

# STAGE

## USER MANUAL

KEEP THIS MANUAL FOR FUTURE NEEDS



# CONTENTS

<b>1. SAFETY INSTRUCTIONS.....</b>	<b>2</b>
IMPORTANT SAFETY WARNING.....	2
GENERAL GUIDELINES .....	3
<b>2. FEATURES .....</b>	<b>4</b>
<b>3. FIXTURE OVERVIEW.....</b>	<b>6</b>
<b>4. DIMENSIONAL DRAWINGS.....</b>	<b>7</b>
<b>5. INSTALLATION INSTRUCTIONS.....</b>	<b>8</b>
RIGGING THE DEVICE .....	8
RIGGING USING THE OMEGA BRACKET.....	9
RIGGING DRAWINGS.....	10
<b>6. DMX-512 CONTROL CONNECTION.....</b>	<b>11</b>
<b>7. DMX-512 CONNECTION WITH DMX TERMINATOR .....</b>	<b>11</b>
<b>8. DEVICE DMX START ADDRESS SELECTION .....</b>	<b>12</b>
<b>9. DISPLAY .....</b>	<b>12</b>
Address .....	15
Config .....	15
Reset Function .....	17
Communication.....	17
Info.....	18
Test.....	20
<b>10. DMX PROTOCOL.....</b>	<b>21</b>
<b>11. ERROR MESSAGES.....</b>	<b>27</b>
<b>12. CLEANING AND MAINTENANCE.....</b>	<b>30</b>

## 1. SAFETY INSTRUCTIONS

### 1.1. IMPORTANT SAFETY WARNING

This device has left the factory in perfect condition. In order to maintain this condition and to ensure safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

In order to install, operate, and maintain the lighting fixture safely and correctly we suggest that the installation and operation be carried out by qualified technicians and these instructions be carefully followed.



**CAUTION!**  
HIGH VOLTAGE. RISK OF SEVERE OR FATAL ELECTRIC SHOCK



**CAUTION!**  
ALWAYS DISCONNECT MAINS SUPPLY BEFORE REMOVING ANY FIXTURE COVERS



**CAUTION!**  
NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE. SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK



**CAUTION!**  
NEVER TOUCH THE DEVICE DURING OPERATION! COVERS MAY BE HOT



**CAUTION!**  
KEEP THIS DEVICE AWAY FROM RAIN AND MOISTURE



#### **Important:**

**Damage caused by the disregard of this user manual is not subject to warranty. The dealer and manufacturer will not accept liability for any resulting defects or problems.**

- 1) If the device has been exposed to temperature changes due to environmental conditions, do not power on immediately. The resulting condensation could damage the device. Leave the device powered off until it has reached room temperature.
- 2) This device falls under protection-class I. Therefore, it is essential that the device be earthed.
- 3) If either lenses or display are damaged (damage may include cracks or gashes in the material) they must be replaced.
- 4) Electrical connections, such as replacing the power plug, must be performed by a qualified person.
- 5) Make sure that the available voltage is not higher than that which is stated at the end of this manual.
- 6) Make sure the power cord is never crushed or damaged by sharp edges. (If the Power cord suffers from this case, the cable must be replaced by an authorized dealer.)
- 7) If the external flexible power cord of this device is damaged, it shall be exclusively replaced by the manufacturer or their service agent or a similar qualified person in order to avoid injury.
- 8) When the device is not in use or before performing maintenance, always disconnect the device from the mains. Only handle the power cord from the plug. Never pull the plug out of a socket by tugging the power cord.
- 9) When powered on for the first time, some smoke or smell may occur. This is caused by the coating on the metal parts when it is heated. And it is normal. If you are concerned, please contact your distributor.
- 10) Do not focus the beam onto flammable surfaces. The minimum distance between the exiting

lens of the device and the illuminated surface must be greater than 2 meters.

**Please be aware that damages caused by any modifications to the device are not subject to warranty. Keep away from children and non-professionals.**

## **1.2. GENERAL GUIDELINES**

- 1) This device is a lighting effect for professional use on stages, in discotheques, theatres, etc., the device is designed for indoor use only.
- 2) This fixture is only allowed to be operated within the maximum alternating current as stated in the technical specifications in section 2 of this manual.
- 3) Handle the device with care, avoid shaking or using force when installing or maintaining the device.
- 4) When choosing the installation location, please make sure that the device is not exposed to extreme heat, moisture or dust.
- 5) If you use the quick lock cam when rigging the device, make sure the quick lock fasteners are located in the quick lock holes correctly and securely.
- 6) Operate the device only after having familiarized yourself with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation.
- 7) Please use the original packaging if the device is to be transported.
- 8) The applicable temperature for the device is between -10°C to 45°C. Do not use the device outside of this temperature range.
- 9) The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person

**For safety reasons, please be aware that all modifications to the device are forbidden. If this device is operated in any way different to the ones described in this manual, the product may suffer damage and the warranty becomes void. Furthermore, any other wrong operations may lead to short-circuits, burns, electric shocks etc.**

## 2. FEATURES

### 1) POWER SUPPLY

- + AC 100-240V~, 50/60Hz
- + Power Consumption: 600W

### 2) OPTICS

- + LED: White 420W LED
- + Extremely long Life: >20,000H

### 3) MOVEMENT

- + Pan movement: 540° /630° Optional (16 bit)
- + Tilt movement: 270° (16 bit)
- + Advanced moving system: fast, stable and quite, auto x-y repositioning

### 4) COLORS

- + CMY & CTO Variable Color Mixing for Infinite Color Possibilities
- + 1 Color wheel: 7 dichroic filters + open, indexable, rainbow effect



### 5) GOBOS

- + 1 Rotation gobo wheel: 7 interchangeable, rotating, and indexable, gobo + open
- + "Slot in & out" gobo wheel system
- + 1 Static gobo wheel: 8 + open

### 6) FEATURES

- + 2 Control channel modes: 34/58 channels
- + 2 operations modes: DMX-512, Extended / Standard
- + Strobe effect with 1-25 flashes per second and pulse effect
- + Rotating Prism: 5 facets prism, Linear prism and prism Macros
- + Animation wheel: can make special dynamic flame or water effect
- + Beam angle: zoom for 8.2° ~56°
- + Motorized focus
- + Dimmer: 0%~100% full range dimming
- + Stepless frost: 0%~100% linear change frost
- + Stepless iris: 5%~100% linear change iris, pulse iris effect

### 7) DISPLAY

- + Advanced and convenient full –color LCD touch screen, with rechargeable battery
- + Locked automatically after standby for 15 seconds to prevent error; hold the  button for 3 seconds to activate
- + Pan/Tilt Lock Out: Locks Pan / Tilt from resetting, enabling reset to be carried out inside a flight case. Power the unit. Press & hold  button until the display shows "No Movement Reset".

