Caution:

Make sure that use the right name when copy or cover the image/video files into memory card.

Supported image file types: JPG (Image resolution is 720 x 480px)

Supported video file types: AVI, MJPEG

(From SD card: video resolution is 720 x 480)

(From computer: video resolution is 800 x 600)



① **Image Folder**

- 32 picture folders, “Image000Image031”.
- At most it can contain 1024 (32 x 32) pictures.
- Each folder can put at most 32 pictures in it. Pictures are changeable; please refer to the following diagram to name your own files if you want to change pictures:

Folder	File name			
Image000	I000_000.jpg	I000_001.jpg	.....	I000_031.jpg
Image001	I001_000.jpg	I001_001.jpg	.....	I001_031.jpg
⋮	⋮	⋮	⋮	⋮
Image031	I031_000.jpg	I031_001.jpg	.....	I031_031.jpg

For example: If you want to replace the picture No.1 in the “Image001” folder, rename your own picture as “ I001_000.jpg ”, then copy it into the “Image001” folder of the memory card to cover the older file.

② **Video Folder**

- 31 video folders, “Video001Video031”. (*Notice: The “Video000” folder is useless.*)
- At most it can contain 992 (31 x 32) videos.
- Each folder can put at most 32 videos in it. Videos are changeable; please refer to the following diagram to name your own files if you want to change videos:

Folder	File name			
Video001	V001_000.avi	V001_001.avi	.....	V001_031.avi
Video002	V002_000.avi	V002_001.avi	.....	V002_031.avi
⋮	⋮	⋮	⋮	⋮
Video031	V031_000.avi	V031_001.avi	.....	V031_031.avi

For example: If you want to replace the video No.1 in the “Video001” folder, rename your own picture as “V001_000.avi ”, then copy it into the “Video001” folder of the memory card to cover the older file.

6.5. Error Information

Lamp Startup Fail

It appears when there is no lamp or some wires are damaged.

Maintenance Fixture

It appears when the maintenance remaining time becomes 0S, please maintain the unit after enter menu mode and reset the time.

Lamp On Over 1000 Hour

It appears when the lamp has been on over 1000 hours, please turn off the fixture and change the lamp.

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

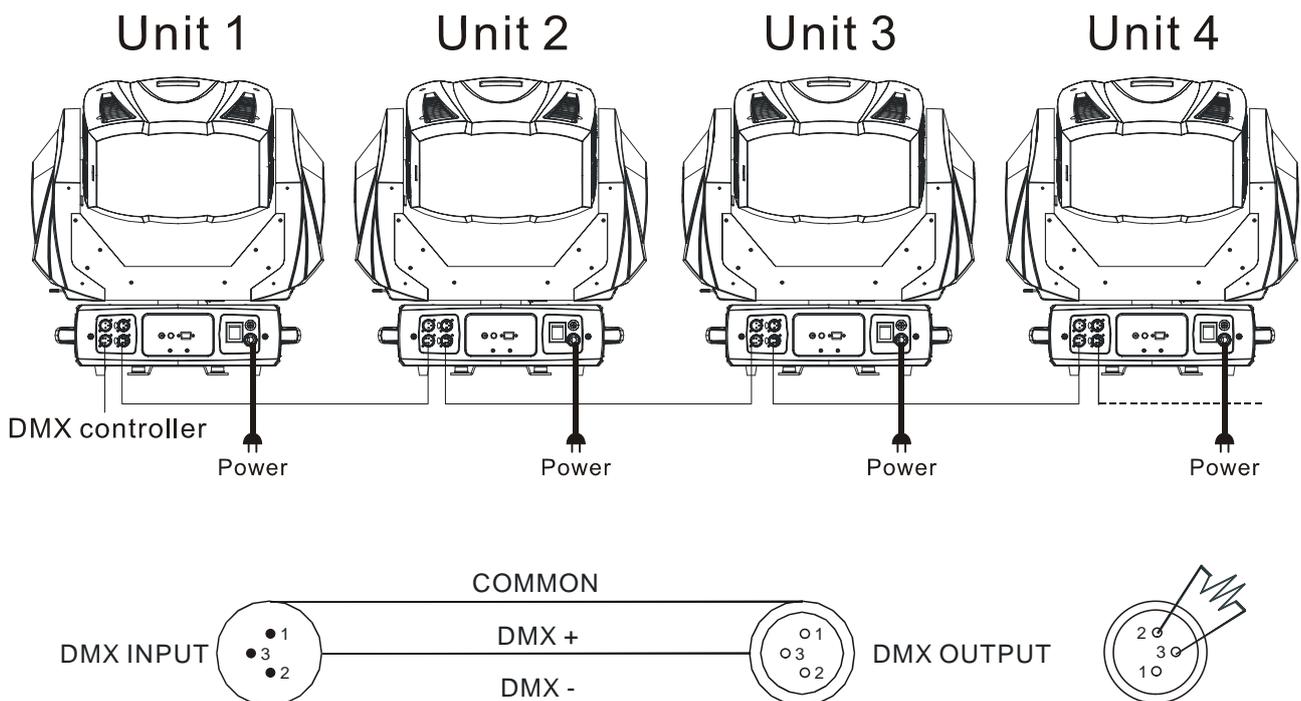
They appear when P.C.B board or some wires are damaged.

