

# **JUBARIS BEAM 551**

## **(SPL-MHL-551IP)**

Version 1.0



## **USER MANUAL**

- Be sure to read the **USER MANUAL** carefully before using this product.
- Be sure to keep the **USER MANUAL** properly for future needs.
- Use this product correctly when you can fully understand the User Manual.

# CONTENT

1. SAFETY INSTRUCTIONS .....	- 1 -
IMPORTANT: .....	- 1 -
2. UNPACKING .....	- 3 -
3. TECHNICAL SPECIFICATIONS .....	- 4 -
4. PHOTOMETRIC DIAGRAM .....	- 5 -
5. OPERATION INSTRUCTIONS .....	- 5 -
6. INSTALLATION .....	- 6 -
NOTICE BEFORE INSTALLATION: .....	- 6 -
INSTALLATION DIAGRAM: .....	- 6 -
PROCEDURES: .....	- 6 -
7. DMX CONNECTION .....	- 7 -
8. DISPLAY AND OPERATION .....	- 9 -
SCENE SET INSTRUCTION: .....	- 10 -
INFORMATION: .....	- 11 -
ERROR MESSAGE DESCRIPTION: .....	- 12 -
9. DMX CHART .....	- 13 -
16-CHANNEL & 20-CHANNEL MODE: .....	- 13 -
10. CLEANING AND MAINTENANCE .....	- 16 -
11. TROUBLESHOOTING GUIDE .....	- 16 -

## 1. SAFETY INSTRUCTIONS

Thanks for choosing our JUBARIS BEAM 551 (SPL-MHL-551IP), for your safety and product longevity please read the user manual carefully **BEFORE YOUR INITIAL START-UP!**

### **CAUTION!**

**Be careful with your operations.**

**With a high voltage equipment you can suffer a dangerous electric shock when touching the wires!**

This product has left our warehouse in absolutely perfect conditions. In order to maintain this condition and to ensure a safety operation, it is absolutely necessary for the user to follow the safety instruction and warning notes written this manual. Our company reserves the right to interpret the matters outlined in this manual.

### **IMPORTANT:**

- If you sell the unit to another user, be sure that they also receive this instruction manual.
- Important: The manufacturer and its dealers will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.
- Unpack and check carefully to ensure that there is no transportation damage before using the unit.
- Check the IP level of our products. IP20 products is not suitable for wet locations. Keep this device away from rain and moisture! IP 65 products are allowed to use in wet conditions, but DO NOT immerse in water! When not in use, keep the fixtures in a dry and clean place.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain (made of steel, min. diameter 4.0mm) when fixing the unit.
- Handle the unit by carrying its base instead of head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the fixture to earth in order to avoid electric shock.
- Minimum ambient temperature: -10°C. Maximum ambient temperature: 40°C. Do not operate this product at a lower or higher temperature.
- During the operation the housing becomes hot. Unit's surface temperature may reach up to 70°C. Allow the fixture to cool approximately 20 minutes prior to manipulate with it. DO NOT touch the housing bare-handed during its operation.
- DO NOT connect the device to any dimmer pack.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.
- Warning! Always disconnect power input cable to completely remove power from unit when not in use or before cleaning or servicing the fixture.
- DO NOT operate in a 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.
- Only handle the power cable by the plug. Never pull out the plug by tugging the power cable.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/surface must be more than 4 meters.
- 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 housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this unit if it becomes damaged.
- DO NOT attempt any repairs yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- When you need to change the lamps and fuses, always use same type and rating only.
- DO use the original packaging if the device is to be transported.
- Check that the head tilt lock is released before packing for transportation.
- Avoid direct eye exposure to the light source while the product is on.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.
- For all moving head lights, external sources of light beams from direct sunlight or any other strong light source, which penetrate the front lens of lighting fixtures, can cause severe internal damage.
- DO NOT expose the fixture front lens to light beams from direct sunlight or any other strong light source from any angle while unpacking, installation, use, and extended idle times outdoors. DO NOT focus a light beam from one lighting fixture directly towards another.

