

# GLW760 IP

**KEEP THIS MANUAL FOR FUTURE NEEDS**



**Thank you for purchasing a TERBLY product. You have acquired a powerful and versatile fixture. We are confident that you will be satisfied with our excellent products and service. For your own safety, please read this user manual carefully before installing and operating the device.**

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# 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.

	<b>CAUTION!</b> HIGH VOLTAGE. RISK OF SEVERE OR FATAL ELECTRIC SHOCK
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	<b>CAUTION!</b> ALWAYS DISCONNECT MAINS SUPPLY BEFORE REMOVING ANY FIXTURE COVERS
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	<b>CAUTION!</b> NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE. SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK
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	<b>CAUTION!</b> NEVER TOUCH THE DEVICE DURING OPERATION! COVERS MAY BE HOT
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 **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.*

- 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.
- This device falls under protection-class I. Therefore, it is essential that the device be earthed.
- If either lenses or display are damaged (damage may include cracks or gashes in the material) they must be replaced.
- Electrical connections, such as replacing the power plug, must be performed by a qualified person.
- Make sure that the available voltage is not higher than that which is stated at the end of this manual.
- Make sure the power cord is never crushed or damaged by sharp edges. Should the power cord suffer If this should be the case, replacement of the cable must be done by an authorized dealer.
- 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.

- 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.
- When powered on for the first time, some smoke or smell may occur. This is caused by coating on metal parts when heated and is normal. If you are concerned, please contact your distributor or Terbly.
- 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 1 meter.

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

## 1.2. GENERAL GUIDELINES

- This device is a lighting effect for professional use on stages, in discotheques, theatres, etc., the device was designed for indoor or outdoor.
- 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.
- Handle the device with care, avoid shaking or using force when installing or maintaining the device.
- When choosing the installation location, please make sure that the device is not exposed to extreme heat, moisture or dust.
- 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.
- 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.
- Please use the original packaging if the device is to be transported.
- The applicable temperature for the device is between -10°C to 45°C. Do not use the device outside of this temperature range.
- The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.

**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 operation may lead to short-circuits, burns, electric shocks etc.**

## 2. FEATURES

## POWER SUPPLY

- AC 100-240V~, 50/60Hz
- Power Consumption: 650W

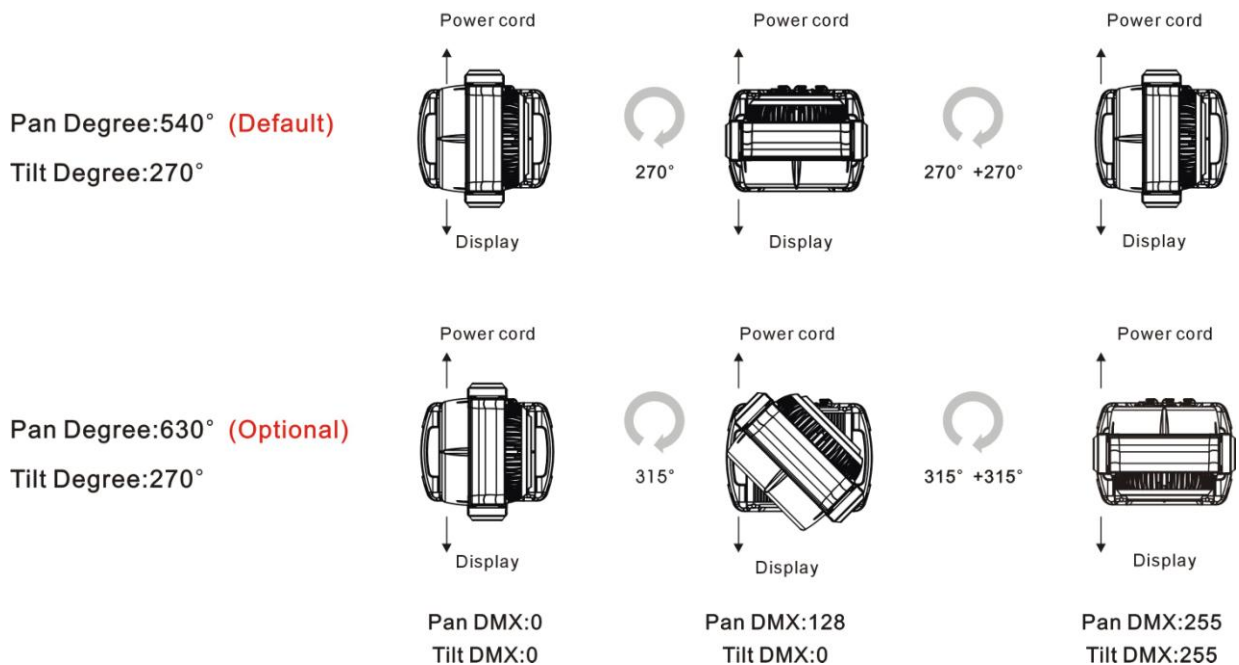
## OPTICS

- LED: 7 pcs high power RGBW LED
- Extremely long Life: >10,000 H

## MOVEMENT

- Pan/Tilt movement: 360° infinite rotation (16 bit)
- Advanced moving system: fast, stable and quite, auto x-y repositioning

### Pan/Tilt movement mode:



## COLORS



- RGBW color mixing, uniform, linear and speed can be adjustable

## FEATURES

- 3 Control channel modes: 26/20/48 channels
- 2 operations modes: DMX-512, Master / Slave Active
- Strobe effect with 1-25 flashes per second and pulse effect
- Beam angle: zoom for 5° ~45°
- Dimmer: 0%~100% full range dimming.

## 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

- Friendly reset detection: hold  and  button to lock pan /tilt reset, able to complete reset detection inside flight case

## SOFTWARE

7 pre-installed programs available upon selection

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

## OTHER SPEC

Input signal isolation: guarantees stable signal transmission without interference

Advanced RDM function

## WHIGHT

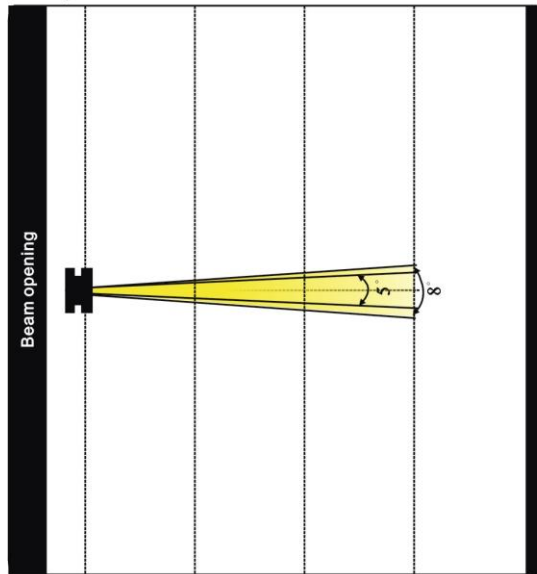
Net weight: 16.8 kg

## PHOTOMETRIC DATA

Min. Beam angle( $5^{\circ}$ )

Min. Field angle( $8^{\circ}$ )

Intensity LUX 14720 3680 1635

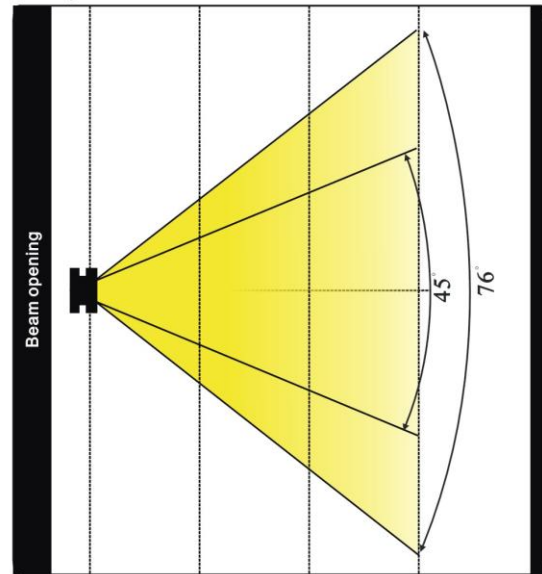


Distance(m)	5	10	15
Diameter(m)	Φ0.48	Φ0.96	Φ14.4

Max. Beam angle( $45^{\circ}$ )