### 8) SOFTWARE

- + Upgrades: fast and convenient through DMX cable
- + Reset DMX address, remote lamp switch, reset can all be done by the controller

- + Running time of fixture on display for reference

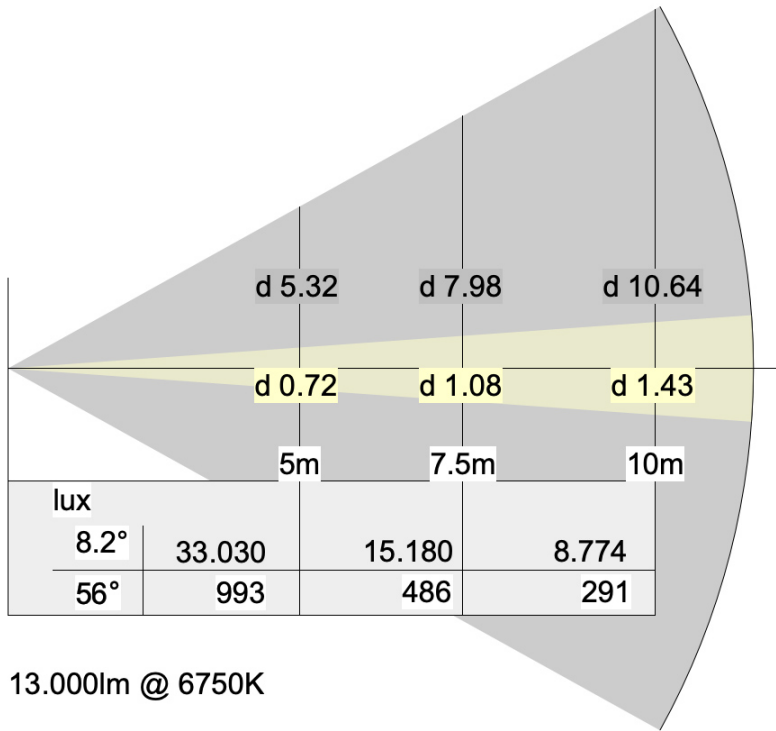
**9) OTHER SPEC**

- + Input signal isolation: guarantees stable signal transmission without interference  
Advanced RDM function

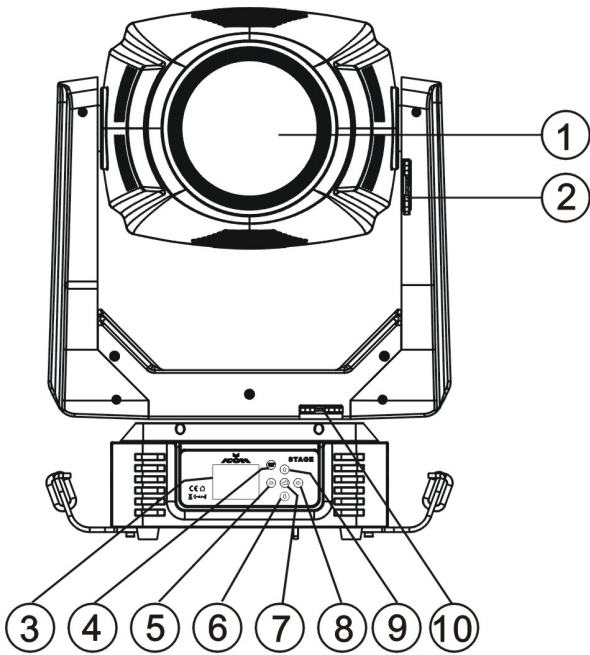
**10) WEIGHT**

- + Net weight: 31 kg

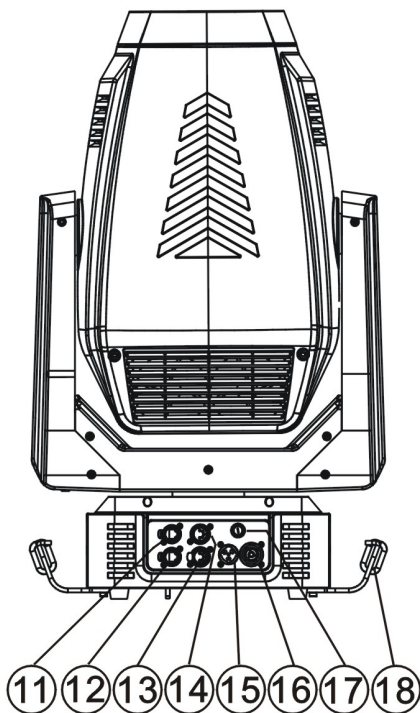
**11) PHOTOMETRIC DATA**



### 3. FIXTURE OVERVIEW

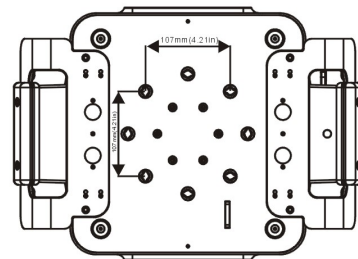
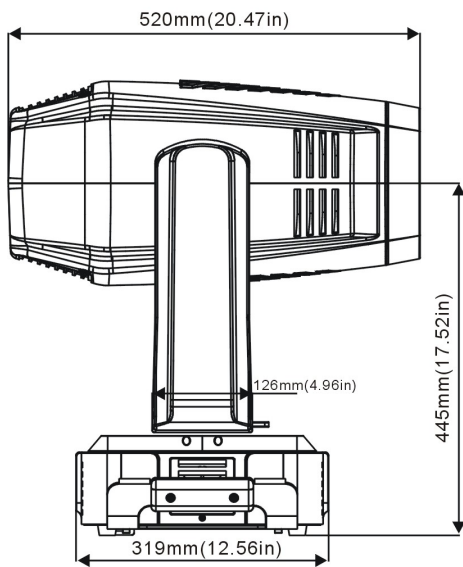
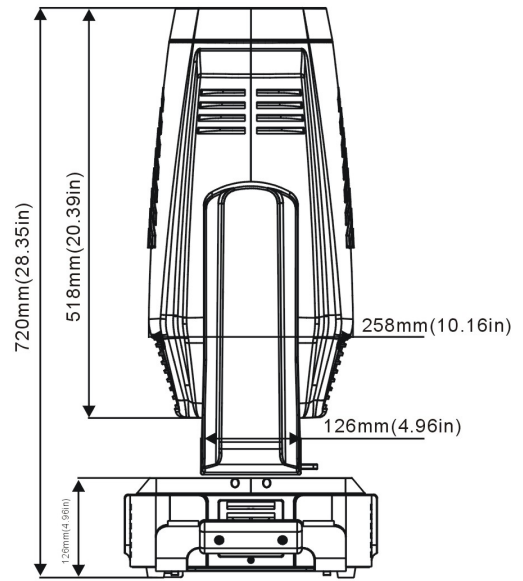
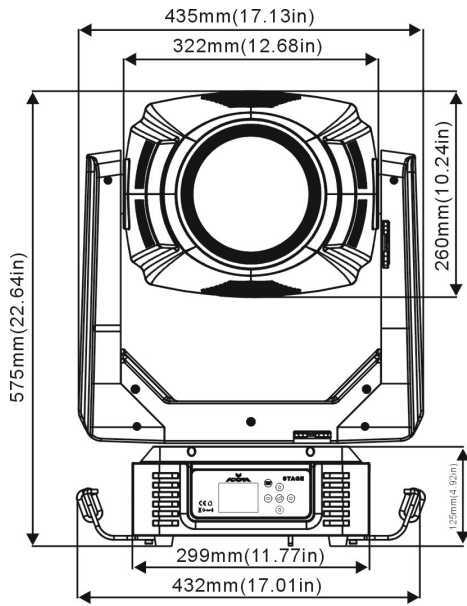


- 1) Lens
- 2) Tilt Lock
- 3) Display
- 4) Mode/Esc-button
- 5) Left-button
- 6) Down-button
- 7) ENTER-button
- 8) Right-button
- 9) Up-button
- 10) Pan Lock



- 11) RJ45 in
- 12) RJ45 out
- 13) DMX out
- 14) DMX in
- 15) Power in
- 16) Power out
- 17) Fuse
- 18) Handle