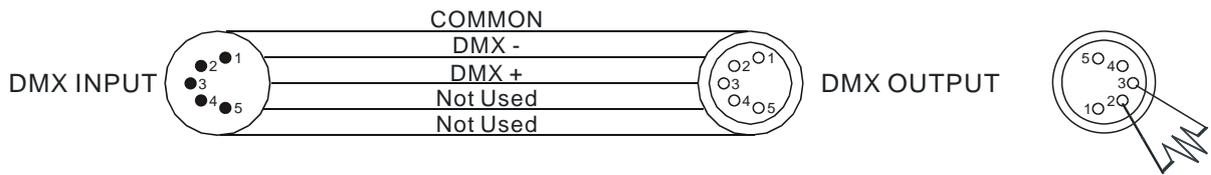
Pan Reset Error, Pan Encode Error, Tilt Reset Error, Tilt Encode Error, Shutter Reset Fail, Focus Reset Fail

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

7. Control By Universal DMX Controller

7.1 Connection





ATTENTION

Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal (Resistance 120 ohm 1/4W between pin2 (DMX-) and pin3 (DMX+) of the last fixture).

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, even 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 0-511 (usually 0 & 1 are equal to 1).
5. The end of the DMX 512 system should be terminated to reduce signal errors.
6. 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.

7.2 Channel Mode Setting

Enter menu mode, select **DMX Settings**, press ENTER button to confirm, use **UP/DOWN** button to select **DMX Channel Mode**, press ENTER button to confirm, present channel mode will blink on the display, use **UP/DOWN** button to select **Mode1 (54 channels mode)** or **Mode 2 (29 channels mode)**, press ENTER button to store. Press MENU button back to

the last menu or let the unit idle one minute to exit menu mode.

7.3 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 DMX signal.

Press MENU button to enter menu mode, select **DMX Settings**, press ENTER button to confirm, use **UP/DOWN** button to select **DMX Address**, press ENTER button to confirm, the present address will blink on the display, use **UP/DOWN** button to adjust the address from 1 to 512, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute 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
54 channels	1	55	109	163
29 channels	1	30	59	88

7.4 DMX 512 Configuration

Please refer to below configurations to control the fixtures

Attention:

1. The unit will remain the last condition if the DMX signal is cut-off.
2. For the channel function, when you change the value from 0~255 very quickly, keep the value for about 5 seconds, then the corresponding function will take into effect.
3. Total three Layers of images.
 - Layer one: Works as Background function.
 - Layer two: Works as Shelter function of the background of layer one.
 - Layer three: Works as Transparent function. (You can see layer one/two through the black part of picture of layer 3.)

54 Channels (Mode 1):

54 Channel (Mode1)						
Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7
Pan	Pan Fine	Tilt	Tilt Fine	Pan/Tilt Speed	Pan/Tilt Macro	Shutter
<p>255 540° 0 0°</p>	<p>255</p>	<p>255 270° 0 0°</p>	<p>255</p>	<p>255 Slow 0 Fast</p>	<p>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 09 064-071 Macro 08 056-063 Macro 07 048-055 Macro 06 040-047 Macro 05 032-039 Macro 04 024-031 Macro 03 016-023 Macro 02 008-015 Macro 01 000-007 Blackout</p>	<p>8-255 Open 0-7 Blackout</p>
Ch8	Ch9	Ch10	Ch11	Ch12	Ch13	
Picture/ Vedio	Video Number	Vedio Speed	Red	Green	Blue	
<p>248-255 Video Directory 31 240-247 Video Directory 30 232-239 Video Directory 29 224-231 Video Directory 28 216-223 Video Directory 27 208-215 Video Directory 26 200-207 Video Directory 25 192-199 Video Directory 24 184-191 Video Directory 23 176-183 Video Directory 22 168-175 Video Directory 21 160-167 Video Directory 20 152-159 Video Directory 19 144-151 Video Directory 18 136-143 Video Directory 17 128-135 Video Directory 16 120-127 Video Directory 15 112-119 Video Directory 14 104-111 Video Directory 13 096-103 Video Directory 12 088-095 Video Directory 11 080-087 Video Directory 10 072-079 Video Directory 09 064-071 Video Directory 08 056-063 Video Directory 07 048-055 Video Directory 06 040-047 Video Directory 05 032-039 Video Directory 04 024-031 Video Directory 03 016-023 Video Directory 02 008-015 Video Directory 01 000-007 Picture</p>	<p>248-255 Number 31 240-247 Number 30 232-239 Number 29 224-231 Number 28 216-223 Number 27 208-215 Number 26 200-207 Number 25 192-199 Number 24 184-191 Number 23 176-183 Number 22 168-175 Number 21 160-167 Number 20 152-159 Number 19 144-151 Number 18 136-143 Number 17 128-135 Number 16 120-127 Number 15 112-119 Number 14 104-111 Number 13 096-103 Number 12 088-095 Number 11 080-087 Number 10 072-079 Number 09 064-071 Number 08 056-063 Number 07 048-055 Number 06 040-047 Number 05 032-039 Number 04 024-031 Number 03 016-023 Number 02 008-015 Number 01 000-007 Number 00</p>	<p>255 Fast 128 Slow 127 Slow 1 Fast 0 Normal</p>	<p>255 100% 0 0%</p>	<p>255 100% 0 0%</p>	<p>255 100% 0 0%</p>	

