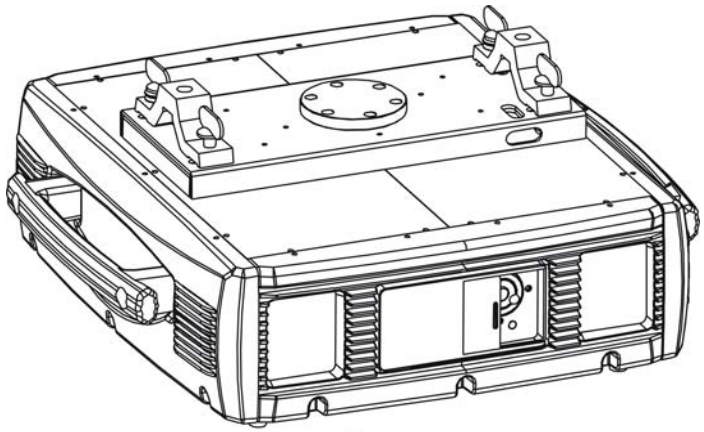
Stage AD Mover

SAM-50



User Manual

Please read the instructions carefully before use

TABLE OF CONTENTS

CAUTION!
Keep this device away from rain and moisture!
Unplug mains power before opening the housing!

1. Safety Instruction

WARNING:

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

The following points are important for safety as well as for the installation and performance.

- Unpack carefully and be sure that no damage has occurred during transportation.
- It is very important to ground the yellow/green conductor in order to meet regulations for safety.
- Do not connect the device to any dimmer pack.
- The electrical work that is necessary for installation must be made by qualified personnel.
- Be sure to locate the unit in a place with adequate ventilation at least 15 cm from the walls. Be sure that no ventilation slots are blocked.
- Be careful that no liquids or other objects can enter the unit. If this ever happens, disconnect the main power immediately.
- When malfunction, turn off the power immediately. Never try to repair the unit yourself that carried out by non-qualified personnel can lead to serious damage. Please contact your dealer for technical assistance.
- Always remember to unplug the unit before any repair service.

CAUTION!

The maximum load of the device is 50 kg !

Do not exceed this value.

2. Technical Specification

Power supply

- AC 120V~60Hz (US)
- AC 230/240/250V ~ 50-60Hz (EU)

Circuit break

- T15A

DMX Connection

- Input: 3-pin XLR socket
- Output: 3-pin XLR socket

Movement

- Pan: 360° in 2.8 second.
- Automatic pan homing correction.

DMX Channels

- Standard DMX 512 signal addressing
- Control by any universal DMX controller available
- 5 Channels:

Channel 1 = Pan position
Channel 2 = Pan fine
Channel 3 = Macro
Channel 4 = Speed
Channel 5 = Reset

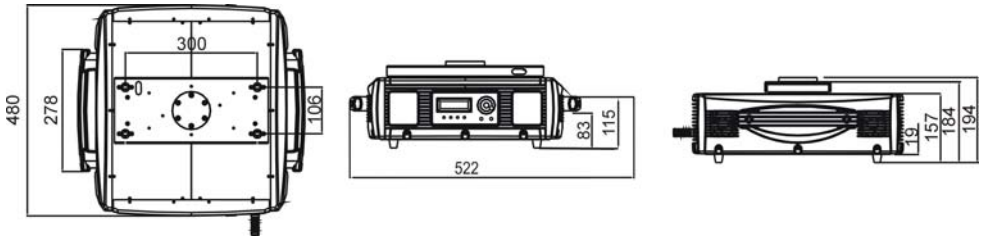
Macro

- 10 moving pattern for instant show
- Pan moving angle are selectable (continuum rotation , 30°, 45°, 60°, 90°, 120°, 180°, 270° & 360°)