Max. Field angle( $76^{\circ}$ )

Intensity LUX 280 70 35



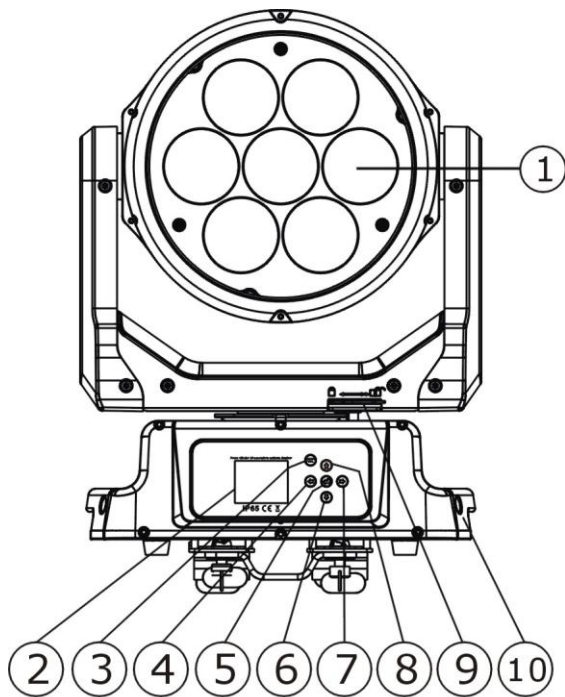
Distance(m)	5	10	15
Diameter(m)	Φ8	Φ16	Φ24

## DMX CHANNEL DATA IMAGE

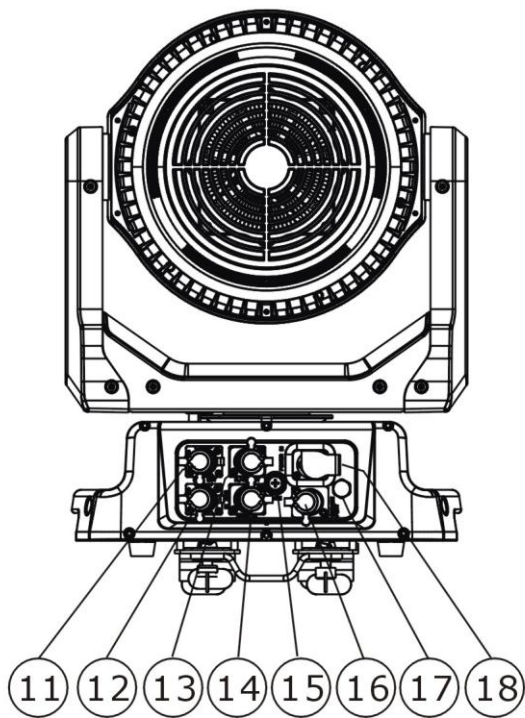
	1	2	3	4	5	6	7	8	9	10	11	12	13
%	Pan	Pan Hight Resolution	Tilt	Tilt Hight Resolution	Scan Speed	Pan Motor	Left Tilt Motor	Strobe	Dimming	Dim Modes	Zoom	Red LED all arrays	Red LED Fine -all arrays
100%		16bit Pan Fine		16bit Tilt Fine	No function	Backwards Pan rotation from slow to fast	Backwards Tilt rotation from slow to fast			Standard			Fine control for Red adjustment
75%				Blackout by movement	No rotation	No rotation	PANDOM STROBE		Stage				
50%					Min	Forwards Pan rotation from fast to slow	Forwards Tilt rotation from fast to slow	Pulse-effect in sequence		TV			
25%					Moving speed ↑	No function	No function			Architectural			
0%					Max					Theatre			
										Default to Unit Setting			

	14	15	16	17	18	19	20	21	22	23	24	25	26		
%	Green LED all arrays	Green LED Fine -all arrays	Blue LED all arrays	Blue LED Fine -all arrays	White LED all arrays	White LED Fine -all arrays	Color Macro	Color Presets	Dimming	Chase Patterns	Chase Speed	Color Mode	Auto Programs		
100%		Fine control for Green adjustment		Fine control for Blue adjustment		Fine control for White adjustment		8000k		Chase 8	Fast to Slow Backward	Store a new white balance	No function		
75%									6500k			Chase 4	Edit a new white balance	Others motor reset	
50%										5600k			Chase 1	Calibrated mode	No function
25%										4300k			Led trun off	No function	Scan motor reset
0%							3200k					All motor reset			
							2700k						Normal		
							No function								

### 3. FIXTURE OVERVIEW



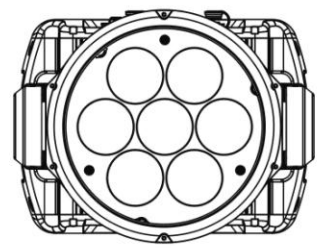
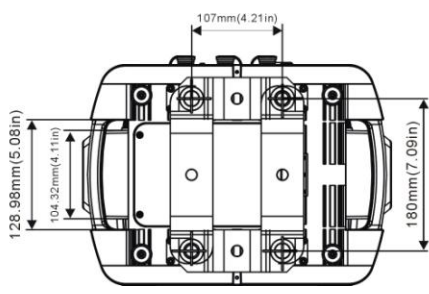
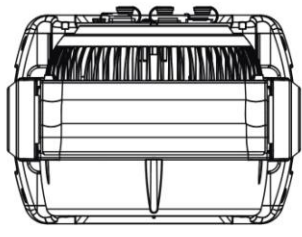
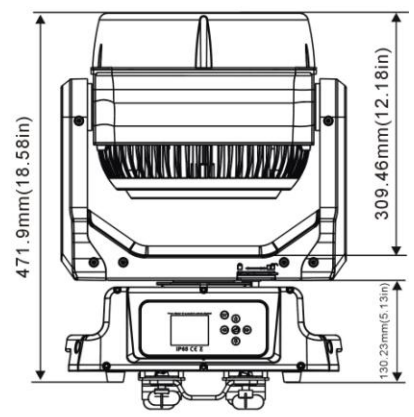
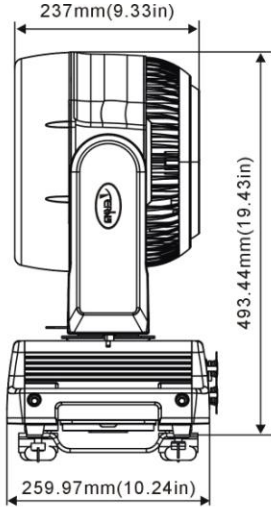
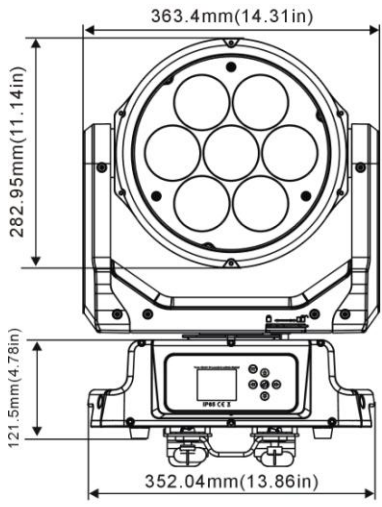
- 1) Lens
- 2) Display
- 3) Mode/Esc-button
- 4) Left-button
- 5) ENTER-button
- 6) Down-button
- 7) Right-button
- 8) Up-button
- 9) Pan Lock
- 10) Handle