## **2. UNPACKING**

The JUBARIS BEAM 551 (SPL-MHL-551IP) adopts a 420w lamp which features high brightness and stability, with waterproof function, ideal for outdoor use. When you receive the fixture, please carefully unpack it and check whether the following items are included inside of the box(In case of any damage or missing items please contact your dealer or manufacturer):

- JUBARIS BEAM 551 (SPL-MHL-551IP) \* 1
- POWER CABLE \* 1
- DMX CABLE \* 1
- USER MANUAL \* 1

### 3. TECHNICAL SPECIFICATIONS

#### ELECTRICAL

- Input power:AC100-240V
- Power frequency:50/60Hz
- Power consumption: 530W

#### LIGHT SOURCE

- Source: 420w Lamp
- Average lifespan: 3000hours

#### COLOR SYSTEM

- Color wheel:14 static colors + open

#### ELECTRONICS

- Linear dimming:0-100% Linear Dimmer
- Strobe:1-25Hz

#### OPTICS

- Beam Angle:1.4 °

#### DYNAMICS EFFECTS

- Prism1: 8-facet +16-facet rotatable prism

- Prism2 :16-facet rotatable prism
- Gobo:17 static Gobo+open
- Color:14 color + open, split color, rainbow, frost

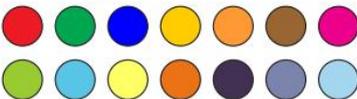
#### CONTROL

- DMX channels:16/20CH
- DMX connector: 5-Pin XLR input and output (or 3-Pin with cable)
- Power connector: Tru1 input
- Control mode:DMX/Master-Slave/Auto/Sound
- Pan: 540°,16bits scanning
- Tilt:270°, 16bits scanning
- LCD color display with 4 buttons

#### PHYSICAL

- IP Rating:IP65
- Housing color: black
- Working ambient temp.: -10°C to 40°C (-14°F to 104°F)
- Dimensions:445x280x730mm/17.5\*11\*28.74in
- Weight:30.5kg/67.24lb