54 Channel (Mode1)					
Ch14	Ch15	Ch16	Ch17	Ch18	Ch19
Layer1 Picture Directory/Color	Layer1 Picture Number/Preset Color	Layer1 Center Offset	Layer1 Center Rotation	Layer1 X zoom	Layer1 Y zoom
248-255 Layer1 Picture Directory 31 240-247 Layer1 Picture Directory 30 232-239 Layer1 Picture Directory 29 224-231 Layer1 Picture Directory 28 216-223 Layer1 Picture Directory 27 208-215 Layer1 Picture Directory 26 200-207 Layer1 Picture Directory 25 192-199 Layer1 Picture Directory 24 184-191 Layer1 Picture Directory 23 176-183 Layer1 Picture Directory 22 168-175 Layer1 Picture Directory 21 160-167 Layer1 Picture Directory 20 152-159 Layer1 Picture Directory 19 144-151 Layer1 Picture Directory 18 136-143 Layer1 Picture Directory 17 128-135 Layer1 Picture Directory 16 120-127 Layer1 Picture Directory 15 112-119 Layer1 Picture Directory 14 104-111 Layer1 Picture Directory 13 096-103 Layer1 Picture Directory 12 088-095 Layer1 Picture Directory 11 080-087 Layer1 Picture Directory 10 072-079 Layer1 Picture Directory 09 064-071 Layer1 Picture Directory 08 056-063 Layer1 Picture Directory 07 048-055 Layer1 Picture Directory 06 040-047 Layer1 Picture Directory 05 032-039 Layer1 Picture Directory 04 024-031 Layer1 Picture Directory 03 016-023 Layer1 Picture Directory 02 008-015 Layer1 Picture Directory 01 000-007 Preset Color	248-255 Layer1 Picture 31 240-247 Layer1 Picture 30 232-239 Layer1 Picture 29 224-231 Layer1 Picture 28 216-223 Layer1 Picture 27 208-215 Layer1 Picture 26 200-207 Layer1 Picture 25 192-199 Layer1 Picture 24 184-191 Layer1 Picture 23 176-183 Layer1 Picture 22 168-175 Layer1 Picture 21 160-167 Layer1 Picture 20 152-159 Layer1 Picture 19 144-151 Layer1 Picture 18 136-143 Layer1 Picture 17 128-135 Layer1 Picture 16 120-127 Layer1 Picture 15 112-119 Layer1 Picture 14 104-111 Layer1 Picture 13 096-103 Layer1 Picture 12 088-095 Layer1 Picture 11 080-087 Layer1 Picture 10 072-079 Layer1 Picture 09 064-071 Layer1 Picture 08 056-063 Layer1 Picture 07 048-055 Layer1 Picture 06 040-047 Layer1 Picture 05 032-039 Layer1 Picture 04 024-031 Layer1 Picture 03 016-023 Layer1 Picture 02 008-015 Layer1 Picture 01 000-007 Layer1 Picture 0				
Ch20	Ch21	Ch22	Ch23	Ch24	
Layer1 Zoom Macro	Layer1 Rotation	Layer2 Picture Directory	Layer2 Picture Number	Layer2 Center Offset	
		248-255 Layer2 Picture Directory 31 240-247 Layer2 Picture Directory 30 232-239 Layer2 Picture Directory 29 224-231 Layer2 Picture Directory 28 216-223 Layer2 Picture Directory 27 208-215 Layer2 Picture Directory 26 200-207 Layer2 Picture Directory 25 192-199 Layer2 Picture Directory 24 184-191 Layer2 Picture Directory 23 176-183 Layer2 Picture Directory 22 168-175 Layer2 Picture Directory 21 160-167 Layer2 Picture Directory 20 152-159 Layer2 Picture Directory 19 144-151 Layer2 Picture Directory 18 136-143 Layer2 Picture Directory 17 128-135 Layer2 Picture Directory 16 120-127 Layer2 Picture Directory 15 112-119 Layer2 Picture Directory 14 104-111 Layer2 Picture Directory 13 096-103 Layer2 Picture Directory 12 088-095 Layer2 Picture Directory 11 080-087 Layer2 Picture Directory 10 072-079 Layer2 Picture Directory 09 064-071 Layer2 Picture Directory 08 056-063 Layer2 Picture Directory 07 048-055 Layer2 Picture Directory 06 040-047 Layer2 Picture Directory 05 032-039 Layer2 Picture Directory 04 024-031 Layer2 Picture Directory 03 016-023 Layer2 Picture Directory 02 008-015 Layer2 Picture Directory 01 000-007 Off	248-255 Layer2 Picture 31 240-247 Layer2 Picture 30 232-239 Layer2 Picture 29 224-231 Layer2 Picture 28 216-223 Layer2 Picture 27 208-215 Layer2 Picture 26 200-207 Layer2 Picture 25 192-199 Layer2 Picture 24 184-191 Layer2 Picture 23 176-183 Layer2 Picture 22 168-175 Layer2 Picture 21 160-167 Layer2 Picture 20 152-159 Layer2 Picture 19 144-151 Layer2 Picture 18 136-143 Layer2 Picture 17 128-135 Layer2 Picture 16 120-127 Layer2 Picture 15 112-119 Layer2 Picture 14 104-111 Layer2 Picture 13 096-103 Layer2 Picture 12 088-095 Layer2 Picture 11 080-087 Layer2 Picture 10 072-079 Layer2 Picture 09 064-071 Layer2 Picture 08 056-063 Layer2 Picture 07 048-055 Layer2 Picture 06 040-047 Layer2 Picture 05 032-039 Layer2 Picture 04 024-031 Layer2 Picture 03 016-023 Layer2 Picture 02 008-015 Layer2 Picture 01 000-007 Layer2 Picture 0		

