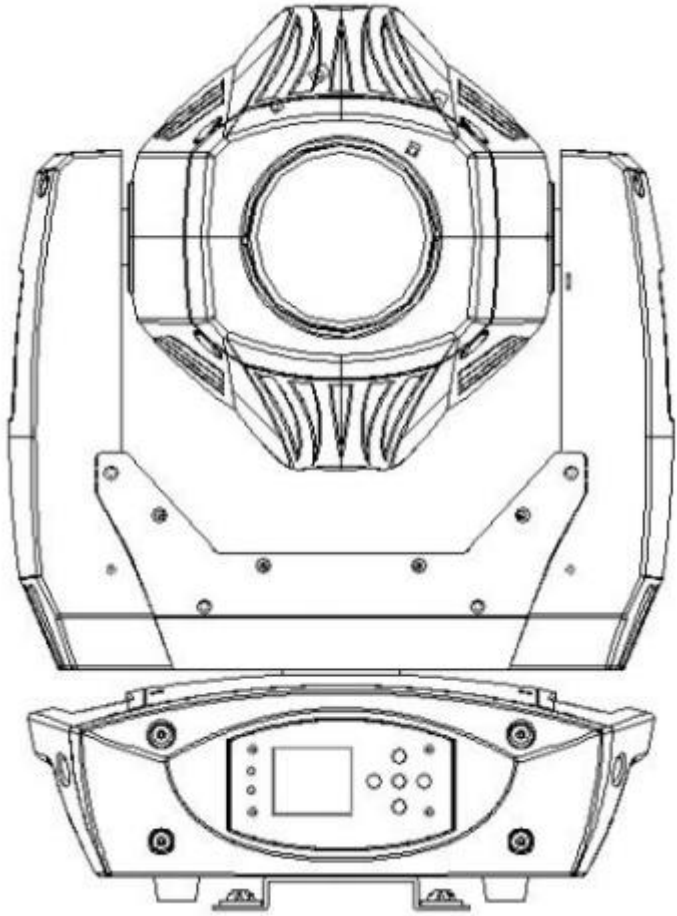
200w 3in1 led spot moving head



User manual

Please read the instructions carefully before use

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statement

The product has well capability and intact packing when leave factory. All of the user should comply with warning item and manual, any misuse cause of the damages are not included in our guarantee, and also can not be responsible for any malfunction & problem owing to ignore the manual.

1. Safety Instructions

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

- Unpack and check carefully there is no transportation damage before using the unit.
- 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.
- The unit is for indoor use only. Use only in a dry location.
- 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.
- Disconnect main power before replacement or servicing.

- Make sure there are no flammable materials close to the unit while operating as it is fire hazard.
- Use safety cable when fixes this unit. DO NOT handle the unit by taking its head only, but always by taking its base.

- Maximum ambient temperature is Ta: 40℃. DO NOT operate it where the temperature is higher than this Unit surface temperature may reach up to 85℃. DO NOT touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.

- In the event of serious operating problem, stop using the unit immediately.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. Always use the same type spare parts.

 DO NOT touch any wire during operation as high voltage might be causing electric shock.

Warning:

 To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
 DO NOT open the unit within five minutes after switching off.
 The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

Caution:

There are no user serviceable parts inside the unit. DO NOT open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

Installation:

The unit should be mounted via its screw holes on the 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 unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people.

2. Technical Specifications

Light Sources: 200W High Power White LED
Max Power Consumption: 290W
Power Input: 100-240V, 50/60Hz
LED Lifespan: 50000 hours
Operating mode: DMX512,Auto, Sound active, Master/slave
Channel mode: 18 DMX512 Channel
Pan: 540°(16bit) Electric correction
Tilt：270° (16bit) Electric correction
Color wheel:9 colors + open, with rainbow effect,speed adjustable
Fixed gobo wheel: 10 gobos + open, pattern shake effect, two-way rotation effect, speed adjustable
Rotation gobo wheel:7 gobos, pattern rotating effect, flow effect
Prism: 4 facet prism
0-100% linear dimming
Strobe: 0-25Hz/s, sync pulse strobe, random pulse stroboscopic,etc.
Frost: With frost effect
Zoom range:7°-21°
Display: 1.8 inch color screen
Over heat protection
IP level: IP20
Packing Size: 343*232*537mm
N.W：15kgs
Gross weight: 18kgs