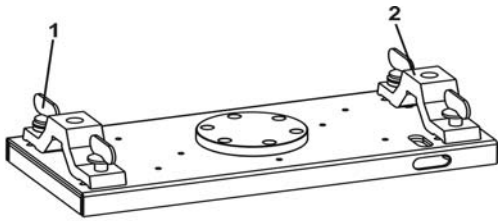
Max. Load : 50 kg

Dimension : 522x480x193 mm

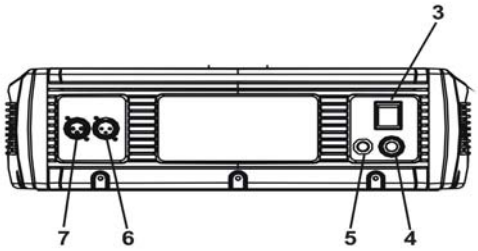
Weight : 16.8 kg



3. Description of the device

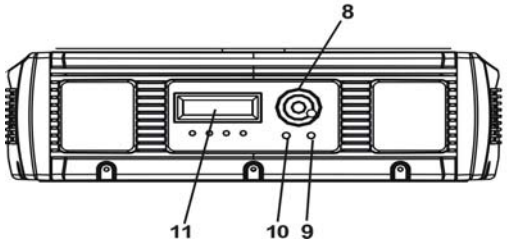


1. Quick-lock fastener
2. Omega clamp



Front panel of the fixture :

3. Power switch
4. Power cord
5. Circuit break
6. DMX input
7. DMX Output

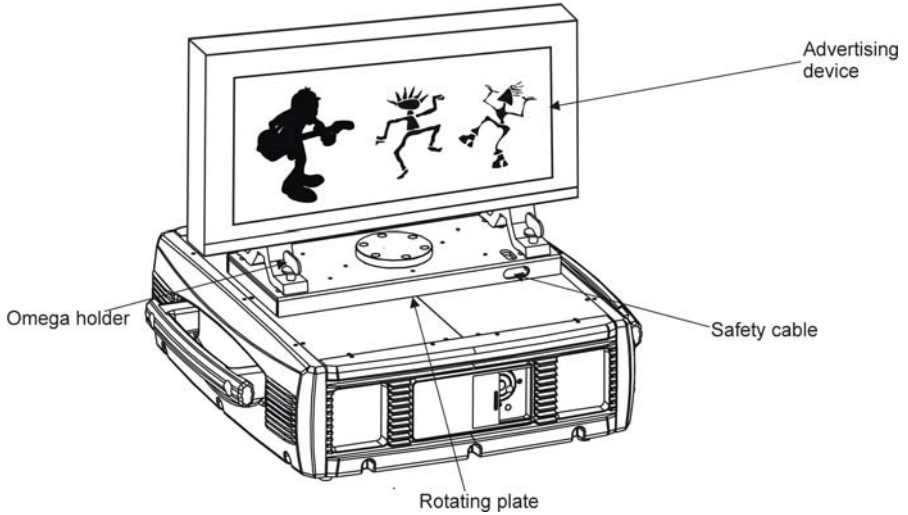


Rear panel of fixture

8. Jog wheel
9. Enter button
10. Esc button
11. LCD display

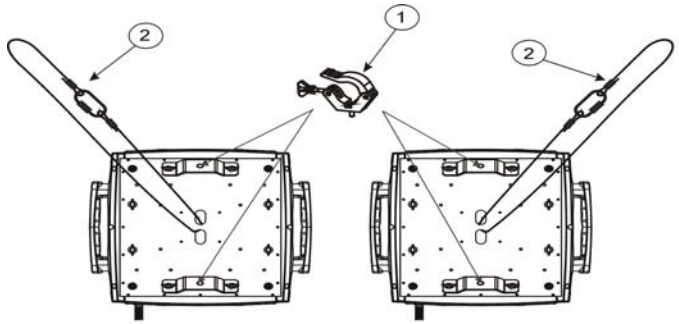
4. Installation

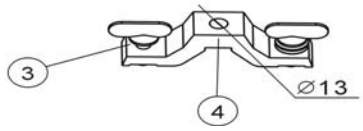
Possible Installation



Overhead installation:

1. Bolt each clamp (1) (not included) to the omega holder (4) with M12 bolt and lock nut through the hole in the holder.
2. Fasten the omega holders on the bottom of the base by inserting both quick-lock fasteners (3) into the holes of the base and tighten fully clockwise.
3. Fasten the safety cable (2) through the two apertures on the bottom of the base and over the trussing system.