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



## 4. DIMENSIONAL DRAWINGS



## 5. INSTALLATION INSTRUCTIONS



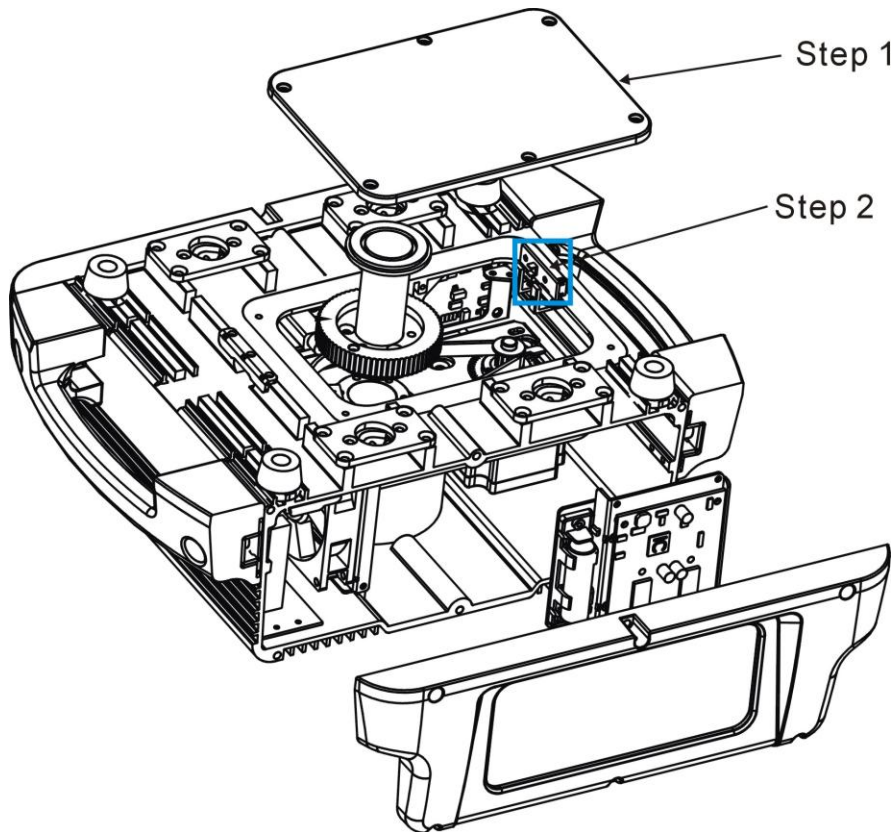
**CAUTION!**  
**DISCONNECT THE FIXTURE FROM POWER AND ALLOW IT TO COOL FOR TEN MINUTE**

### 5.1. INSTALLING OR REPLACING THE PAN LIGHT SENSOR

**Procedures:**

**Step 1:** Remove the bottom seal plate.

**Step 2:** Remove the pan light sensor, see below picture in blue frame.



### 5.2. INSTALLING OR REPLACING THE PAN MOTOR AND BELT

**Procedures:**

**Step 1:** Remove the bottom seal plate.

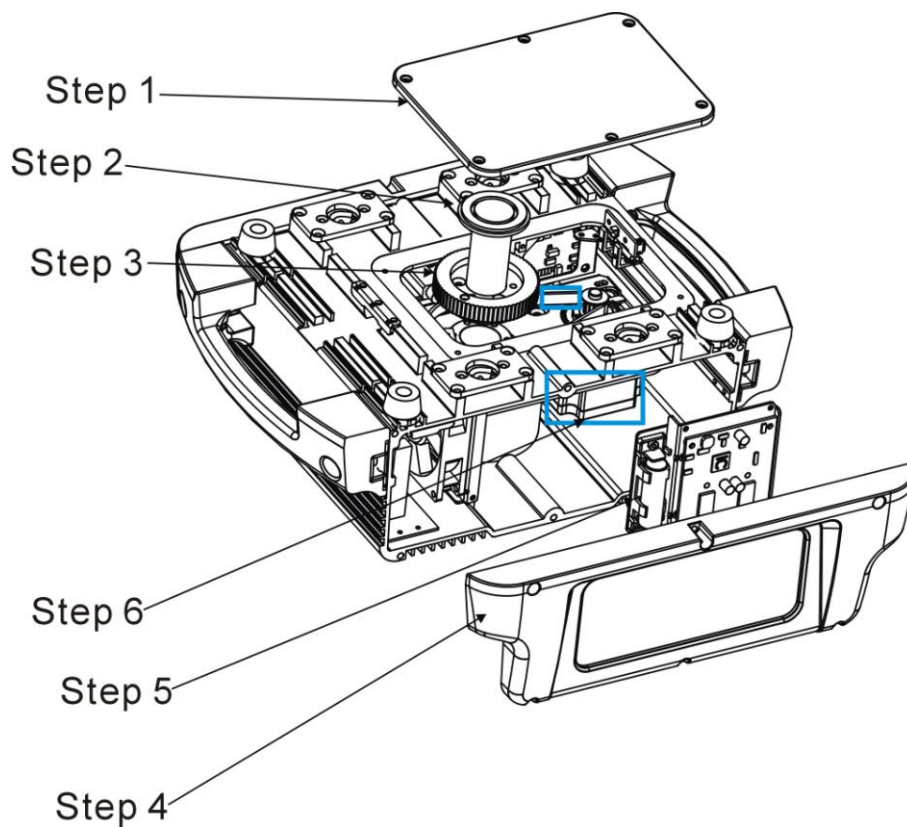
**Step 2:** Remove universal axis.

**Step 3:** Release the screws, removing the Pan Pulley, then can remove the pan belt, see below picture in blue frame.

**Step 4:** Remove the display screen assembly.

**Step 5:** Remove the control board assembly.

**Step 6:** Remove the pan motor assembly, then can install the pan motor, see below picture in blue frame.



### 5.3. INSTALLING OR REPLACING THE TILT MOTOR AND BELT

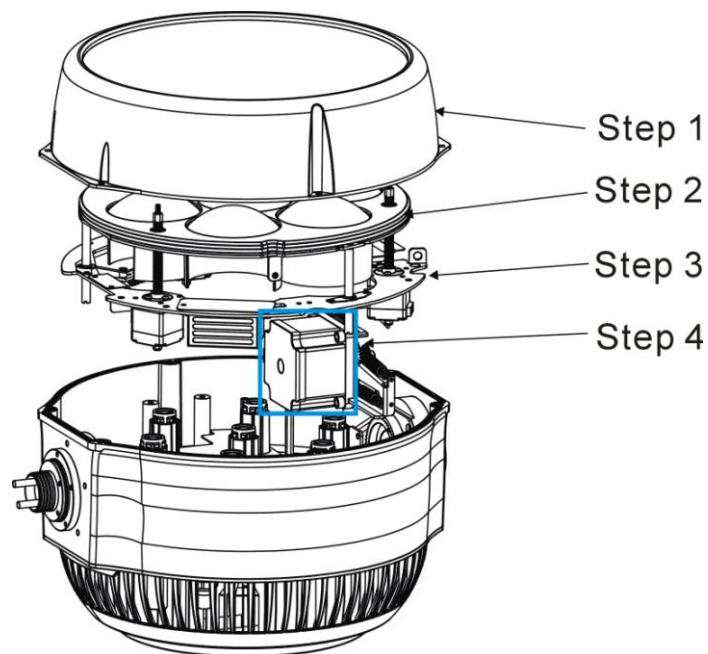
**Procedures:**

**Step 1:** Remove the front head cover assembly.

**Step 2:** Remove the lens cover assy.

**Step 3:** Remove the motor bracket assembly.

**Step 4:** Remove the tilt motor bracket assembly, then can replace and install the tilt motor and belt, see below picture in blue frame.