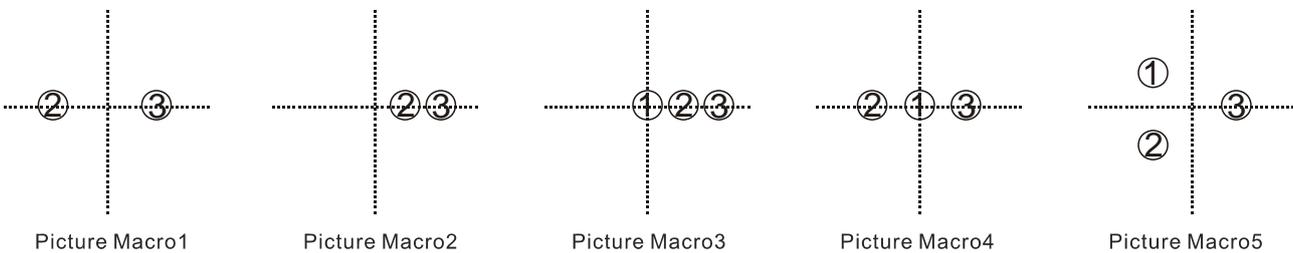
Notice: Put the DMX value of CH14 from 0~7 so that the function of CH11, CH12, and CH13 is enable. In the same time 15CH works as Preset Color.

Layer 2 works as Shelter function of the background of layer one.

0~7 is OFF (It means you can't project the pictures in "Image000" Folder of the SD card in Layer 2).

54 Channel (Mode1)					
Ch25	Ch26	Ch27	Ch28	Ch29	
Layer2 Center Rotation	Layer2 X zoom	Layer2 Y zoom	Layer2 Zoom Macro	Layer2 Rotation	
Ch30	Ch31	Ch32	Ch33	Ch34	Ch35
Layer3 Picture Directory/Filter Picture	Layer3 Picture Number	Layer3 Center Offset	Layer3 Center Rotation	Layer3 X zoom	Layer3 Y zoom
248-255 Layer3 Picture Directory 31 240-247 Layer3 Picture Directory 30 232-239 Layer3 Picture Directory 29 224-231 Layer3 Picture Directory 28 216-223 Layer3 Picture Directory 27 208-215 Layer3 Picture Directory 26 200-207 Layer3 Picture Directory 25 192-199 Layer3 Picture Directory 24 184-191 Layer3 Picture Directory 23 176-183 Layer3 Picture Directory 22 168-175 Layer3 Picture Directory 21 160-167 Layer3 Picture Directory 20 152-159 Layer3 Picture Directory 19 144-151 Layer3 Picture Directory 18 136-143 Layer3 Picture Directory 17 128-135 Layer3 Picture Directory 16 120-127 Layer3 Picture Directory 15 112-119 Layer3 Picture Directory 14 104-111 Layer3 Picture Directory 13 096-103 Layer3 Picture Directory 12 088-095 Layer3 Picture Directory 11 080-087 Layer3 Picture Directory 10 072-079 Layer3 Picture Directory 09 064-071 Layer3 Picture Directory 08 056-063 Layer3 Picture Directory 07 048-055 Layer3 Picture Directory 06 040-047 Layer3 Picture Directory 05 032-039 Layer3 Picture Directory 04 024-031 Layer3 Picture Directory 03 016-023 Layer3 Picture Directory 02 008-015 Layer3 Picture Directory 01 000-007 Layer3 Picture Directory 0	248-255 Layer3 Picture 31 240-247 Layer3 Picture 30 232-239 Layer3 Picture 29 224-231 Layer3 Picture 28 216-223 Layer3 Picture 27 208-215 Layer3 Picture 26 200-207 Layer3 Picture 25 192-199 Layer3 Picture 24 184-191 Layer3 Picture 23 176-183 Layer3 Picture 22 168-175 Layer3 Picture 21 160-167 Layer3 Picture 20 152-159 Layer3 Picture 19 144-151 Layer3 Picture 18 136-143 Layer3 Picture 17 128-135 Layer3 Picture 16 120-127 Layer3 Picture 15 112-119 Layer3 Picture 14 104-111 Layer3 Picture 13 096-103 Layer3 Picture 12 088-095 Layer3 Picture 11 080-087 Layer3 Picture 10 072-079 Layer3 Picture 09 064-071 Layer3 Picture 08 056-063 Layer3 Picture 07 048-055 Layer3 Picture 06 040-047 Layer3 Picture 05 032-039 Layer3 Picture 04 024-031 Layer3 Picture 03 016-023 Layer3 Picture 02 008-015 Layer3 Picture 01 000-007 Layer3 Picture 0				