## 4. DIMENSIONAL DRAWINGS





## 5. INSTALLATION INSTRUCTIONS

### 5.1 RIGGING THE DEVICE

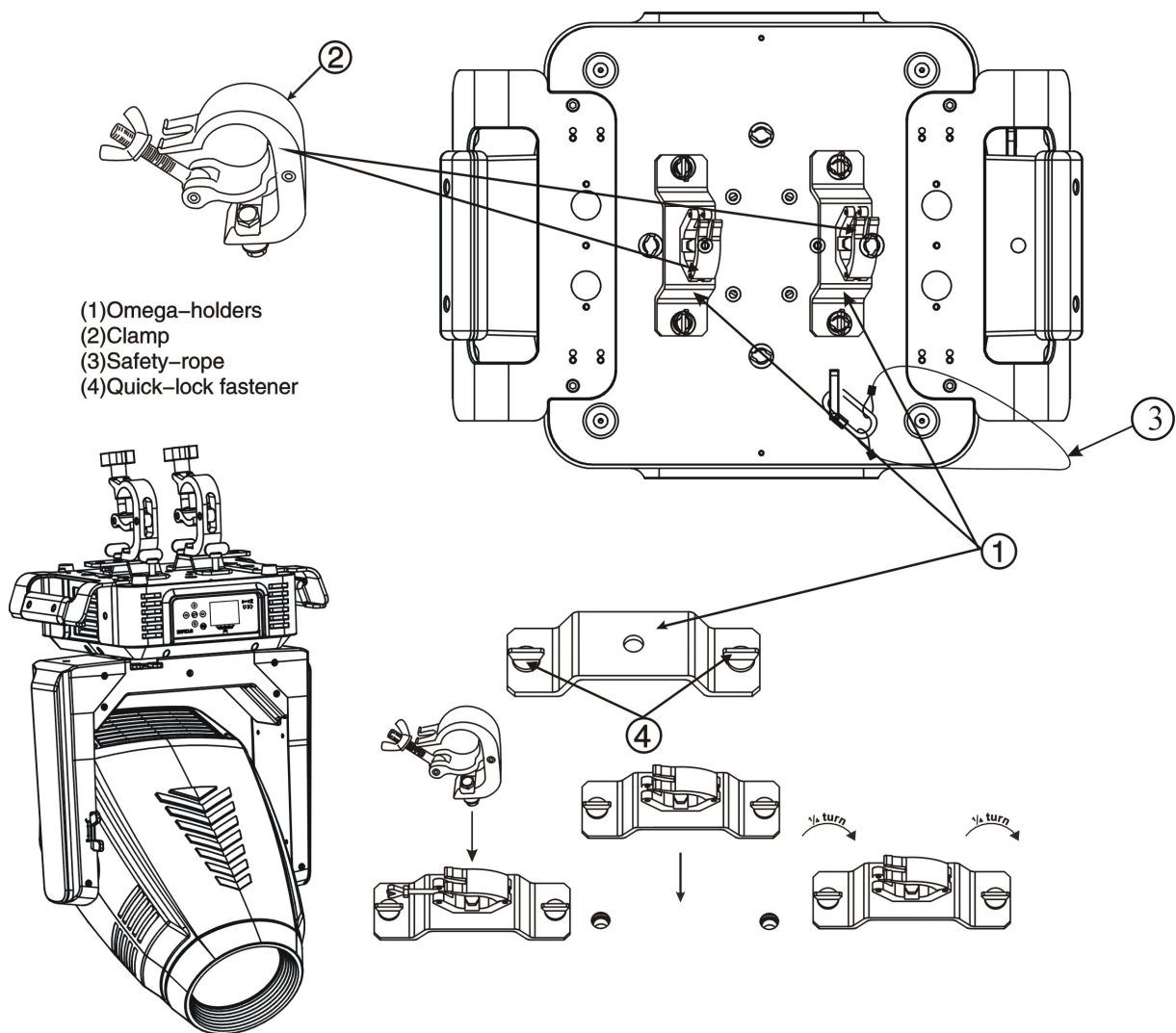


#### **CAUTION!**

PLEASE CONSIDER THE GB7000.1-2015, GB7000.217-2008 AND THE OTHER RESPECTIVE NATIONAL NORMS DURING THE INSTALLATION. THE INSTALLATION MUST ONLY BE CARRIED OUT BY A QUALIFIED PERSON.

- + The structure on which the device is rigged must be able to support 10 times the weight of the device for 1 hour without any critical deformation occurring.
- + The installation must always be secured with a secondary safety attachment, e.g. the included appropriate safety cable.
- + Never stand directly below the device when rigging, de-rigging or maintaining the device.
- + All electrical connections should be approved by a qualified electrician prior to using the product.
- + When the device is permanently installed these installations have to be approved by a qualified person once a year.
- + Overhead rigging requires extensive experience, including (but not limited to) calculating working load limits, specifying installation/ rigging materials, and periodic safety inspection of all installation material as well as the device. If you lack these qualifications, do not attempt the rigging of this device yourself. Improper installation/ rigging can result in serious bodily injury.
- + Before rigging make sure that the installation area can hold a minimum point load of 10 times the device's weight.

## 5.2 RIGGING USING THE OMEGA BRACKETS



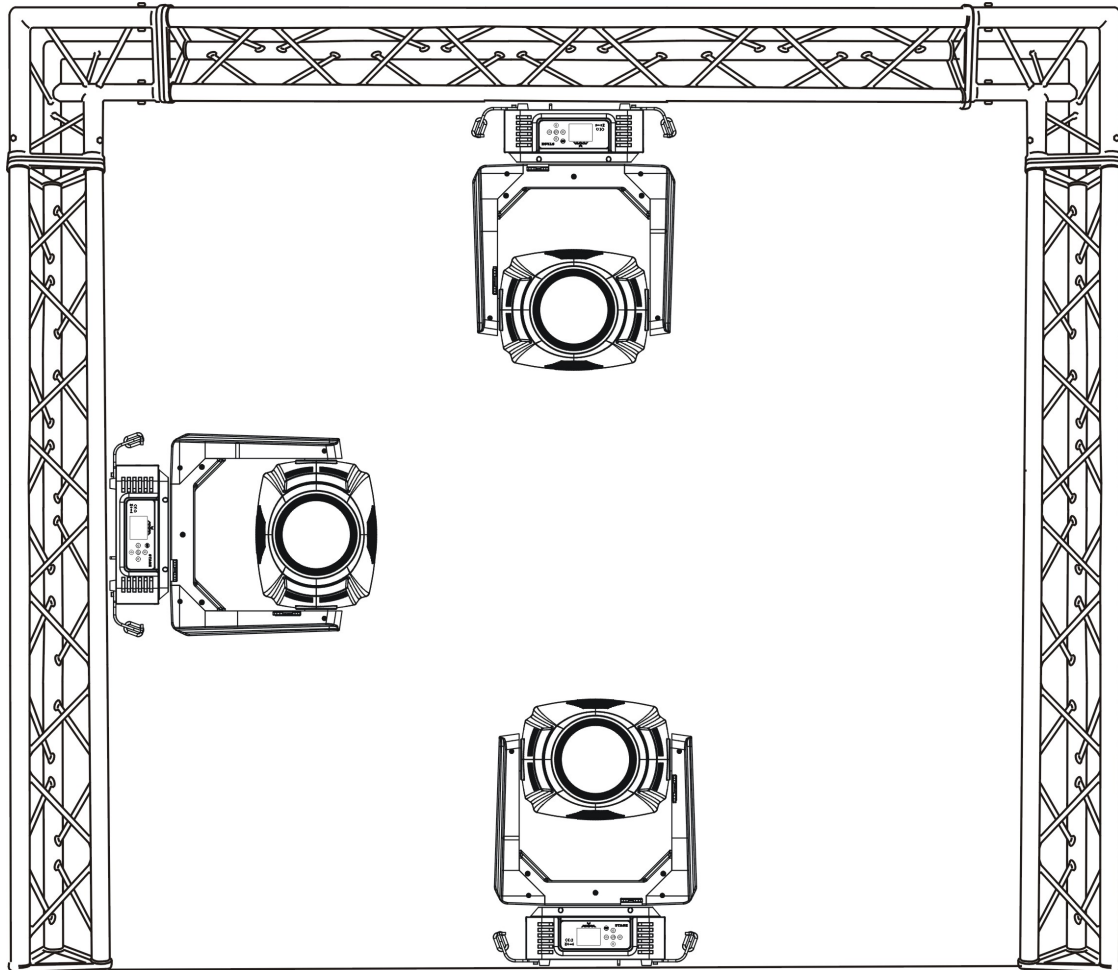
- 1) Fix the clamp to the bracket by tightening the M12 nut and bolt to the bracket through the  $\Phi 13$  hole in the middle of the bracket.
- 2) Insert the quick-lock fasteners of the first Omega holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise.
- 3) Install the second Omega holder.
- 4) Pull the safety cable through the holes on the bottom of the base and over the trussing system or another suitable rigging point. Insert the end into the carabiner and tighten the safety screw.