## 5.4. RIGGING THE DEVICE

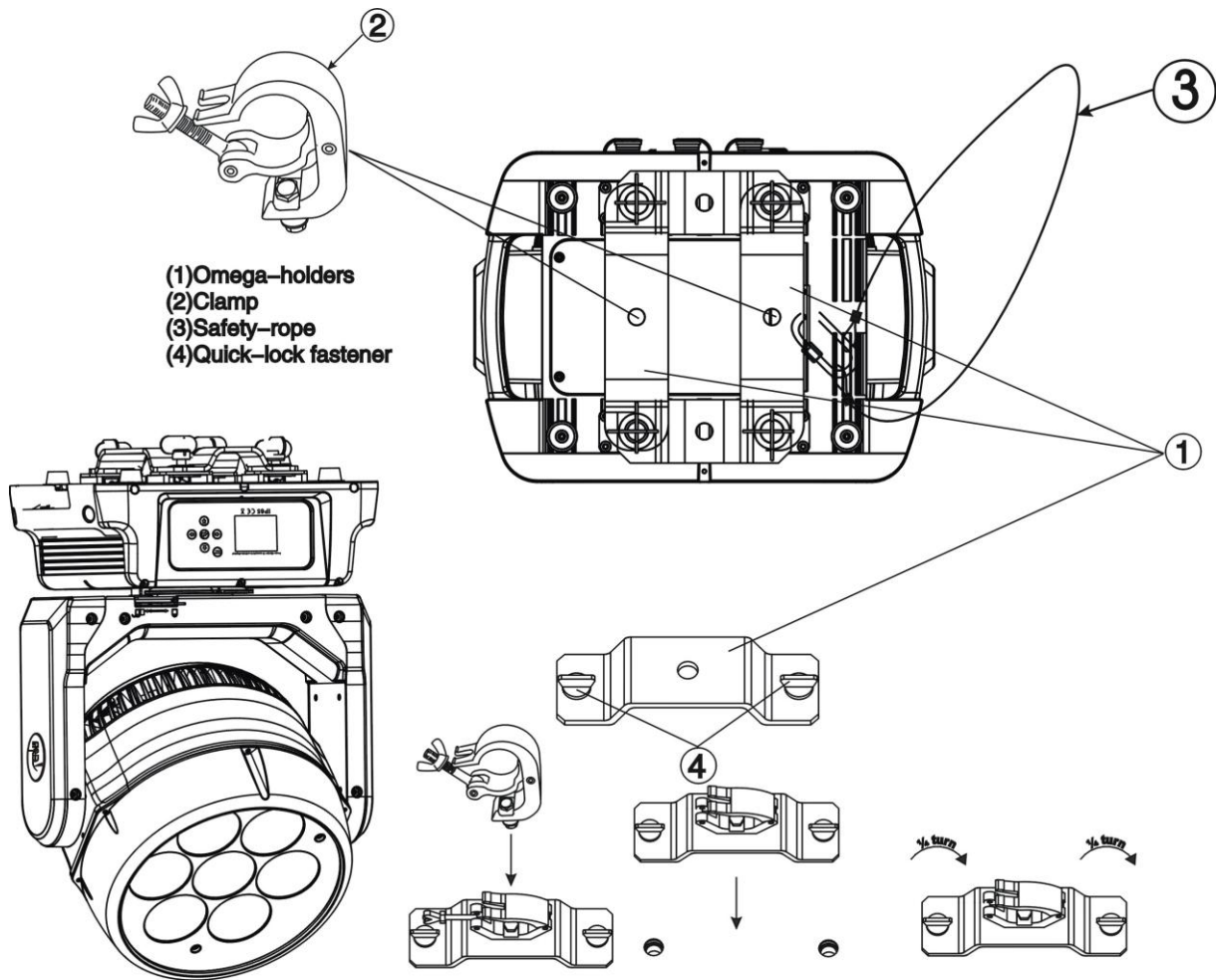


### **CAUTION!**

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.

## 5.5. RIGGING USING THE OMEGA BRACKETS



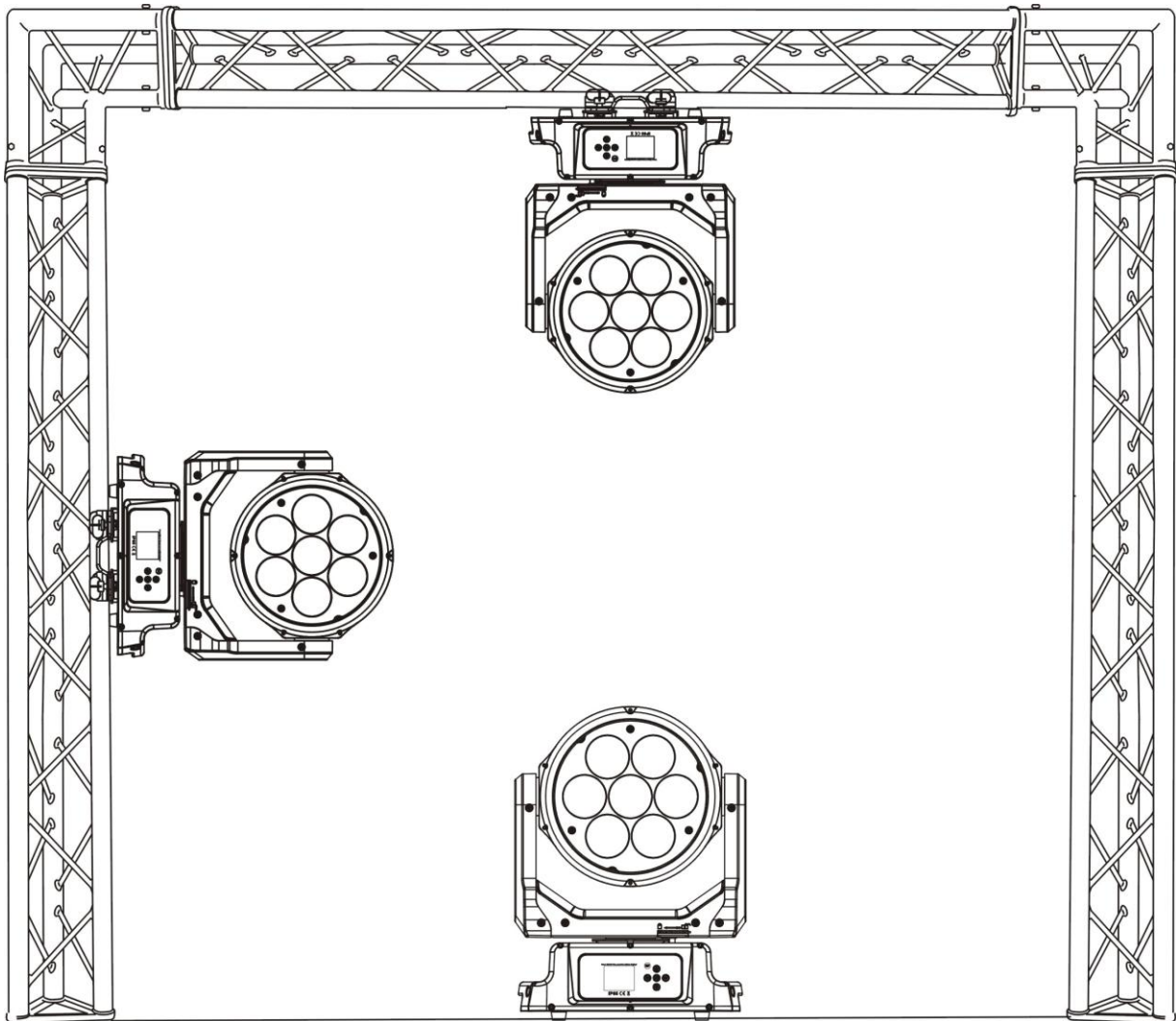
- Fix the clamp to the bracket by tightening the M12 nut and bolt to the bracket through the  $\Phi 13$  hole in the middle of the bracket.
- Insert the quick-lock fasteners of the first Omega holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise.
- Install the second Omega holder.
- 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.

## 5.6. RIGGING DRAWINGS



- The device can be rigged in any of the orientations shown in the image above.
- The device must be kept at least 0.1 m away from any flammable materials (decoration etc. ) .
- 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.