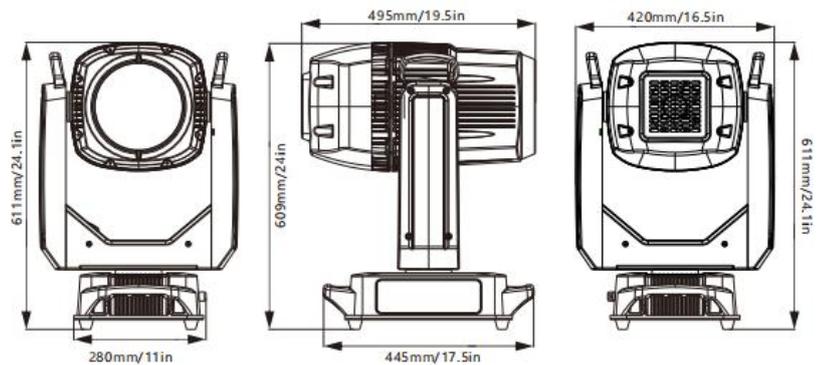
Color Wheel



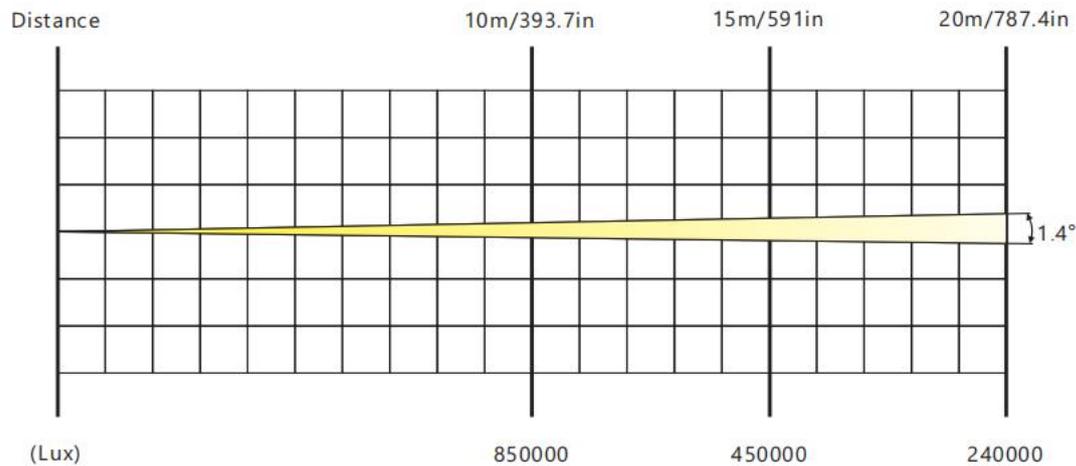
Rainbow Effect



Static Gobo



## 4. PHOTOMETRIC DIAGRAM



## 5. OPERATION INSTRUCTIONS

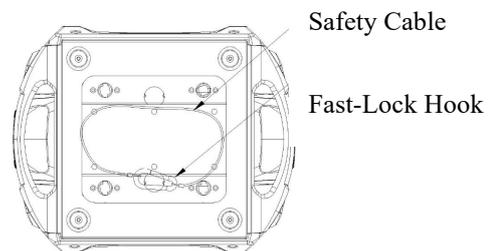
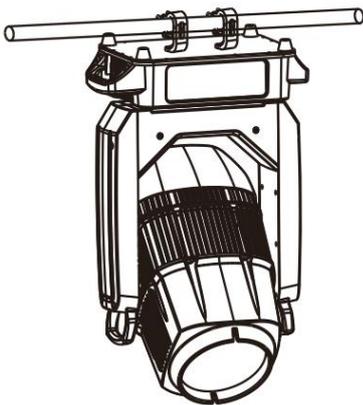
- The JUBARIS BEAM 551 (SPL-MHL-551IP) is for beam effect for on-site decoration purpose.
- Please inspect the product before installation. If you notice any defects, contact the dealer or manufacturer immediately.
- Read this user manual before installation, follow safety and operation instruction in it.
- Allow the fixture to acclimate to room temperature before turning it on, especially after transportation or exposure to significant temperature changes. Operating the light immediately could cause damage due to the sudden environmental shift.
- This light should be protected from shock, strong vibrations or shaking during transportation, movement and installations.
- Do not lift the light by the head alone, as this may cause damage to the mechanical parts.
- Do not expose the fixture to excessive moisture, or dusty environments during installation. Avoid laying power cables on the floor to prevent potential electric shock.
- The applicable temperature for the fixture is between  $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  ( $-14^{\circ}\text{F}$  to  $104^{\circ}\text{F}$ ).
- Please ensure that the environment is in good and safe condition for proper installation and usage.
- Ensure the fixture is operated by qualified personnel who are familiar with its use.
- Keep the original packaging in case a second shipment is needed.
- Please avoid opening or attempting to repair the fixtures without the manufacturer's instructions or guidance from its authorized repair agencies.
- Warranty coverage does not apply to malfunctions resulting from improper use, such as failing to follow the user manual, or engaging in unauthorized operations, including electrical short circuits, electric shocks, or broken lamps. Please refer to our warranty policies for more details.
- Be careful with fire, heat, and electric and fall-off that make heavy fatal injury.
- It is recommended to turn off the fixtures if they have been in use for more than 8 hours.