**Important:**

This step is very important to ensure safe rigging of the fixture.

### 5.3 RIGGING DRAWINGS



- 1) The device can be rigged in any of the orientations shown in the image above.
- 2) The device must be kept at least 0.1 m away from any flammable materials (decoration etc.).
- 3) Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

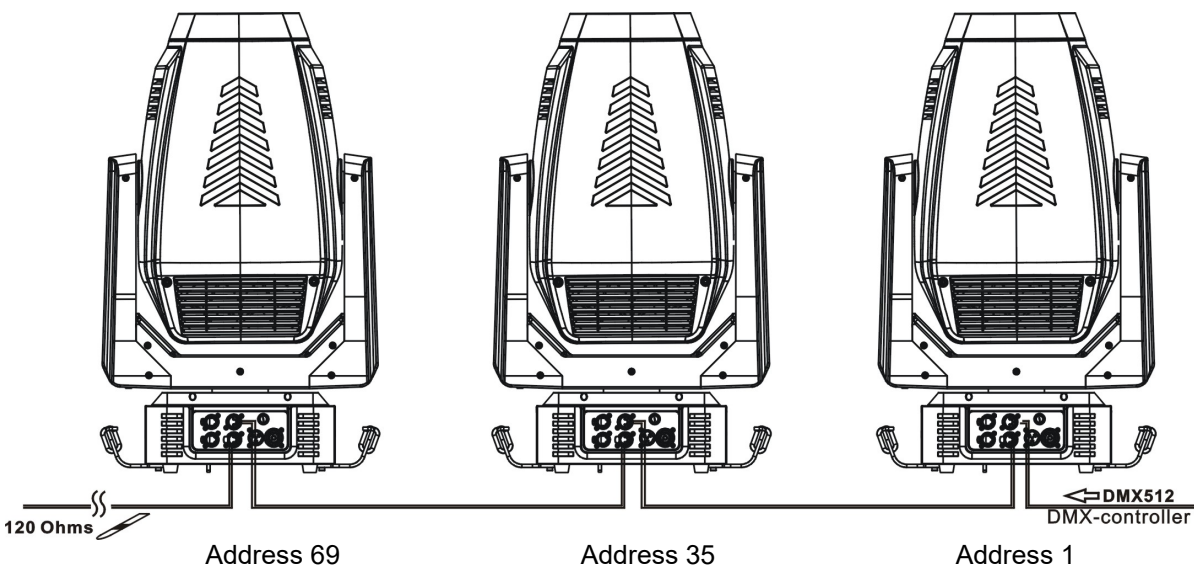
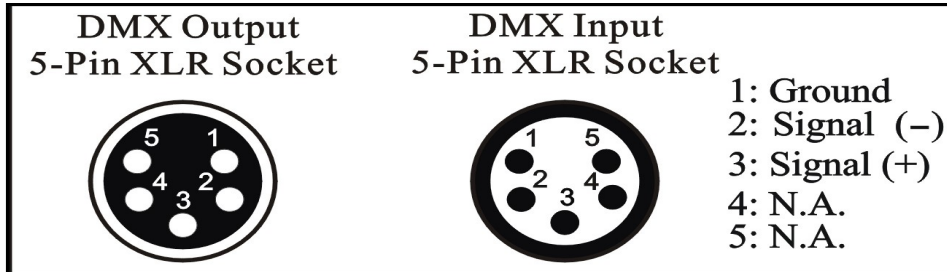


**Important:**

Overhead rigging requires extensive experience, including (but not limited to) calculating working load limits, specifying installation/ rigging materials, and periodic safety inspection of all installation material as well as the device. If you lack these qualifications, do not attempt the rigging of this device yourself. Improper installation/ rigging can result in serious bodily injury.

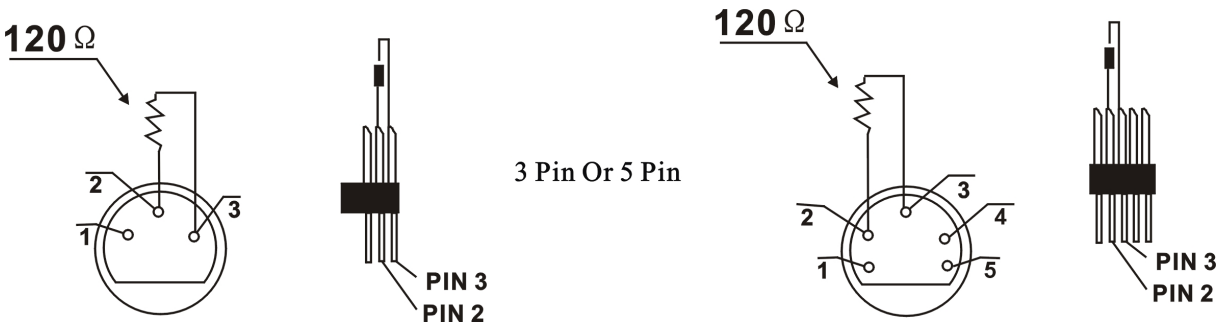
## 6. DMX-512 CONTROL CONNECTION

Connect the provided male side of the XLR cable to the female XLR output of your controller and the female side of the XLR cable to the male XLR input of the device. You can connect multiple devices together in a serial fashion. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.



## 7. DMX-512 CONNECTION WITH DMX TERMINATOR

For installations where the DMX cable has to run over a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal caused by electrical noise. The DMX terminator is an XLR plug with a 120  $\Omega$  resistor connected between pins 2 and 3, which is then plugged into the output (female) XLR socket of the last fixture in the chain. Please see illustrations below.



## 8. DEVICE DMX START ADDRESS SELECTION

All fixtures should be given a DMX starting address when using a DMX signal, so that the correct fixture responds to the correct control signals. This digital starting address is the channel number from which the fixture starts to “listen” to the digital control information sent out from the DMX controller. The allocation of this starting address is achieved by setting the correct address number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each fixture individually.













If you set the same address on all devices, all the devices will start to “listen” to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set a different address, each unit will start to “listen” to the channel number you have set, based on the quantity of control channels of the unit. That means changing the settings of one channel will affect only the selected device.

In the case of the led move head, which is a 34 channel fixture, you should set the starting address of the first unit to 1, the second unit to 35(34 + 1), the third unit to 69 (34+ 35), and so on.

## 9. DISPLAY

The Display offers several features: you can set the starting address, run the pre-programmed program or reset the device.

The main menu is accessed by pressing the  -button until the display starts flashing. Browse through the menu by pressing the  -button ,  -button ,  -button or  -button. Press the Enter-button in order to select the desired menu. You can change the selection by pressing the  -button ,  -button ,  -button or  -button. Confirm every selection by pressing the  -button. You can leave every mode by pressing the  -button. After accessing the edit mode, the unit will automatically exit to the main menu after 15 seconds from the last button press. When the unit is powered on, if no data signal is connected after 1 minute, then the display will switch off automatically. The Display does not need external power to operate. Hold down the  -button for 3 seconds and the Display will be turned on by the built-in battery.