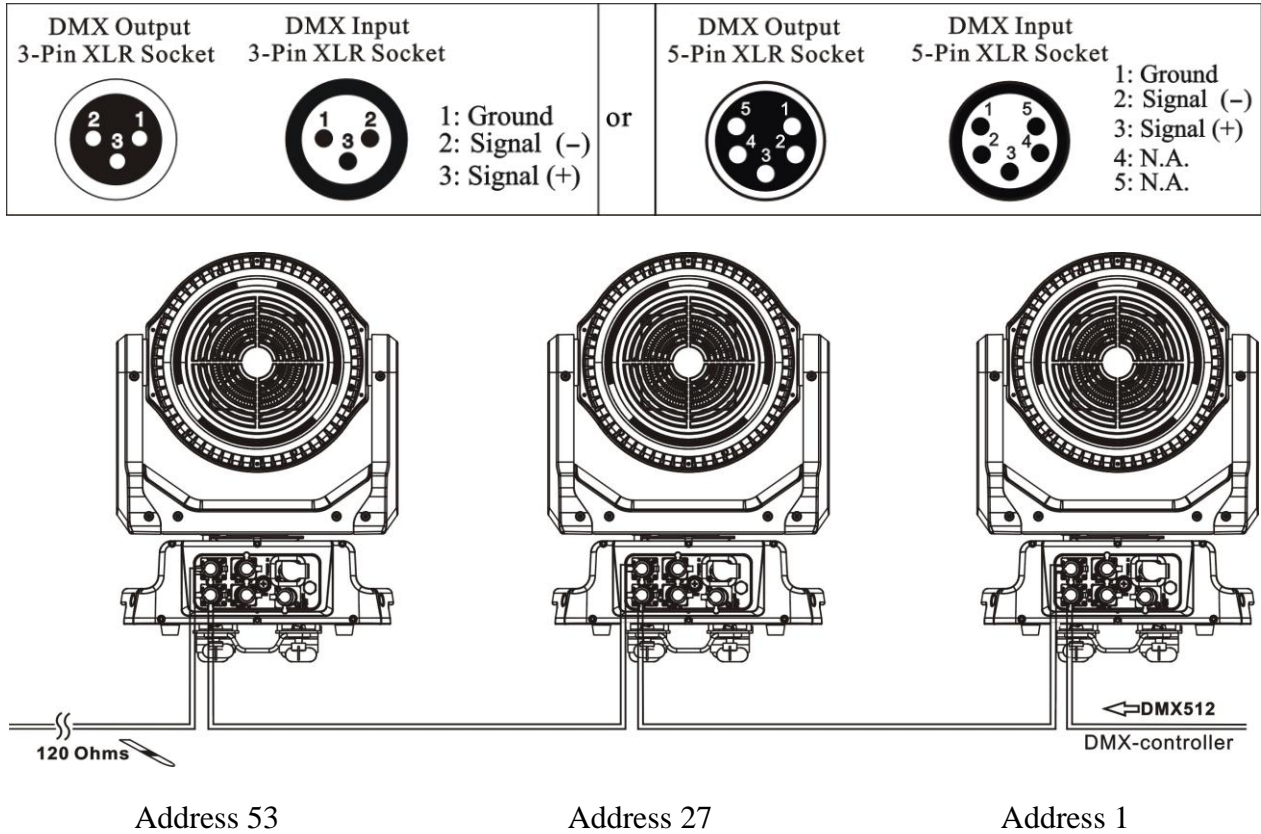


### **Important:**

**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.**

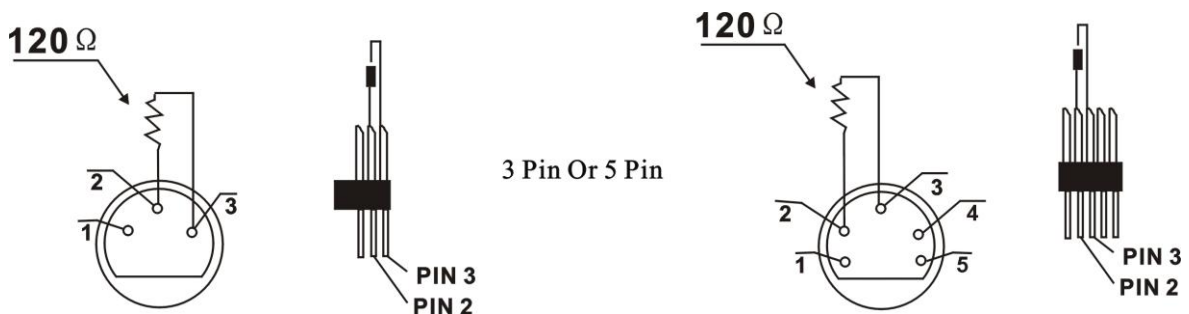
## 6. DMX-512 CONTROL CONNECTION

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 Ω 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 moving head, which is a 26 channel fixture, you should set the starting address of the first unit to 1, the second unit to 27(26 + 1), the third unit to 53 (26+ 27), 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 turn on by using the unit's battery built in battery.



Default settings shaded

Function	Set Dmx Address	A001~AXXX		DMX address setting
	Dmx Value	ALL.....		DMX value display
	Slave Mode	Slave1,Slave2,Slave3		Slave setting
	Auto Program	Master / Alone		Auto program
Information	Time Information	Current Time Total Run Time Last Run Time LastRun Password Clear Last Run	XXXX(Hours) XXXX(Hours) XXXX(Hours) Password=XXX ON/OFF	Owe on running time Fixture running time Fixture Last times clear Timer Password 038 Clear Fixture Last time
	Temperature Info	Head Temperature	XXX°C/°F	Temperature in the head
	Ethernet IP	Ethernet IP XXX. XXX. XXX. XXX XXX. XXX. XXX. XXX		IP Information
	Fan Info	HeadFan1: xxxx RPM .....		Fan Information
	Software Version	1U01: V1.0.0 2U01: V1.0.0 :		Software version
	Error Info	Error Record 1 Error Record 2 ... .. Error Record 10		PAN ..... PAN ..... ... .. PAN .....
Personality	Status Settings	Address Via DMX No DMX Status Pan Reverse Tilt Reverse Pan Degree Feedback LED Degree Change Hibernation	ON/OFF Close/Hold/Auto ON/OFF ON/OFF 630/540 ON/OFF 0/180 OFF, 01M~99M, 15M	Add. via DMX Auto run if no DMX Pan Reverse movement Tilt Reverse movement Pan Degree Select Movement Feedback LED Degree Change Standby Mode
	Service Setting	Password Clear Err. Info DFLT Pow. Efly On USB Update	Password=XXX ON/OFF ON/OFF YES/NO	Service Password“=050” Clear Err. Info DFLT Pow. Efly On USB Update
	Fans Control	Auto High Silent		Fans Control
	Display Setting	Shutoff Time Display Reverse Key Lock	02~60m 05m OFF/ON ON/OFF	Display shutoff time Reverse 180 degree Key Lock
	Temperature C/F	Celsius Fahrenheit		Temperature switch between °C/°F
	Initial Status	PAN =XXX .....		Initial effect position

	Select Signal	DMX Only Art-Net sACN	DMX Only Art-Net sACN
	Ethernet IP	XXX. XXX. XXX. XXX	Ethernet IP
	Ether Mask IP	XXX. XXX. XXX. XXX	Ether Mask IP
	Set Universe	000~32767	Setting Art-Net Universe
	White Balance	ON/OFF	White Balance
	Dimmer Mode	Standard Stage TV Architectural Theatre	Dimmer Mode
	Refresh	900~1200.....	Refresh
	Gamma	2.0, 2.2, 2.4, 2.6, 2.8	Gamma
Reset Default	ON OFF	Restore factory set.	
Reset Function	Reset All Reset Pan&Tilt Reset Others	Reset All Reset Pan&Tilt Reset Others	
Effect Adjust	Test Channel	PAN .....	Test function
	Manual Control	PAN =XXX :	Fine adjustment of the lamp
	Calibration	Calibrate Password Pan=XXX :	Password "050" Calibrate and adjust the effects to standard/right position
Users Mode Set	User Mode	Basic Mode Standard Mode Extended Mode User Mode A User Mode B User Mode C	User's mode to change channel numbers
	Edit User Mode A Edit User Mode B Edit User Mode C	Max Channel = XX PAN = CH01 :	Edit User Mode A,B,C
	Select Programs	Auto Pro Part 1 = Program 1 ~ 10 Program 1 Auto Pro Part 2 = Program 1 ~ 10 Program 1 Auto Pro Part 3 = Program 1 ~ 10 Program 1	Select programs to be run
Edit Program	Edit Program	Program 1 : Program 10	Program Test Step 01=SCxxx Step 64=SCxxx
	Edit Scenes	Edit Scene 001 ~ Edit Scene 250	Pan,Tilt,..... --Fade Time-- --Scene Time-- Input By Out
	Rec. Controller	XX~XX	Automat. scenes rec