## 6. INSTALLATION

### NOTICE BEFORE INSTALLATION:

- This fixture is not suitable for direct installation on flammable surfaces. Please ensure that the fixture is kept at least 0.5 meters away from any materials that can catch fire.
- Use a safety cable to ensure security by always threading it through the fast-lock holes and locking the fast-lock hook properly.
- The fixture operates within a temperature range of  $-10^{\circ}\text{C}$  to  $40^{\circ}\text{C}$  ( $-14^{\circ}\text{F}$  to  $104^{\circ}\text{F}$ ). Avoid using the lighting outside this temperature range.
- The truss used for hanging the fixture should be capable of supporting at least 10 times the weight of the fixture without any deformation after one hour.
- Do not stand under the fixture during installation, uninstallation, movement, or repair.
- Ensure the light is connected properly, and have a professional technician verify the electrical data before installation.
- Have a professional technician inspect the fixture and its installation annually.

### INSTALLATION DIAGRAM:



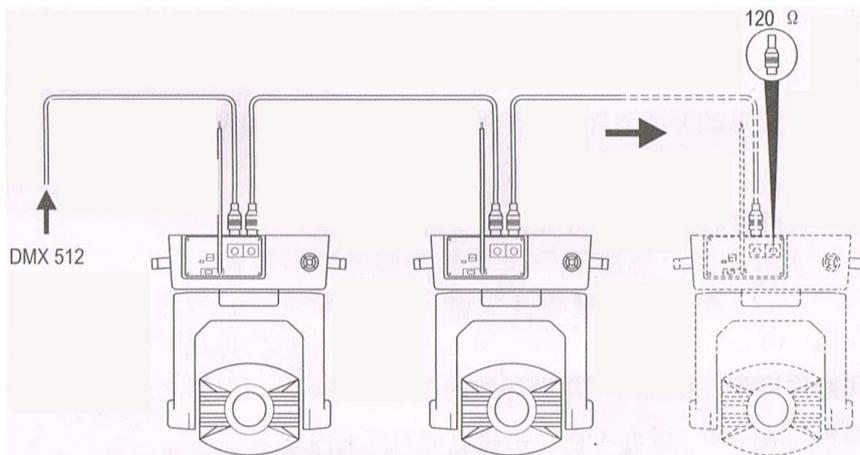
### PROCEDURES:

- Carefully hold the fixture upside down by its base, unfold the two integrated clamps at the bottom, and rotate one of the clamps to the desired direction.
- Hang the clamps onto the truss and tighten the screw.
- Thread a safety cable through the hole in the base, secure it to the truss, and properly lock the fast-lock mechanism.
- Notice: Always use and install a safety cable to prevent accidental damage and/or in case of clamp failure.