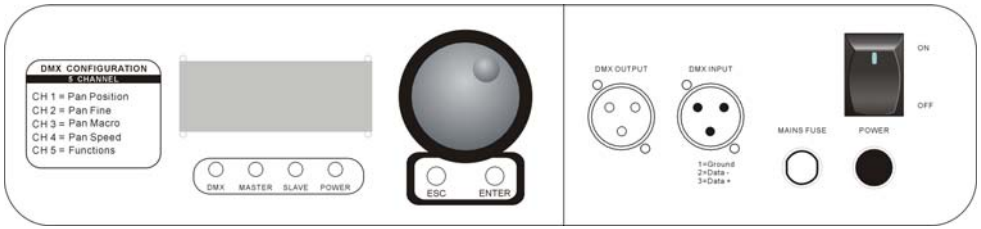




1-Clamp
2-Safety cable
3-Quick-lockfastener
4-Omega holder

5. How to Set the Unit

5.1 Control Panel



LCD MONITOR

To show the various menus

LED

DMX	On	DMX input
MASTER	On	Master mode
SLAVE	On	Slave mode
POWER	On	Indicating advertising device in active

Button

ESC	To go back to the previous function
ENTER	To confirm the selected function
JOG WHEEL	To select the given function

On/Off switch

Turns On/Off the power

Power cord

To connect the power plug

Circuit break

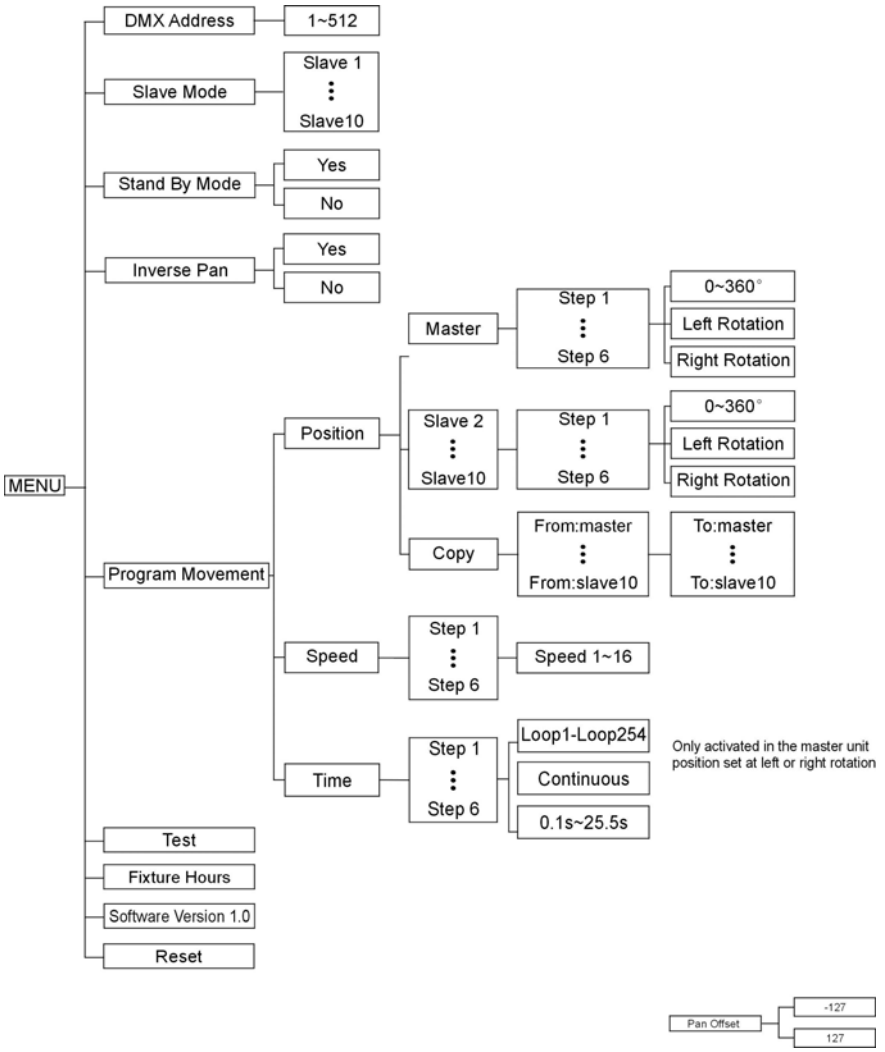
Protect the inner circuit from electrical damage.

DMX input/output

For DMX 512 operation, use 3-pin XLR plug cable to link the unit together.

5.2 Main Function

To select any functions, press **MENU** button until the required one is shown on the display. Select the function by **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the mode. Once the required mode has been selected, press **ENTER** button to setup or it will automatically return to the main functions without any change after idling 8 seconds. Back to the functions without any change press **MENU** button. The main functions are shown below:



DMX 512 Address Setting

Press **ENTER** button and turn jog wheel until **DMX Address** is shown on the monitor. Pressing **ENTER** button and the display will blink. Use jog wheel to change the DMX 512 address. Once the address has been selected, press **ENTER** button to setup or automatically return to the main functions without any change after 10 seconds. Back to the previous functions without any change press **ESC** button.