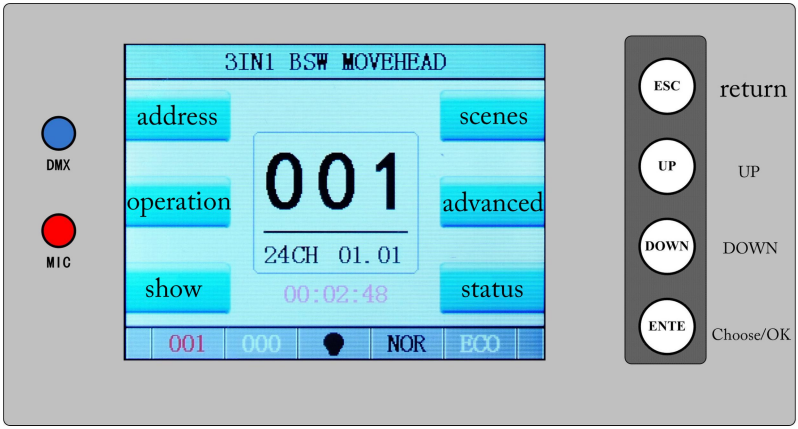
3. How To Control The Unit

Display panel operation

1. Overview

when the fault information is not viewed, the "ERR"is displayed, otherwise "NOR" is displayed
Fixture has DMX/RDM protocol, when the light is searched by RDM host, the panel displays “ RDM”, indicating that the light is enumerated normally.

Display and operate like "Android Operating System" and click on the corresponding item with your fingertips or blunt hard objects.
Note: Do not tap the display with sharp or sharp objects to prevent damage.



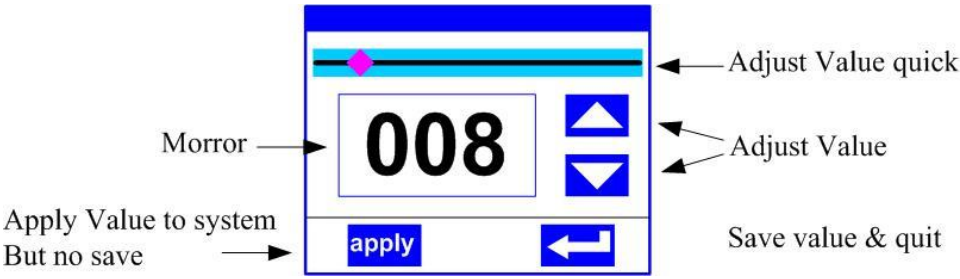
2. Operation

Set the menu by directly touching or typing

①. The left area is the TFT display and touch area, and you can click on the panel content with your finger or blunt surface hardware, which means you can complete things like parameter setting or view status.

②. The area on the right is the assisted input, which you can use to select the items you need to set up or view without using the touch feature that comes with TFT.

Argument numeric input



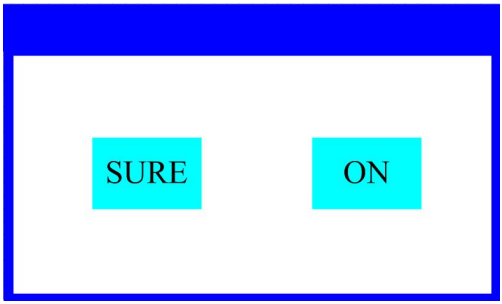
- ①. **Set the Value**: You can quickly set the desired value by pulling the slider directly, or you can click on the "up" or "down" button on the right to set the desired value precisely or set it with the assisted input.
- ②. **Apply value:** When the data is set by the "up" or "down" button, and then press the "apply" app key in the lower left corner, the value is immediately sent to the light, but the value is not saved.
- ③. **Save values:** At any time, click the OK key in the lower right corner to save the current value to the internal storage, and apply the saved value to the lamp next time you turn it on.