Address	A001~AXXX			
Config	Mode	Extended Mode		Default
		Standard Mode		
	Select Signal	DMX Only		Default
		Art-Net On IP2		
		Art-Net On IP10		
		sACN		
	Set Universe	0000~32767		Default 001
	Pan and Tilt	Tilt Reverse	On/Off	Default Off
		Pan Reverse	On/Off	Default Off
		Feedback	On/Off	Default On
	Dimmer Mode	Standard	Default	<i>(Use this function , Please set the Dim Modes channel value to 100%.)</i>
		Stage		
		TV		
		Architectural		
	Theatre			
Refresh	900~25000Hz		Default 1200Hz	
Gamma	2.0~2.8		Default 2.0	
Fan Mode	Auto		<i>Default</i>	
	High			
	Silent			
Gobo Scroll	On/Off		Default Off	
Reset Factory Defaults	On/Off		Default Off	
Reset Function	All			
	Pan/Tilt			
	Others			
Communi cation	Read DMX Value	ALL, Control, Pan, Tilt, .....		
	DMX Info	DMX Update Rate		XXXX p/s <i>(Package per second)</i>
	Comm Loss	No Fade on Loss		
		Fade out 30 seconds		<i>Default</i>
Fade out 60 seconds				
Info	Software Version	X.X.X.....		
	ARTNET IP	ARTNET IP XXX. XXX. XXX. XXX XXX. XXX. XXX. XXX		
	Cross Load SW	On		<i>Need Password 50</i>
		Off		<i>Default</i>
Total Run Time	XXXX (Hours)			

	Last Run Time	XXXX (Hours)		
	Temperature	Head Temperature	XXX°C/°F	
	Service Setting	Password	<i>Password=50</i>	
		Clear Err. Info	OFF	<i>Default</i>
	ON		<i>Password=50</i>	
	Fan Speed	Fan Speed		
		Head2UFan1	xxxx RPM	
		Head2UFan2	xxxx RPM	
		...	...	
	Error Info	Error Record 1	(No Error Record...or displays a list of errors)	
		Error Record 2	(No Error Record...or displays a list of errors)	
		...	...	
		Error Record 10	(No Error Record...or displays a list of errors)	
	Test	Self Test	All	Pan XXX
Titl XXX				
... ..				
Internal Functions			Strobe XXX	
			ColorWheel XXX	
			... ..	
Movement			Pan XXX	
			Titl XXX	
Individual Function			Pan	Pan XXX
			Titl	Titl XXX
		...	... ..	
Manual Control		Pan,		
		Tilt,		
		.....		
Calibrate	Password		Need Password	
	PAN			
	TILT			
	Color Wheel			
	.....			
Cleaning Mode	Clean Focus			
	Clean Prism			
	Clean Zoom			

## 9.1 Address

### 9.1.1. Address

With this function, you can adjust the desired DMX-address via the Control Board.

- 1) Access the main menu.
- 1) Tap the <Up/Down> button until "Address" is displayed.
- 2) Press <ENTER>, the display will show "Address".
- 3) Tap the <Up/Down>button, the display will show "A001~AXXX".
- 4) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## 9.2 Config

### 9.2.1 Mode

With this function, you can define the device as slave.

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until "Config" is displayed. Press <ENTER>, the display will show "Config".
- 2) Tap the <Up/Down>button until "Mode" is displayed.
- 3) Press <ENTER>, the display will show "Mode".
- 4) The display show "Extended Mode", Press <Up/Down>, the display will show "Standard Mode".
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.2.2 Select Signal

With this function, you can define the device as slave.

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until "Config" is displayed. Press <ENTER>, the display will show "Config".
- 2) Tap the <Up/Down>button until "Select Signal" is displayed.
- 3) Press <ENTER>, the display will show "Select Signal".
- 4) The display show "DMX Only", Press <Up/Down>, the display will show "Art-Net On IP2", "Art-Net On IP10", "sACN".
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.2.3 Set Universe

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until "Config" is displayed. Press <ENTER>, the display will show "Config".
- 2) Press <Up/Down>, the display will show "Set Universe".
- 3) Press <ENTER>, the display will show "Set Universe".
- 4) The display show "0000~32767".
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.2.4 Pan and Tilt

#### Tilt Reverse

With this function you can reverse the Tilt-movement.

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until "Config" is displayed. Press <ENTER>, the display will show "Config". Tap the <Up/Down>button until the display will show "Pan and Tilt". Press <ENTER>, the display will show "Pan and Tilt".
- 2) Press <Up/Down>, the display will show "Tilt Reverse".
- 3) Press <ENTER>, the display will show "Tilt Reverse".
- 4) The display show "OFF", Press <Up/Down>, the display will show "ON".



- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **Pan Reverse**

With this function you can reverse the Pan-movement.

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “Config” is displayed. Press <ENTER>, the display will show “Config”. Tap the <Up/Down>button until the display will show “Pan and Tilt”. Press <ENTER>, the display will show “Pan and Tilt”.
- 2) Press <Up/Down>, the display will show “Pan Reverse”.
- 3) Press <ENTER>, the display will show “Pan Reverse”.
- 4) The display show “OFF”, Press <Up/Down>, the display will show “ON”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **Feedback**

With this function, you can feedback switch of pan movement or tilt movement.

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “Config” is displayed. Press <ENTER>, the display will show “Config”. Tap the <Up/Down>button until the display will show “Pan and Tilt”. Press <ENTER>, the display will show “Pan and Tilt”.
- 2) Press <Up/Down>, the display will show “Feedback”.
- 3) Press <ENTER>, the display will show “Feedback”.
- 4) The display show “ON”, Press <Up/Down>, the display will show “OFF”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **9.2.5 Dimmer Curve**

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “Config” is displayed. Press <ENTER>, the display will show “Config”.
- 2) Tap the <Up/Down>button until “Dimmer Curve” is displayed.
- 3) Press <ENTER>, the display will show “Dimmer Curve”.
- 4) The display show “Standard”, Press <Up/Down>, the display will show “Standard”, “Stage”, “TV”, “Architectural”, “Theatre”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **9.2.6 Refresh**

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “Config” is displayed. Press <ENTER>, the display will show “Config”.
- 2) Tap the <Up/Down>button until “Refresh” is displayed.
- 3) Press <ENTER>, the display will show “Refresh”.
- 4) The display show “1200Hz”, Press <Up/Down>, the display will show “900~25000Hz”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **9.2.7 Gamma**

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “Config” is displayed. Press <ENTER>, the display will show “Config”.
- 2) Tap the <Up/Down>button until “Gamma” is displayed.
- 3) Press <ENTER>, the display will show “Gamma”.
- 4) The display show “2.0”, Press <Up/Down>, the display will show “2.0~2.8”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.2.8 Fan Mode

- 1) Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until "Config" is displayed. Press <ENTER>, the display will show "Config".
- 2) Tap the <Up/Down> button until "Fan Mode" is displayed.
- 3) Press <ENTER>, the display will show "Fan Mode".
- 4) The display show "Auto", Press <Up/Down>, the display will show "Auto", "High", "Silent".
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.2.9 Gobo Scroll

- 1) Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until "Config" is displayed. Press <ENTER>, the display will show "Config".
- 2) Tap the <Up/Down> button until "Gobo Scroll" is displayed.
- 3) Press <ENTER>, the display will show "Gobo Scroll".
- 4) The display show "OFF", Press <Up/Down>, the display will show "ON".
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.2.10 Reset Factory Defaults

- 1) Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until "Config" is displayed. Press <ENTER>, the display will show "Config".
- 2) Press <Up/Down>, the display will show "Reset Factory Defaults".
- 3) Press <ENTER>, the display will show "Reset Factory Defaults".
- 4) The display show "OFF", Press <Up/Down>, the display will show "ON".
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## 9.3 Reset Function

With this function you can reset the device via the Control Board. You can select the different reset functions by turning the encoder.