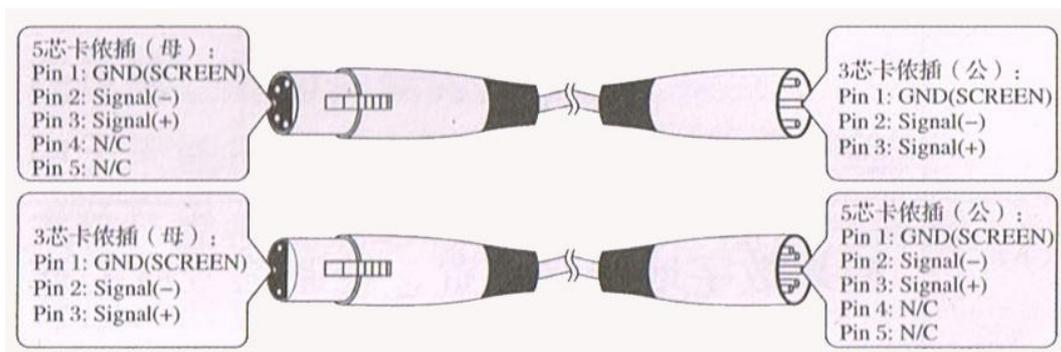
## 7. DMX CONNECTION

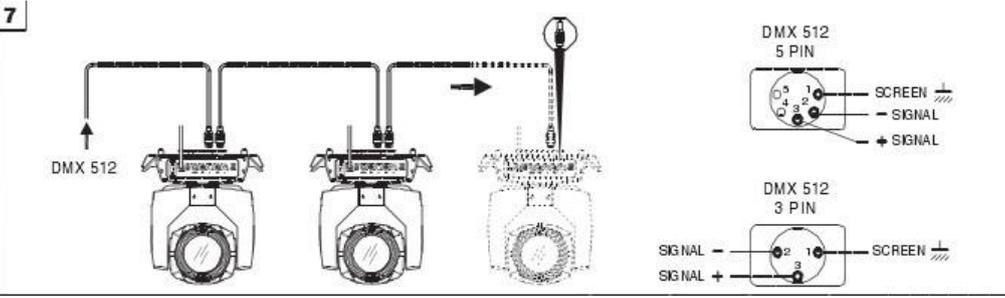
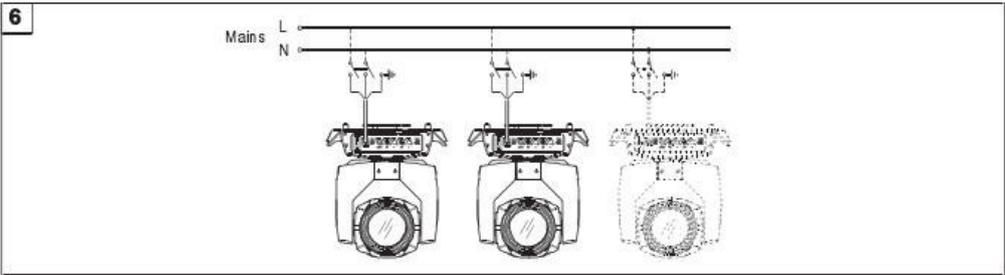
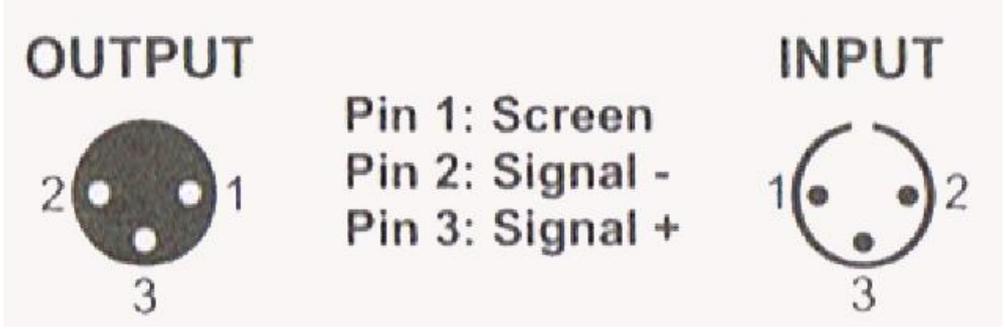
Connect one end of the provided DMX cable to the 3-Pin or 5-Pin XLR output of your console, and the other end to the 3-Pin or 5-Pin XLR input of the first light fixture. Then, use another DMX cable to connect the DMX output of the first fixture to the DMX input of the second fixture, continuing this process until all fixtures are connected. It is recommended to use a DMX terminator at the output of the last fixture if it exceeds more than 10 fixtures in a line.

Please refer to the diagram below:



This product may come in 3-Pin or 5-Pins, so please check the pins on the DMX input and output. If the DMX cable does not match with them, you will need a 3-Pin to 5-Pin converter to connect them.





## 8. DISPLAY AND OPERATION

PASSWORD : DOWN-DOWN-UP-UP



DMX	DMX signal indicator
ERR	Error indicator
UP	Up
DOWN	Down
MENU	Goes to different functions
ENTER	Confirm button
Time (Left)	System total runtime
Time (Right)	Current power-on duration
Dot (Upper Right)	Green: Status OK, no errors
	Red: There is an error (click the icon or "Information Menu/Error Information/View" to view the error

### MENU SETTING:

PASSWORD to enter into Menu: **DOWN-DOWN-UP-UP**

PASSWORD to enter into Advanced Setting or Factory Setting: **UP-DOWN-UP-DOWN**. DO NOT change these settings without authorization, you may affect your fixture!