Set the Boolean parameter

- ①. When the set parameter is Boolean (such as ON or OFF),click directly on the corresponding item to switch parameter values, which are modified and saved to the internal storage. Press the parameter option on the right and the corresponding option will turn gray. When you release your hand, the parameters change and save. If pressing the parameter option is not the parameter you want to change, you can move your finger to another part of the screen and the parameters will

not change.

- ②. The determination of the important Boolean parameter is set by the determination window, as shown in Figure 5 below:



Sub-pages (parameters)

Figure 6-1 Address set

Figure 6-2 Run set

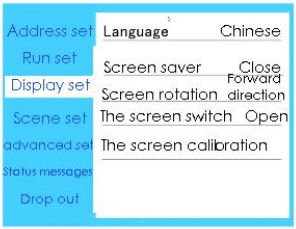


Figure 6-3 Display set

Figure 6-4 Scene set

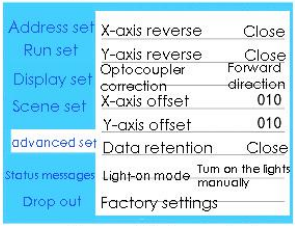


Figure 6-5 Advanced set

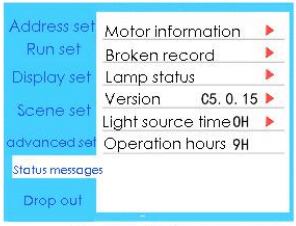


Figure 6-6 Status messages

3. Function operation and Parameter settings

- Go to the settings interface, as shown in Figure 6-1:

- In the main interface, you can enter the appropriate parameter settings by selecting six buttons.
- In the parameter settings interface, you can press the blue option on the left to quickly switch to a different settings interface.

4. Set the DMX address code

The DMX address, channel mode, and so on of the light can be set from the page shown in Figures 6-1.

The menu settings for the light optimize the setting of the address, and several settings for address codes are as follows:

- Select "previous" or "next", the lamp will be based on the current address code and channel data, automatically calculate the next or previous address code, can be quickly set;
- Click on the address code value to enter the value editing window, where you can set any valid address code, the lamp automatically obtains the current number of channels of the lamp, automatically filters the unusable address code(512- the current number of channels).
- The light supports the RDM protocol and can be remotely coded by RDM. Two buttons are available:
- Channel mode: different channel modes can be selected in a circular way;
- Light reset: Reset all motors.

5. Set the light operation model

The operating mode of the lamp and the control of the lamp gun can be set from the page shown in Figures 6-2. The light supports four operating modes(DMX mode, self-walking mode, voice control mode, and scene mode), and detailed parameter numerical settings are referred to in the previous section, as described in the table below:

Run mode

DMX mode	Console mode, receiving DMX signal,RDM signal	
Self-walking mode	The light run automatically according to the built-in program	
Voice mode	When a lamp detects a strong sound, the light automatically runs a scene according to the built-in program, otherwise the last scene is maintained	
Scene mode **01**	Runs as a set scene, supporting custom editing of up to 10 scenes	
	1~10	Output the specified scene
	automatic	The scene is automatically looped out in the set scene time (non-0) order, and the scene with a time of 0 is automatically skipped and ignored
Master-from-selection	When non-DMX mode takes effect, select the mode of the data output, and the light automatically detects the DMX status to automatically switch outputs to prevent data conflicts	
	host	The light operates as built-in, and if the DMX has no signal, the data is output (synchronized), otherwise the data is not output
	From the machine	The light operate as built-in and do not output data (other light out of sync)
	automatic	If the DMX has no signal, the light runs as built-in, otherwise the light operates on the DMX signal
Light bulb switch	(Light bulb light source) pops up the confirmation dialog box, selects "SURE" to confirm the current operation, on or off the bulb, and switches for a limited interval of 30 seconds	
	Shut down	The current bulb output is turned off
	Open	The current light output is on

Scene mode is suitable for a single or small number of light, just output a fixed scene, or need to run a simple program, you can not take the console,

edit in the scene page.