- 1) Tap <MODE/ESC> button, access the main menu.
- 2) Tap the <Up/Down> button until "Reset Function" is displayed.
- 3) Press <ENTER>, the display will show "Reset Function".
- 4) The display show "Reset All", Press <Up/Down>, the display will show "Reset Pan&Tilt", "Reset Others".
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## 9.4 Communication

### 9.4.1 Read Dmx Value

With this function you can display the DMX 512 value of each channel. The display automatically shows the channel with a value changing.

- 1) Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until "Communication" is displayed. Press <ENTER>, the display will show "Communication".
- 2) Tap the <Up/Down> button until "Read Dmx Value" is displayed.
- 3) Press <ENTER>, the display will show "Read Dmx Value".
- 4) The display will show "ALL, Control, Pan, Tilt, .....".
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.4.2 DMX Info

- 1) Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until "Communication" is displayed. Press <ENTER>, the display will show "Communication".

- 2) Tap the <Up/Down>button until“DMX Info”is displayed.
- 3) Press <ENTER>, the display will show“DMX Info”.
- 4) The display show“DMX Update Rate =XXXX p/s”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

#### **9.4.3 Comm Loss**

- 1) Tap<MODE/ESC>button , access the main menu , Tap the <Up/Down>button until “Communication” is displayed. Press <ENTER>, the display will show “Communication”.
- 2) Tap the <Up/Down>button until “Comm Loss” is displayed.
- 3) Press <ENTER>, the display will show “Comm Loss”.
- 4) The display show “Fade out 30 seconds”, Press <Up/Down>, the display will show “No Fade on Loss”, “Fade out 30 seconds”, “Fade out 60 seconds”.
- 5) Press ENTER to confirm or press <MODE/ESC> to return to the main menu.

### **9.5 Info**

#### **9.5.1 Software Version**

With this function, you can display the software version of the device.

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until“Info”is displayed. Press <ENTER>, the display will show “Info”.
- 2) Press <Up/Down>, the display will show “Software version”.
- 3) Press< ENTER>, the display will show “Software version”.
- 4) The display show“X.X.X.....”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

#### **9.5.2 ARTNET IP**

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “Info” is displayed. Press <ENTER>, the display will show“Info”.
- 2) Press <Up/Down>, the display will show “ARTNET IP”.
- 3) Press< ENTER>, the display will show “ARTNET IP”.
- 4) The display will show“XXX. XXX. XXX. XXX”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

#### **9.5.3 Cross load Software**

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until“Info”is displayed. Press <ENTER>, the display will show “Info”.
- 2) Press <Up/Down>, the display will show “Cross load Software”.
- 3) Press< ENTER>, the display will show “Cross load Software”.
- 4) The display show “OFF”, Press <Up/Down>, the display will show “ON”. If you want to need the “ON”, the need password is 50 .
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

#### **9.5.4 Total Run Time**

With this function, you can display the running time of the device. The display shows “XXXX”, “XXXX”stands for the number of hours.

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “Info” is displayed. Press <ENTER>, the display will show “Info”.
- 2) Press <Up/Down>, the display will show “Total run Time”.

- 3) Press < ENTER >, the display will show “Total run Time”.
- 4) The display will show “XXXX” (Hours).
- 5) Press < ENTER > to confirm or press < MODE/ESC > to return to the main menu.

### 9.5.5 Last Run Time

With this function, you can display last the running time of the device. The display shows “XXXX”, “XXXX” stands for the number of hours.

- 1) Tap < MODE/ESC > button, access the main menu, Tap the < Up/Down > button until “Info” is displayed. Press < ENTER >, the display will show “Info”.
- 2) Press < Up/Down >, the display will show “Last Run Time”.
- 3) Press < ENTER >, the display will show “Last Run Time”.
- 4) The display will show “XXXX” (Hours).
- 5) Press < ENTER > to confirm or press < MODE/ESC > to return to the main menu.

### 9.5.6 Temperature

#### Head Temperature

- 1) Tap < MODE/ESC > button, access the main menu, Tap the < Up/Down > button until “Info” is displayed. Press < ENTER >, the display will show “Info”. Tap the < Up/Down > button until “Temperature” is displayed. Press < ENTER >, the display will show “Temperature”.
- 2) Press < Up/Down >, the display will show “Head Temperature”.
- 3) Press < ENTER >, the display will show “Head Temperature”.
- 4) The display will show “XXX□/□”.
- 5) Press < ENTER > to confirm or press < MODE/ESC > to return to the main menu.

### 9.5.7 Service Setting

**Password**—The Password for this function is “50”.

#### Clr Err Info

With this function you can clean the error information.

- 1) Tap < MODE/ESC > button, access the main menu, Tap the < Up/Down > button until “Info” is displayed. Press < ENTER >, the display will show “Info”. Tap the < Up/Down > button until “Service Setting” is displayed. Press < ENTER >, the display will show “Service Setting”.
- 2) Press < Up/Down >, the display will show “Clr Err Info”.
- 3) Press < ENTER >, the display will show “Clr Err Info”.
- 4) The display show “OFF”, Press < Up/Down >, the display will show “ON”.
- 5) Press < ENTER > to confirm or press < MODE/ESC > to return to the main menu.

### 9.5.8 Fan Speed

With this function, you can set the speed of the running fans. The selection have Head2UFan1, Head2UFan2, .....

- 1) Tap < MODE/ESC > button, access the main menu, Tap the < Up/Down > button until “Info” is displayed. Press < ENTER >, the display will show “Info”.
- 2) Press < Up/Down >, the display will show “Fan Mode”.
- 3) Press < ENTER >, the display will show “Fan Mode”.
- 4) The display will show “Head2UFan1= xxxx RPM”, “Head2UFan2= xxxx RPM”, “.....”.
- 5) Press < ENTER > to confirm or press < MODE/ESC > to return to the main menu.

### 9.5.9 Error Info

With this function, you can display the error informatin. The selection have Error Record 1, Error

Record 2, and Error Record 10.

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “Info” is displayed. Press <ENTER>, the display will show “Info”.
- 2) Press <Up/Down>, the display will show “Error Info”.
- 3) Press< ENTER>, the display will show “Error Info”.
- 4) The display will show“Error Record 1”, “Error Record 2”.....“Error Record 10”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## 9.6 Test

### 9.6.1 Self Test

With this function you can test each channel on its (correct) function.

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “Test” is displayed. Press <ENTER>, the display will show “Test”.
- 2) Press <Up/Down>, the display will show “Self Test”.
- 3) Press< ENTER>, the display will show “Self Test”.
- 4) The display show“All”, Press <Up/Down>, the display will show “All”, “Internal Functions”, “Movement”, “Individual Funtion”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.6.2 Manual Control

With this function, you can adjust the lamp more easily. All effects will be canceled, the shutter opens and the dimmer intensity will be set to 100 %. With the individual functions, you can focus the light on a flat surface (wall) and erform the fine lamp adjustment.

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “Test” is displayed. Press <ENTER>, the display will show “Test”.
- 2) Press <Up/Down>, the display will show “Manual control”.
- 3) Press< ENTER>, the display will show “Manual control”.
- 4) The display show “PAN, Tilt, .....”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.6.3 Calibration

With this function, you can calibrate and adjust the effect wheels to their correct positions. The password of calibrate values is 050.