Option	Function	
Run Mode	DMX	Slave unit: Receives DMX signal from console or master unit
		Master unit:Auto-run and send signal to slave unit
	Scene	
	Auto	
Sound		
Scene Set		Can manually configure up to 20 scenes
DMX Address	1~512	Press the "OK" button to enter editing mode. Use the "Up" and "Down" keys to adjust the hundreds digit of the address code. Press "OK" again to move to the tens digit, and press "OK" once more to select the units digit for editing. Press the "OK" button one final time to exit editing mode.
Lamp	Off	Light off
	On	Light on
Devise Reset	Off	

	On	Reset light
Channel Mode	16CH	16-channel mode
	20CH	20-channel mode
Language	English	English
	Chinese	Chinese
Screen Rotation	Off	“Invert display”function off
	On	“Invert display”function on
Invert Pan	Off	
	On	X-axis rotate 180 degrees
Invert Tilt	Off	
	On	Y-axis rotate 180 degrees
Pan-Tilt Swap	Off	
	On	Exchange channels of Pan & Tilt (including Pan fine and Tilt fine)
Pan-Tilt Encoder	On	Use the encoder (optocoupler) to detect any step loss and automatically correct the position.
	Off	Turn off the encoder function
DMX Signal	Keep	Continue running in the original state
	Clean	Motor returns and stops running
Lamp On	Off	
	On	Set light "on" at startup
Linear Color	On	Color wheel linear change
	Off	Color wheel non-linear change, half color change
Clear Scene Data		Clear scenario data
Load Default	On	
	Off	After pressing the "OK" button, a confirmation dialog box will appear. Press "OK" again to restore the default settings.

**SCENE SET INSTRUCTION:**

<b>OPTIONS</b>	<b>FUNCTIONS</b>
Scene Select	Select from scene 1 to scene 20
Scene time	Set the scene runtime, maximum 255 seconds
Auto Run	The default setting is "on," meaning it will execute automatically. If set to "off," it will skip the current scene and proceed to the next one.
1. Color	
2. Shutter/Strobe	
3. Dimmer	
4. Gobo	
5. Prism 1	

6. Prism 1 Rotation	
7. Prism 2	
8. Prism 2 Rotation	
9. Focus	
10. Pan	
11. Pan Fine	
12. Tilt	
13. Tilt Fine	
14. Pan-Tilt Time	
15. Frost	
16. RFU	

**INFORMATION:**

OPTIONS		FUNCTIONS
Ver		Software version
DIS		Display software version
FAN		Fan software version
MT		Motor software version
Temperature		30
Time Information	1. total lamp on time	Record the total lamp-on time
	2. total light work time	Record the total working time of the fixture
Fan Monitor		Fan monitoring
System Warning		If the red ERR indicator light is on, it indicates that the light is running incorrectly. Detailed information can be viewed from this sub interface. After viewing, you can press the "Clear" button to clear the error records.
Hall State	11100010	When magnetic is detected, it is 0; otherwise, it is 1
Panwheel Step		When run in normal direction, the step value should increase, and when run in the reverse direction, the step value should decrease. The value remains normal every time you go to the same point.
Tiltwheel Step		When run in normal direction, the step value should increase, and when run in the opposite direction, the step value should decrease. The value remains normal every time you go to the same point
Authority Hours		9999 without encryption; Other numerical values can be used with encrypted time