If the light light source is a light bulb, wait 10 minutes before turning on the bulb after turning it off.

6. Menu Structure

The light support Both Chinese and English, upside down displays, etc., and enter the parameter settings for the settings shown in Figures 6-3, as shown in the table below:

Show settings

language	Set the language that appears	
	English	Shown in English
	Chinese	Chinese display
Screen saver	Set what or how the screen will appear after no action has been performed for 30 seconds	
	Shut down	Keep the last action page, bright screen
	Mode 1	Turn off the screen
	Mode 2	Black screen, showing the address code of the current light in the lower left corner
	Mode 3	Displays trademark information, address codes, and operating modes
The screen rotates	Set the display direction of the screen	
	Shut down	The display is not reversed
	Open	Reverse the display
	automatic	Automatic detection of the direction of the lamp hanging lamp, automatically switching the display direction

DMX indicates	Set how the DMX signal indicator is indicated	
	Mode 1	When there is a signal, when there is no signal, it goes out
	Mode 2	When there is a signal, when there is no signal, it lights up
	Mode 3	Flashes when there is a signal and goes out when there is no signal
The signal indicates brightness	Set the brightness of the signal indicator	
	1~10	10 levels
Screen back lighting	Set the brightness of the screen backlight after 10 seconds of operation, when fully lit	
	1~10	10 levels
Touch switch	Choose whether to disable the touch screen, and when the screen touch is accidentally damaged, disable the touch function and set the lamp with the auxiliary input	
Touch correction	When the screen touch is inaccurate, you can go to the correction page correction screen	

Touch-enabled light, if there is a bad touch phenomenon, can go to the correction page to recalibrate the touch accuracy of the touch screen, under normal circumstances, do not enter this page. If the touch is damaged, select Disable the touch switch.

7. Scene mode

Go to the page shown in Figures 6-4, the lamp enters scene editing mode, under which the light does not receive DMX console data, and the edited data is immediately reflected on the lamp.

The contents of the page are determined by the channel currently selected, and the contents and order of the channels displayed are consistent with the light channel table, from which you can edit 10 scenes, as shown in the following table:

Scene mode

Scene selection	Select the scenario that you currently need to operate on	
	1~10	10 scene formatting
Scene time	Set the amount of time, in units 0.1 seconds, that the current scene is retained when it is automatic	
	0	The current scene does not participate in automatic scene output
	1-255	0..1 seconds to 25.5 seconds
1. X-axis	0-255	Set the data for each channel, which corresponds to the display content and order and the channel table of the light
……	0-255	
……	0-255	
N. function	0-255	

If you edit a valid reset data in the reset channel in the scene, the light resets, but after the reset, the value of the corresponding reset channel is automatically zeroed to prevent multiple consecutive resets.

By looking at this page, you can get the current channel table order of the light, and refer to the detailed channel description for the specific channel data.

8. Set the working parameters of the light

Go to the page shown in Figures 6-5 to adjust the field parameters of the lamp, facilitate the on-site installation of the lamp, etc. :

Advanced settings

The X-axis is reversed	Sets the direction in which the X-axis rotates	
	Shut down	Not in reverse
	Open	reverse
The Y-axis is	Sets the direction in which the Y axis rotates	

reversed	Shut down	Not in reverse
	Open	reverse
Optocoupling correction	Set whether the light detects XY strides and corrects them	
	Shut down	The position is not corrected after the step is lost
	Open	The position is automatically corrected after the step is lost and the stall fault is logged
X-axis offset	Set the position of the lamp X-axis zero	
	4-150	
Y-axis offset	Set the position of the lamp Y-axis zero	
	4-48	
Data retention	Set the output status of the luminaire without a DMX signal	
	Shut down	There is no signal, so the motor and light source return to their position and state when the reset is complete
	Open	No signal to maintain the last frame ofD MX data output
Turn on the light mode	Set how the bulb is turned on for the first time after it is powered on	
	Power on and open the bubble	Turn on the bulb when powered on and reset the lamp after 30 seconds
	Open after resetting	Power up 3 seconds after resetting the lamp, reset the completion of the light bulb
	Open the bubble manually	When the reset is complete, manually turn on the bulb through the menu or console
Factory settings	Pop up the confirmation box and select "SURE" and the light parameters return to the factory settings	