54 Channel (Mode1)					
Ch36	Ch37	Ch38	Ch39	Ch40	Ch41
Layer3 Zoom Macro	Layer3 Rotation	Picture Macro	Picture Macro Center Offset	Picture Macro Center Rotation	Picture Macro X Zoom
Ch42	Ch43	Ch44	Ch45	Ch46	Ch47
Picture Macro Y Zoom	Picture Macro Zoom Macro	Picture Macro Rotation	Focus	Color Mode	Screen Format
				<p>208-255 Mode5 156-207 Mode4 104-155 Mode3 52-103 Mode2 0-51 Mode1</p>	<p>208-255 Auto 156-207 4:3 104-155 19:16 (II) 52-103 19:16 (I) 0-51 1:1</p>



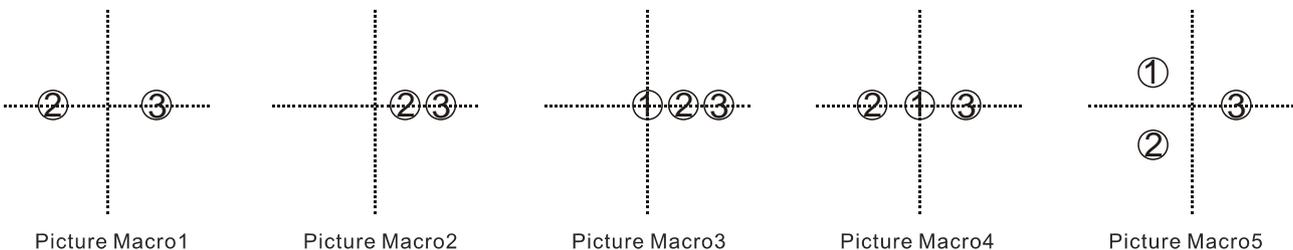
①: Layer1 ②: Layer2 ③: Layer3

54 Channel (Mode1)						
Ch48	Ch49	Ch50	Ch51	Ch52	Ch53	Ch54
Mirror	Keystone	Brightness	Contrast	Freeze	Source	Special Function
					<p>192-255 VGA</p> <p>128-191 S-Video</p> <p>64-127 CVBS</p> <p>0-63 BT 656 (SD Card)</p>	<p>240-255 No function</p> <p>230-239 Lamp Off</p> <p>210-229 No function</p> <p>200-209 Reset all</p> <p>180-189 Reset Focus</p> <p>170-179 Reset Shutter</p> <p>150-169 No function</p> <p>140-149 Reset Pan/Tilt</p> <p>130-139 Lamp On</p> <p>080-089 Unable Blackout while Pan/Tilt Move</p> <p>070-079 Enable Blackout while Pan/Tilt Move</p> <p>000-069 No Function</p>