Language Set	English/Chinese	Language Setting
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## 9.1. Function

### 9.1.1. Set DMX Address

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

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

### 9.1.2. DMX Value

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

1. Access the main menu.
2. Tap the <Up/Down> button until “Dmx Value” is displayed.
3. Press <ENTER>, the display will show “Dmx Value” .
4. Tap the <Up/Down> button, choose each channel.
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.1.3. Slave Mode

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

1. Access the main menu.
2. Tap the <Up/Down> button until “Slave Mode” is displayed.
3. Press <ENTER>, the display will show “Slave Mode” .
4. Tap the <Up/Down> button, the display will show “Slave1” , “Slave2” , “Slave3” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.1.4. Auto Program

With this function, you can run the internal program. You can select the desired program under “**Select program**” . You can set the number of steps under “**Edit program**” . You can edit the individual scenes under “**Edit scenes**” . With this function, you can run the individual scenes either automatically, i. e. with the adjusted Step-Time.

1. Access the main menu.
2. Tap the <Up/Down> button until “Auto Program” is displayed.
3. Press <ENTER>, the display will show “Auto Program” .
4. Tap the <Up/Down> button, the display will show “Master”, “Alone” .
5. Press <ENTER>R to confirm or press <MODE/ESC> to return to the main menu.

## 9.2. Information

### 9.2.1. Time information

## Current Time

With this function, you can display the temporary running time of the device from the last power on. The display shows “XXXX”, “XXXX” stands for the number of hours. The counter is resetted after turning the device off.

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

## 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 “Information” is displayed. Press <ENTER>, the display will show “Information”. Tap the <Up/Down> button until the display will show “Time Information”. Press <ENTER>, the display will show “Time Information”.
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.

## 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 “Information” is displayed. Press <ENTER>, the display will show “Information”. Tap the <Up/Down> button until the display will show “Time Information”. Press <ENTER>, the display will show “Time Information”.
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.

## LastRun Password

With this function, you can display the timer password.

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Information” is displayed. Press <ENTER>, the display will show “Information”. Tap the <Up/Down> button until the display will show “Time Information”. Press <ENTER>, the display will show “Time Information”.
2. Press <Up/Down>, the display will show “LastRun Password”.
3. Press <ENTER>, the display will show “LastRun Password”. The time password is 038.
4. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **Clear Last Run**

With this function, you can clear last run time of the fixture. The display shows “ON” or “OFF”, Press “Enter” to confirm.

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Information” is displayed. Press <ENTER>, the display will show “Information” . Tap the <Up/Down> button until the display will show “Time Information” . Press <ENTER>, the display will show “Time Information” .
2. Press <Up/Down>, the display will show “Clear Last Run” .
3. At “L-Timer Password” menu input right password. Press< ENTER>, the display will show “Clear Last Run” .
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.

### **9.2.2. Temperature Info**

#### **Head Temp.**

With this function you can display the temperature on the display board of the base (near CMY-filter) in Celsius.

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

### **9.2.3. Ethernet IP**

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

### **9.2.4. Fan Info**

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down>button until “Information” is displayed. Press <ENTER>, the display will show “Information” .
2. Press <Up/Down>, the display will show “Fan Info” .
3. Press< ENTER>, the display will show “Fan Info” .
4. The display show “HeadFan1: xxxx RPM” .....
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **9.2.5. Software Ver**

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 “Information” is displayed. Press <ENTER>, the display will show “Information” .

2. Press <Up/Down>, the display will show “Software Ver” .
3. Press< ENTER>, the display will show “Software Ver” .
4. The display show “1U01: V1.0.0” , “2U01: V1.0.0” .....
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### 9.2.6. Error Info

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Information” is displayed. Press <ENTER>, the display will show “Information” .
2. Press <Up/Down>, the display will show “Error Info” .
3. Press< ENTER>, the display will show “Error Info” .
4. The display 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.

## 9.3. Personality

### 9.3.1. Status Settings

#### Address via DMX

With this function, you can adjust the desired DMX-address via an external controller.

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press < ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Status settings” .Press <ENTER>, the display will show “Status settings” .
2. Press <Up/Down>, the display will show “Address via DMX” .
3. Press< ENTER>, the display will show “Address via DMX” .
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.

#### No DMX Status

With this function, when the drive is not DMX signal, it runs automatism, close, hold and music, the default is hold.

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press < ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Status settings” .Press <ENTER>, the display will show “Status settings” .
2. Press <Up/Down>, the display will show “No DMX Status” .
3. Press< ENTER>, the display will show “No DMX Status” .
4. The display show “Hold”, Press <Up/Down>, the display will show “Close”, “Hold”, “Auto” .
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 “Personality” is displayed. Press < ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Status settings” .Press <ENTER>, the display will show “Status settings” .

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.

### **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 “Personality” is displayed. Press < ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Status settings” .Press <ENTER>, the display will show “Status settings” .
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 Degree**

With this function, you can select pan degree for 630 or 540.

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press < ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Status settings” .Press <ENTER>, the display will show “Status settings” .
2. Press <Up/Down>, the display will show “Pan Degree” .
3. Press< ENTER>, the display will show “Pan Degree” .
4. The display show “540”, Press <Up/Down>, the display will show “630” .
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 “Personality” is displayed. Press < ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Status settings” .Press <ENTER>, the display will show “Status settings” .
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.

### **LED Degree Change**

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press < ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Status settings” .Press <ENTER>, the display will show “Status settings” .
2. Press <Up/Down>, the display will show “LED Degree Change” .
3. Press< ENTER>, the display will show “LED Degree Change” .
4. The display show “0”, Press <Up/Down>, the display will show “180” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **Hibernation: Standby mode**

The device and step motors will be power off if the fixture stay without DMX signal for 15 mins (Factory default). And the fixture will be reset before working once it receive DMX signal again.

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Status settings” . Press <ENTER>, the display will show “Status settings” .
2. Press <Up/Down>, the display will show “Hibernation” .
3. Press< ENTER>, the display will show “Hibernation” .
4. The display show “15M”, Press <Up/Down>, the display will show “01M”, “02M” .... “99M” or “OFF” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **9.3.2. Service Setting**

#### **Password**

The Password for this function is “050” .

#### **Clear Err. Info**

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Service Setting” . Press <ENTER>, the display will show “Service Setting” .
2. Press <Up/Down>, the display will show “Clear Err. Info” .
3. Press< ENTER>, the display will show “Clear 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.

#### **DFLT Pow. E-FLY On**

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Service Setting” . Press <ENTER>, the display will show “Service Setting” .
2. Press <Up/Down>, the display will show “DFLT Pow. E-FLY On” .
3. Press< ENTER>, the display will show “DFLT Pow. E-FLY On” .
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.

#### **USB Update**

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Service Setting” . Press <ENTER>, the display will show “Service Setting” .
2. Press <Up/Down>, the display will show “USB Update” .
3. Press< ENTER>, the display will show “USB Update” .
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.

### 9.3.3. Fans Control

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” .
2. Press <Up/Down>, the display will show “Fans Control” .
3. Press< ENTER>, the display will show “Fans Control” .
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.

### 9.3.4. Display Setting

#### Shut off time

With this function you can shut off the LCD display after 2 to 60 minutes. The default is 5 minutes.

#### Display Reverse

With this function you can rotate the display by 180°.

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

#### Key Lock

With this function you can activate the automatic key lock function. If this function is activated, the keys will be locked automatically after exiting the edit mode for 15 seconds. keeping press the <MODE/ESC> key for 3seconds if you do not need this function.

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” . Tap the <Up/Down> button until the display will show “Display Setting” . Press <ENTER>, the display will show “Display Setting” .
2. Press <Up/Down>, the display will show “Key Lock” .
3. Press< ENTER>, the display will show “Key Lock” .
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.