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “Test” is displayed. Press <ENTER>, the display will show “Test”.
- 2) Press <Up/Down>, the display will show “Calibration”.
- 3) Press< ENTER>, the display will show “Calibration”.
- 4) The display show “Password”, Press <Up/Down>, the display will show “Pan”, “Tilt”, “Color Wheel”.....
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.6.4 Cleaning Mode

- 1) Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until“Test”is displayed. Press <ENTER>, the display will show “Test”.
- 2) Press <Up/Down>, the display will show “Cleaning Mode”.
- 3) Press< ENTER>, the display will show “Cleaning Mode”.
- 4) The display show “Clean Focus”, “Clean Prism”, “Clean Zoom”.
- 5) Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## 10. DMX PROTOCOL

DMX channel's functions and their values (58 DMX channels):			
Mode/Channel		Value	Function
St	Ex		
1	1		<b><u>PAN Movement 8bit :</u></b>
		0-255	Pan Movement
2	2		<b><u>Pan Fine 16bit</u></b>
		0-255	Fine control of Pan movement
3	3		<b><u>TILT Movement 8bit :</u></b>
		0-255	Tilt Movement
4	4		<b><u>Tilt Fine 16bit</u></b>
		0-255	Fine control of Tilt movement
5	5		<b><u>Color Wheel and color change to any position:</u></b>
		0-127	Cooler change to any position
		15-17	Color 1 (center)
		31-33	Color 2 (center)
		47-49	Color 3 (center)
		63-65	Color 4 (center)
		79-81	Color 5 (center)
		95-97	Color 6 (center)
		111-113	Color 7 (center)
		128-189	Forwards rainbow effect from fast to slow
		190-193	No rotation
		194-255	Backwards rainbow effect from slow to fast
	6		<b><u>Color Wheel Fine :</u></b>
		0-255	Color Wheel color change to any position Fine
6	7		<b><u>Cyan Color :</u></b>
		0-255	Cyan (0-white, 255-100% Cyan)
	8		<b><u>Cyan Color Fine :</u></b>
		0-255	Cyan Fine
7	9		<b><u>Magenta Color :</u></b>
		0-255	Magenta (0-white, 255-100% magenta)
	10		<b><u>Magenta Color Fine :</u></b>
		0-255	Magenta Fine
8	11		<b><u>Yellow Color :</u></b>
		0-255	Yellow (0-white, 255-100% Yellow)
	12		<b><u>Yellow Color Fine :</u></b>
		0-255	Yellow Fine
9	13		<b><u>CTO Color :</u></b>
		0-255	CTO (0-white, 255-100% CTO)
	14		<b><u>CTO Color Fine :</u></b>

		0-255	CTO Fine
10	15		<b><u>Rotating gobos, cont. rotation :</u></b>
			<b>Gobo wheel index</b>
			<i>(Gobo Scroll ON in the menu or Control channel)</i>
		0-5	Open
		6~189	gobo change to any position
		29	gobo 1 (center reference value)
		52	gobo 2 (center reference value)
		75	gobo 3 (center reference value)
		98	gobo 4 (center reference value)
		121	gobo 5 (center reference value)
		144	gobo 6 (center reference value)
		167	gobo 7 (center reference value)
			<i>(Gobo Scroll OFF in the menu or Control channel)</i>
		0-7	Open
		8-17	Rot. gobo 1
		18-27	Rot. gobo 2
		28-37	Rot. gobo 3
		38-47	Rot. gobo 4
		48-57	Rot. gobo 5
		58-67	Rot. gobo 6
		68-77	Rot. gobo 7
		78-93	Gobo 1 shake slow to fast
		94-109	Gobo 2 shake slow to fast
		110-125	Gobo 3 shake slow to fast
		126-141	Gobo 4 shake slow to fast
		142-157	Gobo 5 shake slow to fast
		158-173	Gobo 6 shake slow to fast
		174-189	Gobo 7 shake slow to fast
			<b>Gobo wheel rotation</b>
		190-221	Gobo wheel rotation forwards from fast to slow
		222-223	Reserved
		224-255	Gobo wheel rotation f backwards from slow to fast
11	16		<b><u>Rotating gobo index, rotating gobo rotation :</u></b>
		0-127	Gobo indexing
		128-189	Clock-wise rotation from fast to slow
		190-193	No rotation
		194-255	Counter clock-wise rotation from slow to fast
	17		<b><u>Rotating gobo indexing Fine</u></b>
		0-255	Fine indexing
12	18		<b><u>Fixed Gobos :</u></b>
			<i>(Gobo Scroll ON in the menu or Control channel)</i>
		0-9	Open

		10~189	gobo change to any position
		30	gobo 1 (center reference value)
		50	gobo 2 (center reference value)
		70	gobo 3 (center reference value)
		90	gobo 4 (center reference value)
		110	gobo 5 (center reference value)
		130	gobo 6 (center reference value)
		150	gobo 7 (center reference value)
		170	gobo 8 (center reference value)
			<i>(Gobo Scroll OFF in the menu or Control channel)</i>
		0-29	Open
		30-39	Gobo 1
		40-49	Gobo 2
		50-59	Gobo 3
		60-69	Gobo 4
		70-79	Gobo 5
		80-89	Gobo 6
		90-99	Gobo 7
		100-109	Gobo 8
		110-119	Gobo 1 shake slow to fast
		120-129	Gobo 2 shake slow to fast
		130-139	Gobo 3 shake slow to fast
		140-149	Gobo 4 shake slow to fast
		150-159	Gobo 5 shake slow to fast
		160-169	Gobo 6 shake slow to fast
		170-179	Gobo 7 shake slow to fast
		180-189	Gobo 8 shake slow to fast
			<b>Gobo wheel rotation</b>
		190-221	Gobo wheel rotation forwards from fast to slow
		222-223	No rotation
		224-255	Gobo wheel rotation f backwards from slow to fast
13	19		<b><u>Wheel Animation :</u></b>
		0-7	Close
		8-127	Animation indexing
		128-187	Clock-wise scroll from fast to slow
		188-195	No rotation
		196-255	Counter clock-wise scroll from slow to fast
14	20		<b><u>Iris:</u></b>
		0-255	Max. diameter to Min. diameter
	21		<b><u>Iris Fine:</u></b>
		0-255	Iris Fine
15	22		<b><u>Prism:</u></b>
		0-63	Open position (hole)
		64-127	Prism



		128- 255	No function
16	23		<b><u>Rotating prism index, rotating prism rotation</u></b>
		0-127	Prism indexing
		128-189	Clock-wise rotation from fast to slow
		190-193	No rotation
		194-255	Counter clock-wise rotation from slow to fast
	24		<b><u>Rotating prism indexing Fine</u></b>
0-255		Fine indexing	
17	25		<b><u>Zoom :</u></b>
		0-255	Zoom adjustment from small to big
	26		<b><u>Zoom Fine:</u></b>
0-255		Zoom adjustment Fine	
18	27		<b><u>Focus :</u></b>
		0-255	Continuous adjustment from near to far
	28		<b><u>Focus Fine:</u></b>
0-255		Continuous adjustment Fine	
19	29		<b><u>Auto Focus:</u></b>
		0-50	Auto Focus Off
		51-100	5m
		101-150	7.5m
		151-200	10m
		201-255	15m
20	30		<b><u>Auto Focus adjustment:</u></b>
		0-255	Continuous adjustment
21	31		<b><u>Shutter, strobe:</u></b>
		0-31	Shutter closed
		32-63	No function (shutter open)
		64-95	Strobe effect slow to fast
		96-127	No function (shutter open)
		128-159	Pulse-effect in sequences
		160-191	No function (shutter open)
		192-223	Random strobe effect slow to fast
224-255	No function (shutter open)		
22	32		<b><u>Dimmer intensity:</u></b>
		0-255	Intensity 0 to 100%
	33		<b><u>Fine Dimmer intensity:</u></b>
0-255		Dimmer intensity fine	
23	34		<b><u>Dim Modes</u></b>
		0-20	Standard
		21-40	Stage
		41-60	TV
		61-80	Architectural