When selecting the power-on foaming mode, the lamp will wait for the bulb to start fully for 30 seconds after powering up, so that the bulb is fully

started, the internal voltage is stable enough, and then start the reset procedure, if the use of on-site electricity capacity is stable, it is recommended to turn on the light bulb mode.

When the light cannot correct the position, first check that Optocoupling Correction is turned off.

When the signal is unplugged, check the Data Hold setting first if the lamp is not positioned to output as envisaged.

9. View the current status of the light

Go to the page shown in Figures 6-6 to view the lighting information and real-time status to find out the status of the lamp's use, and if the lamp needs to be sold out, please provide the status information displayed on the page for judging, as shown in the following table:

Status information

Motor information	Displays the information status of all motors and signals in the light	
	Hall	Not displayed indicates that the motor is not corrected, 0 indicates that the motor is out of the correction position point, and 1 indicates that the motor is at the correction position point
	state	Displays the completion status of the motor reset
	X-axis	Display the real-time position value of the X-axis optocoupler feedback
	Y-axis	Displays real-time position values for Y-axis optocoupled feedback
	Optocoupled	Displays the level status of the X and Y axes optically coupled signals, binary
	Displays the last 8 fault records for lamp reset and runtime,	

Fault/status record	which are not saved after power-down, and are valid for the last power-up cycle	
	Fault data	The total number of faults detected after powering up
	12：:03	The power-up time, in minutes, at the time of the failure
	Hall fault	The motor did not detect a valid Hall signal when the motor was reset
	Hall short circuit	The Hall signal that detected the motor when the motor was reset has been valid
	ptocoupling failu	No valid optocoupled signal was detected when the corresponding motor was reset
	out of step	The corresponding motor is out of sync during operation
	Hit the pole	Hit the positioning lever when the motor is reset
	The bulb is faulty	The light bulb went out unexpectedly
	Sensor failure	The temperature sensor signal is not correct,
	Fan failure	The main fan is not working properly
The status of the lamp	Displays critical status data for the current light for reference	
	corresponden ce	0 to 100%, the communication quality of the internal data link of the lamp
	Error count	The number of error frames detected after power-up, cumulative
	The temperature of the light source	Displays the temperature of the current light source, and --- indicates no detection
	Display board temperature	Displays the temperature of the current display board or the ambient temperature nearby

	Sensor 1 temperature	Displays the current board temperature or the ambient temperature at the board installation location
Version information	Displays information and version of the current I, an important reference for after-sales maintenance	
	equipment	The name of the light is the same as the device information of the RRDM
	Model	The model number of the light is the same as the model information of the RRDM
	The display board	The firmware version and serial number of the display board
	Motherboard 1	The firmware version and serial number of Motherboard 1
Light source time	Record the total cumulative time of the light source on, unit minutes, the user manually cleared, as the light source regular maintenance time reference	
Lamp time	Record the total cumulative time spent on the lamp, unit minutes, can not be cleared	

10. Channel Table

This light channel can view the order in scene mode, which is set on the Address Settings page, as shown in the table below:

Channel table

Channel 1	name	numeric value	description
CH1	**Pan**	0-255	0-540 degrees
CH2	**Pan fine**	0-255	0-2 degrees
CH3	**Tilt**	0-255	0-270 degrees