**ERROR MESSAGE DESCRIPTION:**

<b>Common Error Messages</b>		<b>Description</b>
Motor board connection error		The motor board does not respond. There is a problem with the serial communication line connecting the display board and the motor board, or there is a problem with the motor board.
X axis reset error		There is a problem with the X-axis photoelectric switch, X-axis motor, or motor board
Y axis reset error		There is a problem with the Y-axis photoelectric switch, Y-axis motor, or motor board
X axis hall error		X-axis Hall or motor board issues
Y axis hall error		Y-axis Hall or motor board issues
Color wheel reset error		Color wheel Hall or color wheel motor problem
Gobo wheel reset error		gobo wheel Hall or gobo wheel motor problem
Focus reset error		Problem with focusing Hall or focusing motor
Lamp control error		Failure to light up or extinguish bubbles, problem with the bulb or bulb ballast
Correction	download data	After replacing the display board, download the calibration data of the original display board from the motor board
	X-axis	After entering the sub interface, the reset positions of the X-axis, Y-axis, and other motors can be adjusted to compensate for hardware installation errors. The adjustment range is -128 to+127, with+0 indicating no adjustment.
	Y-axis	
	Color	
	Gobo	
	Focos	
	Dimmer	
	Prism 1 zero point	
	Prism 1 stroke	
	Prism 2 zero point	
	Prism 2 stroke	
	Frost zero point	
	Frost stroke	
	Zeroing	
		on, Data recovery defaults
	X hall	off, X hall error reporting off
		on, X hall error reporting on
	Y hall	off, Y hall error reporting off
		on, Y hall error reporting on
	Half power	Off, no half power
	On, have half power	

## 9. DMX CHART

### 16-CHANNEL & 20-CHANNEL MODE:

20CH	16CH	Function	Value	Details
1	1	Color whee	000-004	White
			005 -009	White+Color 1
			010 - 014	Color 1
			015 - 019	Color 1+color 2
			020 - 024	Color 2
			025 - 029	Color 2+color 3
			030 - 034	Color 3
			035 - 039	Color 3+color 4
			040 - 044	Color 4
			045 - 049	Color 4+color 5
			050 - 054	Color 5
			055 - 059	Color 5+color 6
			060 - 064	Color 6
			065 - 069	Color 6+color 7
			070 - 074	Color 7
			075 - 079	Color 7+color 8
			080 - 084	Color 8
			085 - 089	Color 8+color 9
			090 - 094	Color 9
			095 - 099	Color 9+color 10
			100 -104	Color 10
			105 -109	Color 10+color 11
			110 -114	Color 11
			115 -119	Color 11+color 12
			120 -124	Color 12
			125-129	Color 12+color 13
			130 -134	Color 13
			135 -139	Color 13+color 14
			140- 144	Color 14
			145- 149	Color 14+White
150- 200	Rotation forward (from fast to slow)			
201- 255	Rotation backward (from slow to fast)			
2	2	Strobe	000-003	Shutter closed
			004-103	Strobe from slow to fast
			104-107	Open the shutter →(controlled by the dimming channel)
			108-207	Pulse strobe from slow to fast
			208-212	Open →(controlled by the dimming channel)

			213-251	Random strobe from slow to fast
			252-255	Open → (controlled by the dimming channel)
3	3	Dimmer	000-255	Dimmer from dark to bright
4	4	Gobo wheel	000 - 004	White
			005 - 009	Gobo 1
			010 - 014	Gobo 2
			015 - 019	Gobo 3
			020 - 024	Gobo 4
			025 - 029	Gobo 5
			030 - 034	Gobo 6
			035 - 039	Gobo 7
			040 - 044	Gobo 8
			045 - 049	Gobo 9
			050 - 054	Gobo 10
			055 - 059	Gobo 11
			060 - 064	Gobo 12
			065 - 069	Gobo 13
			070 - 074	Gobo 14
			075 - 079	Gobo 15
			080 - 084	Gobo 16
			085 - 089	Gobo 17
			090 - 094	Gobo 1 shake slow to fast
			095 - 099	Gobo 2 shake slow to fast
			100 - 104	Gobo 3 shake slow to fast
			105 - 109	Gobo 4 shake slow to fast
			110 - 114	Gobo 5 shake slow to fast
			115 - 119	Gobo 6 shake slow to fast
			120 - 124	Gobo 7 shake slow to fast
			125 - 129	Gobo 8 shake slow to fast
			130 - 134	Gobo 9 shake slow to fast
			135 - 139	Gobo 10 shake slow to fast
			140 - 144	Gobo 11 shake slow to fast
			145 - 149	Gobo 12 shake slow to fast
150 - 154	Gobo 13 shake slow to fast			
155 - 159	Gobo 14 shake slow to fast			
160 - 164	Gobo 15 shake slow to fast			
165 - 169	Gobo 16 shake slow to fast			
170 - 174	Gobo 17 shake slow to fast			
			175- 200	Rotation forward (from fast to slow)
			250 - 255	Rotation backward (from slow to fast)
5	5	Prism1	000-127	no prism
			128-255	prism 1