Slave Mode

Press **MENU** button until **Slave Mode** is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the (slave1~slave10) mode. Once the mode has been selected, press **ENTER** button to setup or automatically return to the main functions without any change after 10 seconds. Back to the functions without any change press **MENU** button again.

Stand By Mode

Press **MENU** button until **Stand By Mode** is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the (Yes) or (No) mode. Once the mode has been selected, press **ENTER** button to setup or automatically return to the main functions without any change after 10 seconds. Back to the functions without any change press **MENU** button again.

Inverse Pan

Press **MENU** button until **Inversion Pan** is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the (Yes) or (No) mode. Once the mode has been selected, press **ENTER** button to setup or automatically return to the main functions without any change after 10 seconds. Back to the functions without any change press **MENU** button again.

Program Movement

1. Press the **ENTER** button and turn jog wheel until **Program Movement** is shown on the monitor. Pressing **ENTER** button and the display will blink. Use jog wheel to select the (Position) or (speed) or (Time) mode.
2. Select the **Position** Pressing **ENTER** button and the display will blink. Use jog wheel to select the (Master) or (Slave 2~Slave 10) or (Copy).
3. Select the **Master** Pressing **ENTER** button and the display will blink. Use jog wheel to select the (Step1~Step6) mode. Select (Yes) option, Use jog wheel to select the 0~360°. Pressing **ENTER** button .Back to the main functions, press the **ESC** button twice.
4. Select the **Slave 2~Slave 10** Pressing **ENTER** button and the display will blink. Use jog wheel to select the (Step 1~Step 6) mode. Select (Yes) option, Use jog wheel to select the 0~360°. Pressing **ENTER** button .Back to the main functions, press the **ESC** button twice.
5. Select the **Copy** Pressing **ENTER** button and the display will blink. Use jog wheel to select the (From: Master To: Slave 10 or From: Slave 5 To: Slave 6 or etc) mode. Select (Yes) option and Pressing **ENTER** button. Back to the main functions press the **ESC** button twice.
6. Select the **Speed** Pressing **ENTER** button and the display will blink. Use jog wheel to select the (Step 1~Step 6) mode. Select (Speed 1~16) option and Pressing **ENTER** button. Back to the main functions press **ESC** button twice.
7. Select the **Time** Pressing **ENTER** button and the display will blink. Use jog wheel to select the (Step 1~Step 6) mode. Use jog wheel to select the (0.1s~25.5s). Select (Yes) option and Pressing **ENTER** button. Back to the main functions press **ESC** button twice.

Test

Press **MENU** button until **Test** is blinking on the display. Pressing **ENTER** button and the unit will run self-test by built in program. Back to the functions press **MENU** button again.

Fixture Hours

Press **MENU** button until **Fixture Hours** is blinking on the display. Pressing **ENTER** button and the display will show the number of working hours of the unit. Back to the functions press **MENU** button again.

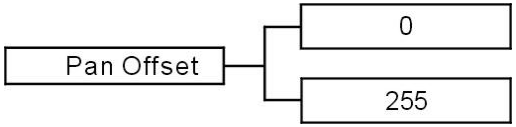
Software Version

Press **ENTER** button and turn jog wheel until **Software Version** is shown on the monitor. Pressing **ENTER** button and the display will blink. Use jog wheel to select the (A) or (B) or (C) or (D) mode. Once the mode has been selected, press **ENTER** button to setup or automatically return to the main functions without any change after 10 seconds. Back to the previous functions without any change press **ESC** button.

Reset

Press **MENU** button until **Reset** is blinking on the display. Pressing **ENTER** button and all channels of the unit will return to their standard position. Back to the functions press **MENU** button again.

5.3 Home position adjustment



Pan Offset

Press **ENTER** button for at least 5 seconds into offset mode, use jog wheel until **Pan offset** is shown on the monitor. Pressing **ENTER** button and the display will blink. Use jog wheel to adjust the pan home position. Once the position has been selected, press **ENTER** button to setup or automatically return to the offset functions without any change by press ESC button.