### 9.3.5. Temperature C/F

With this function you can display the temperature in Celsius or Fahrenheit.

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” .
2. Press <Up/Down>, the display will show “Temperature C/F” .
3. Press< ENTER>, the display will show “Temperature C/F” .
4. The display show “Fahrenheit”, Press <Up/Down>, the display will show “Celsius” .

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

### **9.3.6. Initial Status**

With this function you can display initial effect position.

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” .
2. Press <Up/Down>, the display will show “Initial Status” .
3. Press< ENTER>, the display will show “Initial Status” .
4. The display show “Pan=XXX” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **9.3.7. Select Signal**

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” .
2. Press <Up/Down>, the display will show “Select Signal” .
3. Press< ENTER>, the display will show “Select Signal” .
4. The display shows “DMX only” , Press <Up/Down>, the display will show “DMX only” , “Art-Net” , “sACN” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **9.3.8. Ethernet IP**

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

### **9.3.9. Ether Mask IP**

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

### **9.3.10. Set Universe**

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” .
2. Press <Up/Down>, the display will show “Set Universe” .
3. Press< ENTER>, the display will show “Set Universe” .
4. The display show “000-32767” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **9.3.11. White Balance**

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” .

2. Press <Up/Down>, the display will show “White Balance” .
3. Press< ENTER>, the display will show “White Balance” .
4. The display shows “OFF” , Press <Up/Down>, the display will show “ON” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

#### **9.3.12. Dimmer Mode**

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” .
2. Press <Up/Down>, the display will show “Dimmer Mode” .
3. Press< ENTER>, the display will show “Dimmer Mode” .
4. The display shows “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.

#### **9.3.13. Refresh**

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

#### **9.3.14. Gamma**

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” .
2. Press <Up/Down>, the display will show “Gamma” .
3. Press< ENTER>, the display will show “Gamma” .
4. The display shows “2.2” , Press <Up/Down>, the display will show “2.0” , “2.2” , “2.4” , “2.6” , “2.8” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

#### **9.3.15. Reset Default**

With this function, you can select restore factory set for ON or OFF, the default is OFF.

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Personality” is displayed. Press <ENTER>, the display will show “Personality” .
2. Press <Up/Down>, the display will show “Reset Default” .
3. Press< ENTER>, the display will show “Reset Default” .
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.

### **9.4. RESET FUNCTION**

With this function you can reset the device via the Display. You can select the different reset functions from the display screen or a DMX console.

1. Tap <MODE/ESC> button, access the main menu.
2. Tap <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 All”, “Reset Pan & Tilt”, “Reset Others” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## **9.5. Effect Adjust**

### **9.5.1. Test Channel**

With this function you can test each channel’s function to ensure correct operation.

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Effect Adjust” is displayed. Press <ENTER>, the display will show “Effect Adjust” .
2. Press <Up/Down>, the display will show “Test Channel” .
3. Press <ENTER>, the display will show “Test Channel” .
4. The display shows “PAN = XXX” first channel, Press <Up/Down>, can choose other channel.
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

### **9.5.2. Manual Control**

When set to Manual Mode, fixture will be back to factory settings. If want to adjust brightness, can adjust by shutter and dimming channel, channel value is 0-255. Other functions can be set according to user's real need.

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

### **9.5.3. 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 “Effect Adjust” is displayed. Press <ENTER>, the display will show “Effect Adjust” .
2. Press <Up/Down>, the display will show “Calibration” .
3. Input a correct password, press <ENTER>, the display will show “Calibration” .
4. The display show “Password=XXXX” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## **9.6. USERS MODE SET**

1. Tap <MODE/ESC> button, access the main menu.
2. Tap the <Up/Down> button until “Users mode set” is displayed.
3. Press <ENTER>, the display will show “Users mode set” .
4. The display shows “User Mode”, Press <Up/Down> button, then you can choose “Edit User Mode A”, “Edit User Mode B” and “Edit User Mode C” .
5. Press <ENTER> to confirm or press <MODE/ESC> to exit.

As well as Standard Mode, Basic Mode and Extended Mode, this fixture has another three

DMX modes which can be set according to user's needs. To set one of these user modes see below:

1. Tap <MODE/ESC> button, access the main menu, Tap the <Up/Down> button until “Users mode set” is displayed. Press <ENTER>, the display will show “Users mode set” .
2. Choose “Edit User Mode A”, press “ENTER” .
3. Set “Max Channel=xxx” the max channel.
4. Set “Edit User Mode B” and “Edit User Mode C” as above.

### 9.6.1. User Mode

With this function, you can create user defined channel orders.

### 9.6.2. Edit User Mode A/B/C

With this function, you can adjust the rest user defined channel order.

1. Tap <MODE/ESC> button, access the main menu.
2. Tap the <Up/Down> button until “Users mode set” is displayed.
3. Press <ENTER>, the display will show “Users mode set” .
4. The display show “Edit User Mode A” first channel, Press <Up/Down> the display will show “Edit User Mode B”, “Edit User Mode C” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

## 9.7. EDIT PROGRAM

1. Tap <MODE/ESC> button, access the main menu.
2. Tap the <Up/Down> button until “Edit program” is displayed.
3. Press <ENTER>, the display will show “Edit program” .
4. The display show “Select programs”, Press <Up/Down>, the display will show “Edit Program”, “Edit Scenes”, “Rec. Controller” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Run the auto program: A master fixture can output to three different program signals to the slave fixture to operate. It means the host will send cyclically in the following orders (The host will keep operating the program of Part 1) Then the slave fixture will make the selectively receiving according to its own set.



1. If the slave fixture chooses Run For Slave 1 from the menu of 1-3, then it will receive the part 1's automatic program from link, in the same way, when the slave fixture chooses Run For Slave 2, then it will receive the part 2's automatic program from link.
2. Enter the menu of 1-3 Function Mode---Set To Slave, Here to set machine operate which part of the program during the host-slave connection.
3. Enter the menu of 1-4, 1-5 Function Mode---Set To Master.
4. Enter the menu of 8-1 Edit Program---Auto Program Part1. The host outputs three groups driven program---Part1, Part2, Part3 (Part1 program runs the same effect as the host)

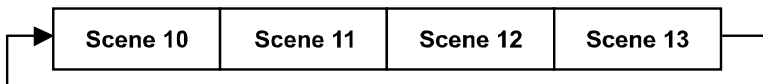
5. Enter the menu of 8-2 Edit Program---Edit Program. Edit the program's connection, connect the scene in order.
6. The editor of the scene, there are as many as 250 scenario editors, and every scene can have a program connection of 10.

**Note:**

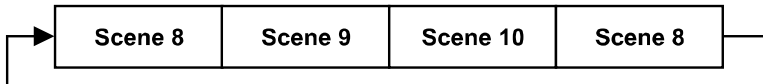
Part 2, Part 3 repeat in accordance with the Part1's repeat. For example: When Part 1 uses Program 2, Part 2 uses Program 4, Part 3 uses Program 6, Assume: Program 2 includes scene of 10, 11, 12, 13; Program 4 includes scene of 8, 9, 10; Program 6 includes scene of 12, 13, 14, 15; Then it will run as below.

Example:

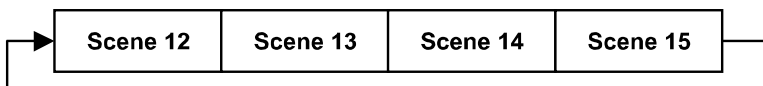
**Part 1:**



**Part 2:**



**Part 3:**



## 9.8. Language Set

With this function, you can set the device language to English or Chinese, the default is English.