29 Channels (Mode 2):

29 Channel (Mode2)						
Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7
Pan	Pan Fine	Tilt	Tilt Fine	Pan/Tilt Speed	Shutter	Picture/ Vedio
255 540° 0 0°	255 0	255 270° 0 0°	255 0	255 Slow 0 Fast	8-255 Open 0-7 Blackout	248-255 Video Directory 31 240-247 Video Directory 30 232-239 Video Directory 29 224-231 Video Directory 28 216-223 Video Directory 27 208-215 Video Directory 26 200-207 Video Directory 25 192-199 Video Directory 24 184-191 Video Directory 23 176-183 Video Directory 22 168-175 Video Directory 21 160-167 Video Directory 20 152-159 Video Directory 19 144-151 Video Directory 18 136-143 Video Directory 17 128-135 Video Directory 16 120-127 Video Directory 15 112-119 Video Directory 14 104-111 Video Directory 13 096-103 Video Directory 12 088-095 Video Directory 11 080-087 Video Directory 10 072-079 Video Directory 09 064-071 Video Directory 08 056-063 Video Directory 07 048-055 Video Directory 06 040-047 Video Directory 05 032-039 Video Directory 04 024-031 Video Directory 03 016-023 Video Directory 02 008-015 Video Directory 01 000-007 Picture
Ch8	Ch9	Ch10	Ch11	Ch12		
Video Number	Vedio Speed	Layer1 Picture Directory/Color	Layer1 Picture Number/Preset Color	Layer2 Picture Directory		
248-255 Number 31 240-247 Number 30 232-239 Number 29 224-231 Number 28 216-223 Number 27 208-215 Number 26 200-207 Number 25 192-199 Number 24 184-191 Number 23 176-183 Number 22 168-175 Number 21 160-167 Number 20 152-159 Number 19 144-151 Number 18 136-143 Number 17 128-135 Number 16 120-127 Number 15 112-119 Number 14 104-111 Number 13 096-103 Number 12 088-095 Number 11 080-087 Number 10 072-079 Number 09 064-071 Number 08 056-063 Number 07 048-055 Number 06 040-047 Number 05 032-039 Number 04 024-031 Number 03 016-023 Number 02 008-015 Number 01 000-007 Number 00	255 Fast ↑ Slow ↑ Slow ↑ Fast 128 127 1 0 Normal	248-255 Layer1 Picture Directory 31 240-247 Layer1 Picture Directory 30 232-239 Layer1 Picture Directory 29 224-231 Layer1 Picture Directory 28 216-223 Layer1 Picture Directory 27 208-215 Layer1 Picture Directory 26 200-207 Layer1 Picture Directory 25 192-199 Layer1 Picture Directory 24 184-191 Layer1 Picture Directory 23 176-183 Layer1 Picture Directory 22 168-175 Layer1 Picture Directory 21 160-167 Layer1 Picture Directory 20 152-159 Layer1 Picture Directory 19 144-151 Layer1 Picture Directory 18 136-143 Layer1 Picture Directory 17 128-135 Layer1 Picture Directory 16 120-127 Layer1 Picture Directory 15 112-119 Layer1 Picture Directory 14 104-111 Layer1 Picture Directory 13 096-103 Layer1 Picture Directory 12 088-095 Layer1 Picture Directory 11 080-087 Layer1 Picture Directory 10 072-079 Layer1 Picture Directory 09 064-071 Layer1 Picture Directory 08 056-063 Layer1 Picture Directory 07 048-055 Layer1 Picture Directory 06 040-047 Layer1 Picture Directory 05 032-039 Layer1 Picture Directory 04 024-031 Layer1 Picture Directory 03 016-023 Layer1 Picture Directory 02 008-015 Layer1 Picture Directory 01 000-007 Preset Color	248-255 Layer1 Picture 31 240-247 Layer1 Picture 30 232-239 Layer1 Picture 29 224-231 Layer1 Picture 28 216-223 Layer1 Picture 27 208-215 Layer1 Picture 26 200-207 Layer1 Picture 25 192-199 Layer1 Picture 24 184-191 Layer1 Picture 23 176-183 Layer1 Picture 22 168-175 Layer1 Picture 21 160-167 Layer1 Picture 20 152-159 Layer1 Picture 19 144-151 Layer1 Picture 18 136-143 Layer1 Picture 17 128-135 Layer1 Picture 16 120-127 Layer1 Picture 15 112-119 Layer1 Picture 14 104-111 Layer1 Picture 13 096-103 Layer1 Picture 12 088-095 Layer1 Picture 11 080-087 Layer1 Picture 10 072-079 Layer1 Picture 09 064-071 Layer1 Picture 08 056-063 Layer1 Picture 07 048-055 Layer1 Picture 06 040-047 Layer1 Picture 05 032-039 Layer1 Picture 04 024-031 Layer1 Picture 03 016-023 Layer1 Picture 02 008-015 Layer1 Picture 01 000-007 Layer1 Picture 0	248-255 Layer2 Picture Directory 31 240-247 Layer2 Picture Directory 30 232-239 Layer2 Picture Directory 29 224-231 Layer2 Picture Directory 28 216-223 Layer2 Picture Directory 27 208-215 Layer2 Picture Directory 26 200-207 Layer2 Picture Directory 25 192-199 Layer2 Picture Directory 24 184-191 Layer2 Picture Directory 23 176-183 Layer2 Picture Directory 22 168-175 Layer2 Picture Directory 21 160-167 Layer2 Picture Directory 20 152-159 Layer2 Picture Directory 19 144-151 Layer2 Picture Directory 18 136-143 Layer2 Picture Directory 17 128-135 Layer2 Picture Directory 16 120-127 Layer2 Picture Directory 15 112-119 Layer2 Picture Directory 14 104-111 Layer2 Picture Directory 13 096-103 Layer2 Picture Directory 12 088-095 Layer2 Picture Directory 11 080-087 Layer2 Picture Directory 10 072-079 Layer2 Picture Directory 09 064-071 Layer2 Picture Directory 08 056-063 Layer2 Picture Directory 07 048-055 Layer2 Picture Directory 06 040-047 Layer2 Picture Directory 05 032-039 Layer2 Picture Directory 04 024-031 Layer2 Picture Directory 03 016-023 Layer2 Picture Directory 02 008-015 Layer2 Picture Directory 01 000-007 Off		