6. How to Control the Unit

The unit can be controlled by any universal DMX controller: No need to turn the unit off when you change the DMX address, as new DMX address setting will be effected at once. Every time you turn the unit on, it will show “SMM-50 resetting…” on the monitor and move the motors to it’s ‘home’ position and you may hear some noises for about 20 seconds. After that the unit will be ready to receive DMX signal.

6.1 Master/Slave Preprogrammed Function

When setting the series units in master/slave connection, the first one will be recognized as master role automatically. The master can cooperate with others linkages as salve to display automatic, sound activated synchronized light show. It provides an instant show without complicated setting. You have to programming the movement first. Its DMX input jack will have nothing plugged into it, and Its master LED will be constantly on. The other units will have to set in slave mode, Their DMX cables plugged into the DMX input jacks (daisy chain) and the slave LED lights will constantly on.

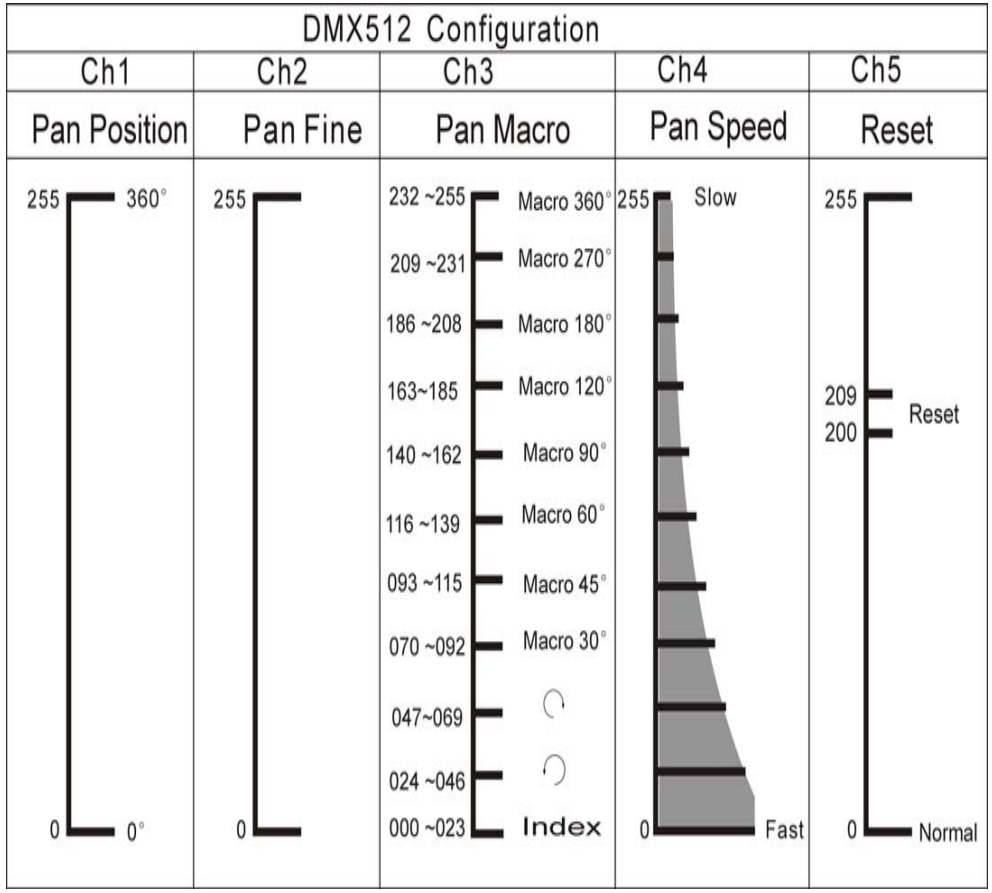
6.2 DMX Controller

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 until **DMX Address** is shown on the display. Pressing **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the DMX512 address. Once the address has been selected, press and keep **ENTER** button pressed until the display stops blinking or storing automatically 8 seconds later.

Please refer to the following diagram to address your DMX512 channel for the first 5 units.