		81-100	Theatre
		101-255	Default to Unit Setting
24	35	<u>    </u>	<b><u>Frost:</u></b>
		0-50	Open
		51-100	100% Frost2
		101-150	100% Frost1
		151-255	100%Frost1& Frost2
25	36		<b><u>Blade 1 A</u></b>
		0-255	Open to Close
	37		<b><u>Blade 1 A Fine</u> :</b>
		0-255	Open to Close Fine
26	38		<b><u>Blade 1 B</u> :</b>
		0-255	Blade 1 Rotation
	39		<b><u>Blade 1 B Fine</u> :</b>
		0-255	Blade 1 Rotation Fine
27	40		<b><u>Blade 2A</u> :</b>
		0-255	Open to Close
	41		<b><u>Blade 2 A Fine</u> :</b>
		0-255	Open to Close Fine
28	42		<b><u>Blade 2 B</u> :</b>
		0-255	Blade 2 Rotation
	43		<b><u>Blade 2 B Fine</u> :</b>
		0-255	Blade 2 Rotation Fine
29	44		<b><u>Blade 3 A</u> :</b>
		0-255	Open to Close
	45		<b><u>Blade 3 A Fine</u> :</b>
		0-255	Open to Close Fine
30	46		<b><u>Blade 3 B</u> :</b>
		0-255	Blade 3 Rotation
	47		<b><u>Blade 3 B Fine</u> :</b>
		0-255	Blade 3 Rotation Fine
31	48		<b><u>Blade 4 A</u> :</b>
		0-255	Open to Close
	49		<b><u>Blade 4 A Fine</u> :</b>
		0-255	Open to Close Fine
32	50		<b><u>Blade 4 B</u> :</b>
		0-255	Right Blade Rotation
	51		<b><u>Blade 4 B Fine</u> :</b>
		0-255	Right Blade Rotation Fine
33	52		<b><u>All Blade Rotation</u> :</b>
		0-255	All Blade Rotation
	53		<b><u>All Blade Rotation Fine</u> :</b>
		0-255	All Blade Rotation Fine
			<b><u>Focus Timing</u></b>

	54	0-255	Adjustment of fixture timing to control Pan/Tilt mechanisms.
			<b><u>Color Timing</u></b>
	55	0-255	Adjustment of fixture timing to control color mechanisms.
			<b><u>Beam Timing</u></b>
	56	0-255	Adjustment of fixture timing to control beam mechanisms.
			<b><u>Gobo Timing</u></b>
	57	0-255	Adjustment of fixture timing to control gobo mechanisms.
34	58		<b><u>Control:</u></b>
			The settings is effective after remaining the value unchanged at least 3 seconds
		0-39	No function
		40~59	Gobo Scroll ON
		60~79	Gobo Scroll OFF
		80~99	All motor reset
		100~119	Pan/TILT reset
		120-139	other motor reset
			Refresh Rate (LED) (default 1.2KHz)
		140~200	900Hz~1500Hz (+10Hz/+1 value )
		201	2.5KHz
		202	4KHz
		203	5KHz
		204	10KHz
		205	15KHz
		206	20KHz
		207	25KHz
	208-255	No function	

## 11. ERROR MESSAGES

When you turn on the device, it will first perform a reset. The display may show “Err channel is XX” should there be problems with one or more functions. “XX” stands for channel 1, 2, 3, 4, 5, 6 etc whose sensor has encountered a problem. For example, when the display shows “Err channel is Pan movement”, it means there is an error on channel 1. If there are errors on channel 1, channel 3, channel 21 at the same time, you may see the error message, “Err channel is Pan movement”, “Err channel is Tilt movement”, “Err channel is Shutter”, flash twice, and then the device will generate a second reset. If the error messages persist after performing a reset more than twice, the channels which have errors may not work properly however, all other functions can work as usual. Please contact your dealer or manufacturer for service. Self-repair is not allowed.

### **PAN- movement Er**

(PAN- yoke movement error) This message will appear after the reset of the fixture if the yoke's magnetic-indexing circuit malfunction (Optical Sensor or Magnetic Sensor fails) or the stepper motor is defective (or its driving IC on the main PCB). The PAN- movement is not located in the default position after the reset.

### **TILT- movement Er**

(TILT- head movement error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions ((Optical Sensor or Magnetic Sensor fails)) or the stepper motor is defective (or its driving IC on the main PCB). The TILT- movement is not located in the default position after the reset.

### **CMY wheel Er**

(CMY wheel- error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The CMY - movement is not located in the default position after the reset.

### **CTO wheel Er**

(CTO wheel- error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The CTO - movement is not located in the default position after the reset.

### **Color wheel Er**

(Color wheel- error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Color - movement is not located in the default position after the reset.

### **Gobo wheel1 Er**

(Gobo wheel1- error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Gobo 1 - movement is not located in the default position after the reset.

### **Gobo 1 Rot wheel Er**

(Gobo 1 Rot wheel - error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Gobo 1 Rot I - movement is not located in the default position after the reset.

### **Fix Gobo wheel Er**

(Fix Gobo wheel- error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Fix Gobo - movement is not located in the default position after the reset.

### **Animation wheel Er**

(Animation wheel\_ error) This message will appear after the reset of the fixture if the head's

magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Animation - movement is not located in the default position after the reset.

#### **Prism wheel Er**

(Prism wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Prism - movement is not located in the default position after the reset.

#### **Prism Rot wheel Er**

(Prism Rot wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Prism Rot - movement is not located in the default position after the reset.

#### **Zoom wheel Er**

(Zoom wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Zoom - movement is not located in the default position after the reset.

#### **Focus wheel Er**

(Focus wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Focus - movement is not located in the default position after the reset.

#### **Frost 1 wheel Er**

(Frost1 wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Frost 1 - movement is not located in the default position after the reset.

#### **Frost 2 wheel Er**

(Frost 2 wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Frost 2 - movement is not located in the default position after the reset.

#### **Iris wheel Er**

(Iris wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Iris - movement is not located in the default position after the reset.

#### **Blade 1 wheel Er**

(Blade 1 wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Blade 1 - movement is not located in the default position after the reset.

#### **Blade 1 Rotation wheel Er**

(Blade 1 Rotation wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Blade 1 Rotation - movement is not located in the default position after the reset.

#### **Blade 2 wheel Er**

(Blade 2 wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Blade 2 - movement is not located in the default position after the reset.

**Blade 2 Rotation wheel Er**

(Blade 2 Rotation wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Blade 2 Rotation - movement is not located in the default position after the reset.

**Blade 3 wheel Er**

(Blade 3 wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Blade 3 - movement is not located in the default position after the reset.

**Blade 3 Rotation wheel Er**

(Blade 3 Rotation wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Blade 3 Rotation - movement is not located in the default position after the reset.

**Blade 4 wheel Er**

(Blade 4 wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Blade 4 - movement is not located in the default position after the reset.

**Blade 4 Rotation wheel Er**

(Blade 4 Rotation wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Blade 4 Rotation - movement is not located in the default position after the reset.

**Blade Rotation wheel Er**

(Blade Rotation wheel\_ error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Blade Rotation - movement is not located in the default position after the reset.

## 12. CLEANING AND MAINTENANCE

The following points have to be considered during inspection:

- 1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- 2) There must not be any deformations to the housing, lenses, rigging and installation points (ceiling, suspension, trussing).
- 3) Motorized parts must not show any signs of wear and must move smoothly without issue.
- 4) The power supply cables must not show any damage, material fatigue or sediment.

Further instructions depending on the installation location and usage have to be adhered to by a qualified installer and any safety concerns have to be removed.



### CAUTION!

Disconnect from mains before starting maintenance operation.

In order to ensure the device remains in good condition and does not fail prematurely, we suggest regular maintenance.

- 1) Clean the inside and outside lens each week to avoid loss of output due to accumulation of dust/ dirt on the lens.
- 2) Clean the fans each week to ensure maximum airflow and efficient thermal cooling. This will ensure the light source is operated in the best possible condition.
- 3) A detailed electrical check by an approved electrician every quarter to make sure that the circuit contacts are in good condition. This will prevent poor circuit contacts and the resultant overheating.

We recommend frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents.

Please refer to the instructions under “Installation instructions”.

Should you need any spare parts, please order genuine parts from your local dealer.