29 Channel (Mode2)					
Ch13	Ch14	Ch15	Ch16	Ch17	
Layer2 Picture Number	Layer3 Picture Directory/Filter Picture	Layer3 Picture Number	Picture Macro	Picture Macro Center Offset	
248-255 Layer2 Picture 31 240-247 Layer2 Picture 30 232-239 Layer2 Picture 29 224-231 Layer2 Picture 28 216-223 Layer2 Picture 27 208-215 Layer2 Picture 26 200-207 Layer2 Picture 25 192-199 Layer2 Picture 24 184-191 Layer2 Picture 23 176-183 Layer2 Picture 22 168-175 Layer2 Picture 21 160-167 Layer2 Picture 20 152-159 Layer2 Picture 19 144-151 Layer2 Picture 18 136-143 Layer2 Picture 17 128-135 Layer2 Picture 16 120-127 Layer2 Picture 15 112-119 Layer2 Picture 14 104-111 Layer2 Picture 13 096-103 Layer2 Picture 12 088-095 Layer2 Picture 11 080-087 Layer2 Picture 10 072-079 Layer2 Picture 09 064-071 Layer2 Picture 08 056-063 Layer2 Picture 07 048-055 Layer2 Picture 06 040-047 Layer2 Picture 05 032-039 Layer2 Picture 04 024-031 Layer2 Picture 03 016-023 Layer2 Picture 02 008-015 Layer2 Picture 01 000-007 Layer2 Picture 0	248-255 Layer3 Picture Directory 31 240-247 Layer3 Picture Directory 30 232-239 Layer3 Picture Directory 29 224-231 Layer3 Picture Directory 28 216-223 Layer3 Picture Directory 27 208-215 Layer3 Picture Directory 26 200-207 Layer3 Picture Directory 25 192-199 Layer3 Picture Directory 24 184-191 Layer3 Picture Directory 23 176-183 Layer3 Picture Directory 22 168-175 Layer3 Picture Directory 21 160-167 Layer3 Picture Directory 20 152-159 Layer3 Picture Directory 19 144-151 Layer3 Picture Directory 18 136-143 Layer3 Picture Directory 17 128-135 Layer3 Picture Directory 16 120-127 Layer3 Picture Directory 15 112-119 Layer3 Picture Directory 14 104-111 Layer3 Picture Directory 13 096-103 Layer3 Picture Directory 12 088-095 Layer3 Picture Directory 11 080-087 Layer3 Picture Directory 10 072-079 Layer3 Picture Directory 09 064-071 Layer3 Picture Directory 08 056-063 Layer3 Picture Directory 07 048-055 Layer3 Picture Directory 06 040-047 Layer3 Picture Directory 05 032-039 Layer3 Picture Directory 04 024-031 Layer3 Picture Directory 03 016-023 Layer3 Picture Directory 02 008-015 Layer3 Picture Directory 01 000-007 Layer3 Picture Directory 0	248-255 Layer3 Picture 31 240-247 Layer3 Picture 30 232-239 Layer3 Picture 29 224-231 Layer3 Picture 28 216-223 Layer3 Picture 27 208-215 Layer3 Picture 26 200-207 Layer3 Picture 25 192-199 Layer3 Picture 24 184-191 Layer3 Picture 23 176-183 Layer3 Picture 22 168-175 Layer3 Picture 21 160-167 Layer3 Picture 20 152-159 Layer3 Picture 19 144-151 Layer3 Picture 18 136-143 Layer3 Picture 17 128-135 Layer3 Picture 16 120-127 Layer3 Picture 15 112-119 Layer3 Picture 14 104-111 Layer3 Picture 13 096-103 Layer3 Picture 12 088-095 Layer3 Picture 11 080-087 Layer3 Picture 10 072-079 Layer3 Picture 09 064-071 Layer3 Picture 08 056-063 Layer3 Picture 07 048-055 Layer3 Picture 06 040-047 Layer3 Picture 05 032-039 Layer3 Picture 04 024-031 Layer3 Picture 03 016-023 Layer3 Picture 02 008-015 Layer3 Picture 01 000-007 Layer3 Picture 0	255 213 212 171 170 128 127 86 85 43 42 0 Picture Macro5 Picture Macro4 Picture Macro3 Picture Macro2 Picture Macro1 No movement	255 1 0 Center Offset Normal	
Ch18	Ch19	Ch20	Ch21	Ch22	Ch23
Picture Macro Center Rotation	Picture Macro X Zoom	Picture Macro Y Zoom	Picture Macro Zoom Macro	Picture Macro Rotation	Focus
255 194 193 190 189 128 127 0 Fast Slow Stop Slow Fast	255 52 51 0	255 52 51 0	255 215 214 213 172 171 170 129 128 48 47 0 Zoom Stop Fast Slow Stop Fast Slow	255 194 193 190 189 128 127 0 Fast Slow Stop Index	255 0 ▲ ▲ ● ●



①: Layer1 ②: Layer2 ③: Layer3

29 Channel (Mode2)					
Ch24	Ch25	Ch26	Ch27	Ch28	Ch29
Color mode	Screen Format	Mirror	Keystone	Source	Special Function
208-255 Mode5 156-207 Mode4 104-155 Mode3 52-103 Mode2 0-51 Mode1	208-255 Auto 156-207 4:3 104-155 19:16 (II) 52-103 19:16 (I) 0-51 1:1			192-255 VGA 128-191 S-Video 64-127 CVBS 0-63 BT 656 (SD Card)	240-255 No function 230-239 Lamp Off 210-229 No function 200-209 Reset all 180-189 Reset Focus 170-179 Reset Shutter 150-169 No function 140-149 Reset Pan/Tilt 130-139 Lamp On 080-089 Unable Blackout while Pan/Tilt Move 070-079 Enable Blackout while Pan/Tilt Move 000-069 No Function

8. Update Software

Download update file from our web site, follow the user manual of IU-01 to update the fixture via IU-01(not included).