1. Tap <MODE/ESC>button, access the main menu,
2. Press <Up/Down>, the display will show “Language Set” .
3. Press< ENTER>, the display will show “Language Set” .
4. The display show “English”, Press <Up/Down>, can choose “Chinese” .
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 (26/20/48DMX channels):**

Mode/Channel			Value	Function	Default Dmx	Time/Speed	
St	Ba	Ex					
1	1	1		<b><u>Pan Movement 8bit :</u></b>	128	540°=2.25Sec, 630°=2.51Sec	
			0-255	Pan Movement 540°Default/630°Optional			
2		2		<b><u>Pan Fine 16bit</u></b>	0		
			0-255	Fine control of Pan movement			
3	2	3		<b><u>Tilt Movement 8bit :</u></b>	128	270°=1.33Sec	
			0-255	Tilt Movement 270°			
4		4		<b><u>Tilt Fine 16bit</u></b>	0		
			0-255	Fine control of Tilt movement			
5	3	5		<b><u>Speed Pan/Tilt movement:</u></b>	0		
			0-225	Max to min speed			
			226-235	Blackout by movement			
			236-255	No function			
6	4	6		<b>Pan Motor continuous rotation</b>	0		
			0-127	No function			
			128-189	Forwards Pan rotation from fast to slow			55.2RPM- 0.92RPM
			190-193	No rotation			
			194-255	Backwards Pan rotation from slow to fast			0.92RPM- 55.2RPM
7	5	7		<b>Tilt Motor continuous rotation</b>	0		
			0-127	No function			
			128-189	Forwards Tilt rotation from fast to slow			65.75RPM-1.0 9RPM
			190-193	No rotation			
			194-255	Backwards Tilt rotation from slow to fast			1.09RPM- 65.75RPM
8	6	8		<b><u>Shutter, strobe:</u></b>	32		
			0-31	Led trun off			
			32-63	Led turn on			
			64-95	Strobe effect slow to fast			1-25HZ
			96-127	Led turn on			
			128-159	Pulse-effect in sequences			1-25HZ
			160-191	Led turn on			
			192-223	Random strobe effect slow to fast			
			224-255	Led turn on			
9	7	9		<b><u>Dimmer intensity:</u></b>	0		
			0-255	Intensity 0 to 100%			
		10		<b><u>Dimmer intensity fine:</u></b>	0		
			0-255	Fine control for Dimmer adjustment			
10	8	11		<b><u>Dim Modes</u></b>	0		
			0-20	Standard			
			21-40	Stage			
			41-60	TV			

			61-80	Architectural		
			81-100	Theatre		
			101-255	Default to Unit Setting		
11	9	12		<b><u>Zoom :</u></b>	128	1.50Sec
			0-255	Zoom adjustment (5°~45°)		
		13		<b><u>Zoom Fine :</u></b>	0	
			0-255	Fine control for Zoom adjustment		
12	10			<b><u>Red LED -all arrays :</u></b>	0	
			0-255	Red ( 0-Black , 255-100% Red )		
13				<b><u>Red LED Fine -all arrays :</u></b>	0	
			0-255	Fine control for Red adjustment		
14	11			<b><u>Green LED-all arrays :</u></b>	0	
			0-255	Green ( 0-Black , 255-100% Green )		
15				<b><u>Green LED Fine -all arrays :</u></b>	0	
			0-255	Fine control for Green adjustment		
16	12			<b><u>Blue LED -all arrays :</u></b>	0	
			0-255	Blue ( 0-Black , 255-100% Blue )		
17				<b><u>Blue LED Fine -all arrays :</u></b>	0	
			0-255	Fine control for Blue adjustment		
18	13			<b><u>White LED -all arrays :</u></b>	0	
			0-255	White ( 0-Black , 255-100% White )		
19				<b><u>White LED Fine -all arrays :</u></b>	0	
			0-255	Fine control for White adjustment		
20	14	14		<b><u>Color Macro:</u></b>	0	
			0-7	No function		
			8-39	From RED to YELLOW		
			40-71	From YELLOW to GREEN		
			72-103	From GREEN to CYAN		
			104-135	From CYAN to BLUE		
			136-167	From BLUE to MAGENTA		
			168-199	From MAGENTA to RED		
			200-231	From RED to WHITE		
			232-255	Color Rainbow from slow to fast		
21	15	15		<b><u>Color Presets:</u></b>	0	
			0-9	No function		
			10--50	White2700k		
			51--91	White3200k		
			92-132	White4300k		
			133-173	White5600k		
			174-214	White6500k		
			215-255	White8000k		
22	16	16		<b><u>Color Presets Dimmer:</u></b>	0	
			0-255	Dimmer 100 to 0%		



23	17	17		<b><u>Chase Patterns:</u></b>	0	
			0-10	Led trun off		
			11-40	Chase 1		
			41-70	Chase 2		
			71-100	Chase 3		
			101-130	Chase 4		
			131-160	Chase 5		
			161-190	Chase 6		
			191-220	Chase 7		
			221-255	Chase 8		
24	18	18		<b><u>Chase Speed:</u></b>	0	
			0-255	Fast to Slow Backward		
25	19	19		<b><u>Color Mode:</u></b>	0	
			0-189	No function		
			190-254	Edit a new white balance		
			255	Store a new white balance		
26	20	20		<b><u>Reset, internal programs:</u></b>	0	
			0-79	Normal		
			80-84	Reset All		
			85-87	Reset Pan&Tilt		
			88-90	No function		
			91-93	Store white balance enabled		
			94-96	No function		
			97-99	Reset Others		
			100-119	Internal program 1 (secne1~8 of EEPROM)		
			120-139	Internal program 2 (secne9~16 of EEPROM)		
			140-159	Internal program 3 (secne17~24 of EEPROM)		
			160-179	Internal program 4 (secne25~32 of EEPROM)		
			180-199	Internal program 5 (secne33~40 of EEPROM)		
			200-219	Internal program 6 (secne41~48 of EEPROM)		
220-239	Internal program 7 (secne49~56 of EEPROM)					
			240-255	No function		
		21		<b><u>Red LED -array 1 :</u></b>	0	
			0-255	Red ( 0-Black , 255-100% Red )		
		22		<b><u>Green LED-array 1 :</u></b>	0	
			0-255	Green ( 0-Black , 255-100% Green )		
		23		<b><u>Blue LED -array 1 :</u></b>	0	
			0-255	Blue ( 0-Black , 255-100% Blue )		
		24		<b><u>White LED -array 1 :</u></b>	0	
			0-255	White ( 0-Black , 255-100% White )		
		25		<b><u>Red LED -array 2 :</u></b>	0	
			0-255	Red ( 0-Black , 255-100% Red )		
		26		<b><u>Green LED-array 2 :</u></b>	0	
			0-255	Green ( 0-Black , 255-100% Green )		
		27		<b><u>Blue LED -array 2 :</u></b>	0	

		0-255	Blue ( 0-Black , 255-100% Blue )		
	28		<b><u>White LED -array 2 :</u></b>	0	
		0-255	White ( 0-Black , 255-100% White )		
	29		<b><u>Red LED -array 3 :</u></b>	0	
		0-255	Red ( 0-Black , 255-100% Red )		
	30		<b><u>Green LED-array 3 :</u></b>	0	
		0-255	Green ( 0-Black , 255-100% Green )		
	31		<b><u>Blue LED -array 3 :</u></b>	0	
		0-255	Blue ( 0-Black , 255-100% Blue )		
	32		<b><u>White LED -array 3:</u></b>	0	
		0-255	White ( 0-Black , 255-100% White )		
		o o o o o o	—		
		o o o o o o	—		
	45		<b><u>Red LED -array 7:</u></b>	0	
		0-255	White ( 0-Black , 255-100% White )		
	46		<b><u>Green LED -array 7:</u></b>	0	
		0-255	White ( 0-Black , 255-100% White )		
	47		<b><u>Blue LED -array 7:</u></b>	0	
		0-255	White ( 0-Black , 255-100% White )		
	48		<b><u>White LED -array 7:</u></b>	0	
		0-255	White ( 0-Black , 255-100% White )		

## 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 5. If there are errors on channel 1, channel 3, channel 8 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.

### **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.

## 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.

## 13. SERVICE

**For all service needs please contact your local authorized dealer or Terbly directly. Our contact details are:**

**Email:** [QA@terbly.com](mailto:QA@terbly.com)

**Phone:** +86 20 3996 6388

**Address:** No. 109 Hai Yong Road, Shi Ji Town, Pan Yu Zone Guangzhou City, China, 511450

**Remark:** Errors and omissions for all information given in this manual are excepted. All information is subject to change without prior notice.