CH4	**Tilt fine**	0-255	0-1 degrees
CH5	**Pan/Tilt speed**	0-255	From fast to slow
CH6	**Dimmer**	0-255	0-100% dimming
CH7	**Strobe**	0-3	Turn off the light
		4-99	Strobe from slow to fast pulse
		100-199	Strobe from slow to fast gradient
		200-249	Random strobe from slow to fast
		250-255	Light on
CH8	**Color**	0-199	Linear color
		200-226	Flowing in the direct direction from fast to slow
		227-229	Stop it
		230-255	Flow from slow to fast reverse
CH9	**Static gobo wheel**	0-4	white light
		5-9	Pattern 1
		10-14	Pattern 2
		15-19	Pattern 3
		20-24	Pattern 4
		25-29	Pattern 5
		30-34	Pattern 6
		35-39	Pattern 7
		40-44	Pattern 8
		45-49	Pattern 9
		50-54	Pattern 10
		55-64	From slow to fast jitter pattern 1
		65-74	From slow to fast jitter pattern 2
		75-84	From slow to fast jitter pattern 3
		85-94	From slow to fast jitter pattern 4
		95-104	From slow to fast jitter pattern 5

		105-114	From slow to fast jitter pattern 6
		115-124	From slow to fast jitter pattern 7
		125-134	From slow to fast jitter pattern 8
		135-144	From slow to fast jitter pattern 9
		145-154	From slow to fast jitter pattern 10
		155-202	Flowing in the direct direction from fast to slow
		203-206	Stop it
		207-255	Flow from slow to fast reverse
CH10	**Rotation gobo wheel**	0-9	white light
		10-19	Pattern 1
		20-29	Pattern 2
		30-39	Pattern 3
		40-49	Pattern 4
		50-59	Pattern 5
		60-69	Pattern 6
		70-79	Pattern 7
		80-89	From slow to fast jitter pattern 1
		90-99	From slow to fast jitter pattern 2
		100-109	From slow to fast jitter pattern 3
		110-119	From slow to fast jitter pattern 4
		120-129	From slow to fast jitter pattern 5
		130-139	From slow to fast jitter pattern 6
		140-149	From slow to fast jitter pattern 7
		150-159	Shake the white light from slow to fast
		160-206	Flowing in the direct direction from fast to slow
		207-210	Stop it

		211-255	Flow from slow to fast reverse
CH11	**Rotation gobo rotates**	0-127	0-400 degrees
		128-190	Flowing in the direct direction from fast to slow
		191-192	Stop it
		193-255	Flow from slow to fast reverse
CH12	**Prism 1**	0-127	Remove the prism
		128-255	Insert Prism 1
CH13	**Prism 1 rotation**	0-127	0-400 degrees
		128-190	Flowing in the direct direction from fast to slow
		191-192	Stop it
		193-255	Flow from slow to fast reverse
CH14	**Frost**	0-127	not
		128-255	atomization
CH15	**Focus**	0-255	From far to near
CH16	**Zoom**	0-255	From small to large
CH17	**retain**		
CH18	**function**	251-255	Reset all in more than 5 seconds

11.Notes on the use of RDM

The RDM is an extended version of the DMX512-A protocol, theRemote DeviceManagementprotocol, and the traditional DMX512 protocol communication is one-way communication, based on the RS-485 bus,RS-485 is a time-sharing multipoint, half-duplex protocol, allowing only one port to be output for the host at the same time, so there are a few things to note when using RDM

- To use a console or host device that supports the RDM protocol host;
- To use a bidirectional signal amplifier, the traditional one-way signal

amplifier does not apply to the RDM protocol because the RMD protocol requires feedback data, and the use of a one-way amplifier blocks the returned data, resulting in a search for light;

- All light must be set to DMX mode to ensure that there is only one host on the signal line;
- Terminals 2 and 3 of the terminal plug must be inserted between a 120ohm impedance matching resistor, when the signal line is longer, reduce signal reflection will use differential signal more stable, conducive to the quality of communication;
- When a light is controlled by DMX, but cannot R DM search for the light, check the signal amplifier first, and then check the signal line 2and3 lines for poor contact.

4. Trouble shooting

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

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if link 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 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.

5. 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 using normal glass cleaning 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.