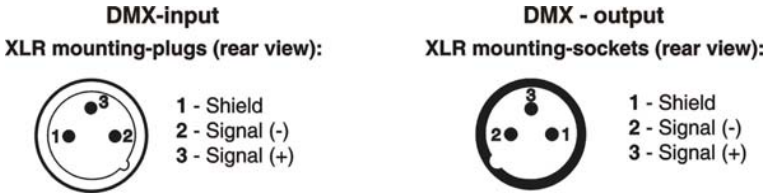
Fixture	Fixture1	Fixture 2	Fixture 3	Fixture 4
Start DMX address	1	6	11	16

6.3 DMX512 Configuration

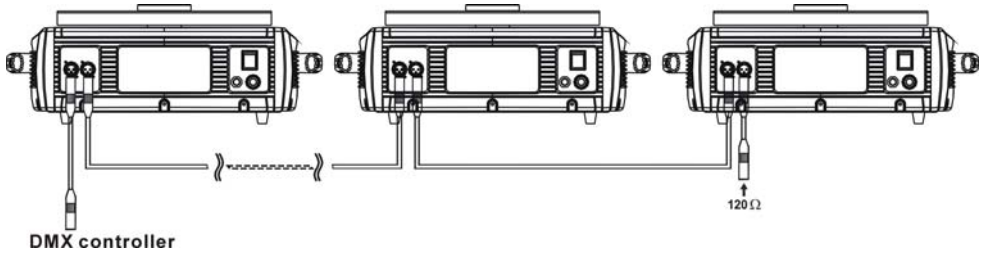


6.4 DMX 512 Connection

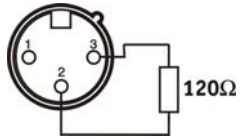
The fixture is equipped with 3-pin XLR sockets for DMX input and output. The sockets are wired in parallel. Only use a shielded twisted-pair cable designed for 3-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.



If you are using the standard DMX controllers, you can connect the DMX output of the controller directly with the DMX input of the first fixture in the DMX-chain. If you wish to connect DMX-controllers with other XLR-outputs, you need to use adapter-cables.



At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120Ωresistor between Signal (－) and Signal (＋) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.



7. Troubleshooting

DANGER !!

Disconnect from the mains before starting any maintenance work

Verify the power supply settings before applying power !

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. If the unit does not work, no light output, or fan is not working

1. Check main power connection and fuse.
2. Measure mains voltage on main power connector.
3. Check power on LED.

B. Not responding to DMX controller

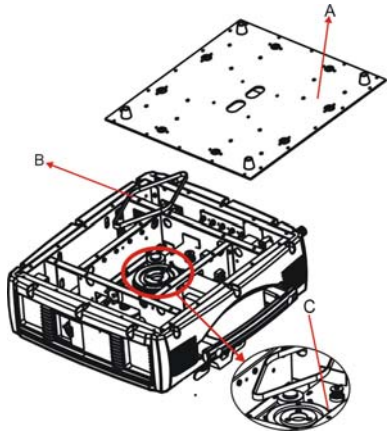
1. DMX LED should be on. Check DMX connectors and cables to see if link properly.
2. If DMX LED is on but no response to DMX signal, check the DMX address setting and DMX polarity.
3. If you have intermittent DMX signal problems, check the pin on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check DMX cables run near or run alongside to high voltage cables. It may cause damage or interference to DMX interface circuit.

E. One of the channels is not working well

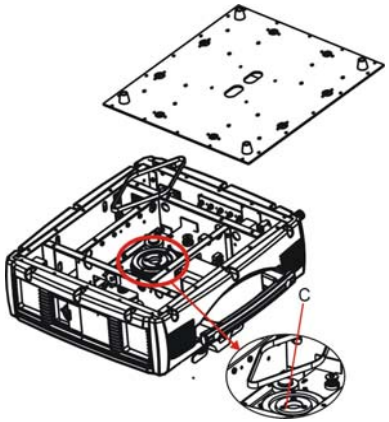
1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

D. If pan belt is broken

1. **Turn off main power.**
2. Unscrew all screws (A) and open the base-housing cover.
3. Unplug all connect wires.
4. Unscrew the screws (C) and remove the fixture head.
5. Change a new belt (B), put the belt around the axis gear and motor gear.
6. Screw the screws (C), and adjust the belt tension properly.
   Note: do not fix belt too tight as it is easy to rupture.
7. Plug all the connect wires back.
8. Screw all screws (A) and close the base-housing cover.



※ **Pay attention to the belt tension when install the belt.**



CAUTION !

Install the belt, Unscrew the screws (C) and remove the fixture head.

8. Maintenance and cleaning

- Internal and external must be carried out periodically to optimize machine operation.
- Cleaning frequency depends on the environment in which the fixture operates.
- Clean with soft cloth using normal cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days.

Innovation, Quality, Performance