6	6	Prism1 rotation	000-127	Prism1 angle adjustment
			128-190	Reverse rotation (fast to slow)
			191-192	Stop
			193-255	Rotation forward (slow to fast)
7	7	Prism 2	000-31	No prism
			32-255	Prism 2
8	8	Prism2 rotation	000-127	Prism2 angle adjustment
			128-190	Reverse rotation (fast to slow)
			191-192	Stop
			193-255	Forward rotation (slow to fast)
9	9	Focus	000-255	Pattern clarity from near to far
10	10	Pan	000-255	0-540 degree
11	11	Pan Fine	000-255	0-1.2 degree
12	12	Tilt	000-255	0-270 degree
13	13	Tilt Fine	000-255	0-1.2 degree
14	14	XY speed	000-255	Speed fast to slow
15	15	Frost & Rainbow	000-127	No function
			128-191	Frost
			192-255	Rainbow effect
16	16	Lamp Control and Reset	000-025	No function
			026-050	Small motors reset
			061-085	XY motors reset
			100-109	Light off
			200-209	Light on
			251-255	All motors reset
17		Keep	0-255	Speed from slow to fast
18		Color Wheel Speed	0-255	Speed fast to slow
19		Dimmer-Prism-Frost speed	0-255	
20		Gobo Wheel Speed	0-255	

## **10. CLEANING AND MAINTENANCE**

If the lens of the fixture is damaged or broken, it should be replaced with a new lens. If the bulb is damaged or shows any form of deformation that causes the light to dim, it indicates that the bulb has reached the end of its lifespan and should be replaced promptly. The fixture contains three thermal protection devices that are designed to cut off power to the fixture in the event of overheating. If a thermal protection device is activated, the fan should be checked to ensure it is functioning properly.

It is absolutely essential to keep the fixture clean and prevent the buildup of dust, dirt, and smoke-fluid residues on or within the fixture. Failure to do so will significantly reduce the fixture's light output. Regular cleaning of the internal and external optical lenses and mirrors will not only ensure maximum light output but also allow the fixture to function reliably throughout its lifespan. The frequency of cleaning depends on the operating frequency of the fixture and the surrounding environment. It is recommended to clean the external optical system once every 20 days and the internal optical system at least once every 60 days.

**Optics:** Gently wipe the optical components using a soft, odorless cotton cloth. Use water or a specialized glass cleaner to remove dust and fog, then carefully dry the parts.

**Air Duct:** Use a soft brush, tissue paper, or compressed air to remove dust from the fan and air inlet. Ensure the fan and air vents are free of dust to maintain proper airflow.

**Exterior:** Do not use organic solvents such as alcohol to wipe the fixture's exterior, as this could cause damage.

## **11. TROUBLESHOOTING GUIDE**

<b>Trouble</b>	<b>Solution</b>
No power	Check power's voltage
Power is on, light is emitting, but the fixture is not responding to control commands	Check the address settings and the connection of the control signal cable.
Projected image has a halo effect	Check if the electronic focus channel values are appropriate for the current projection distance.
Beam is very dim	The bulb may have reached the end of its lifespan; replace it with a new one. Also, check if the optical components are clean.

**Note:** All other repairs should be carried out by qualified professionals.