9. 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 connected power and mains 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 to high voltage cables that may cause damage or interference to DMX interface circuit.

C. One of the channels is not working well

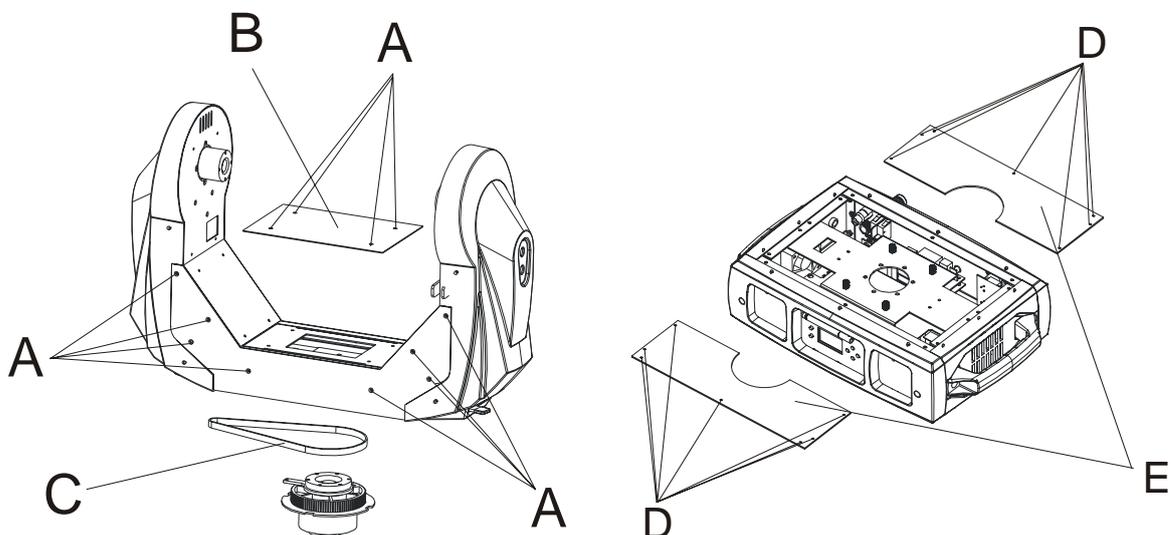
- 1.The stepper motor might be damaged or the cable connected to the PCB is broken.
- 2.The motor's drive IC on the PCB might be out of condition.

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.

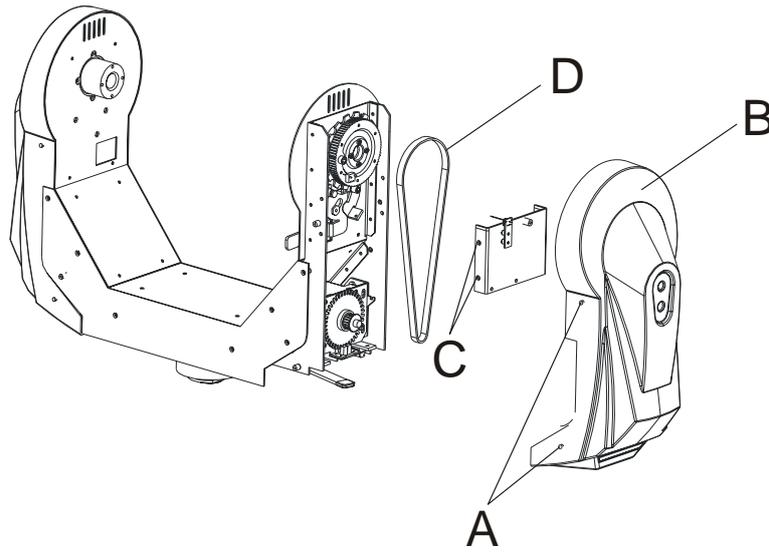
E. If The pan belt is broken

1. Turn off the mains power.
2. Loosen the screws (A) open the cover (B).
3. Loosen the screws (D) open the base-housing cover (E).
4. Unplug all the connect wires over the belt.
5. Change a new belt (C), put the belt around the axis gear and motor gear.
6. Plug all the connect wires back that upon the belt.
7. Tighten all the screws.



F. If The 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) that fix the bridge.
4. Change a new belt (D).
5. Reverse the procedures from step 3 to 2.



10. 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 30/60 days.

EC 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 2004/108/EC.

EN55103-1:1996; EN55103-2:1996;

EN61000-3-2:2006

EN61000-3-3:2008

&

Harmonized Standard

EN 60598-2-17: 1989 +A2: 1991

EN60598-1:2008+A11:2009

Part 1:General requirements and test

Following the provisions of the low voltage directive 2006/95/EC

