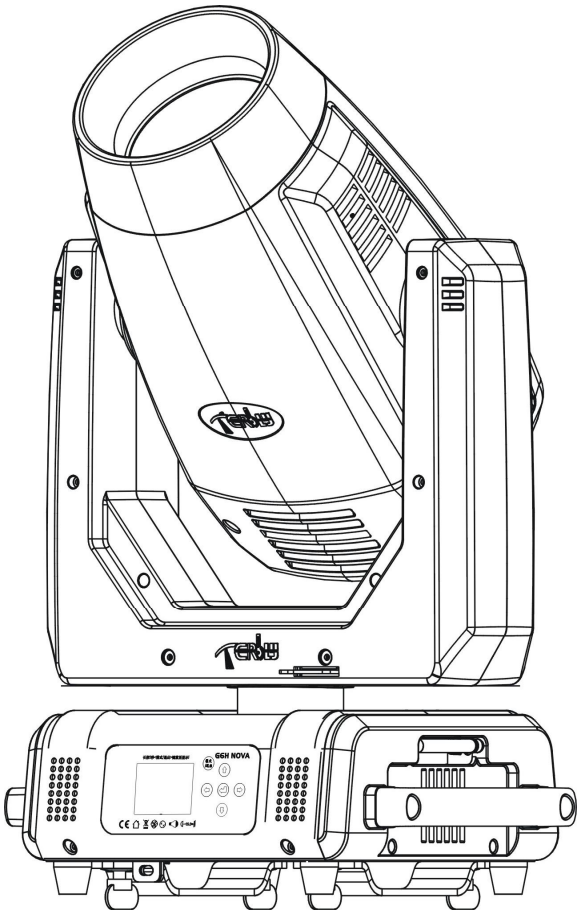
Terbly Professional Lighting

LED MOVING HEAD

USER MANUAL



G6H NOVA

KEEP THIS MANUAL FOR FUTURE NEEDS

Terbly Professional Lighting

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.

CONTENTS

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.

- 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 15 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 use only.
- 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 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 operation may lead to short-circuits, burns, electric shocks etc.

2. FEATURES

POWER SUPPLY

- AC 100-240V~，50/60Hz
- Power Consumption：480W

OPTICS

- Lamp：MSD Platinum 200 Flex 240W PHILIPS
- Extremely long Life：Lamp must be replaced between 2000-6000 hours based on usage as indicated on display

MOVEMENT

- Pan movement：540° Default /630° Optional (16 bit)
- Tilt movement：245° (16 bit)
- Advanced moving system：fast，stable and quite，auto x-y repositioning

COLORS

- CMY color mixing，uniform，linear and speed can be adjustable
- 1 Color wheel：13 dichroic filters + open，indexable，rainbow effect

GOBOS

- 1 Rotation gobo wheel：8 interchangeable，rotating，and indexable，gobo + open
- “ Slot in & out ” gobo wheel system
- 1 Static gobo wheel：12 + open

FEATURES

- 2 Control channel modes：20/34 channels
- 2 operations modes：DMX-512，Master / Slave mode
- Strobe effect with 1-25 flashes per second and pulse effect
- Rotating Prism: 16 prism and 5 line prism Macros
- Beam angle：zoom for 1.9 ° ~ 19 ° in Beam，zoom for 2.6 ° ~27 ° in Spot，zoom for 3.6 ° ~25 ° in Wash
- Motorized focus
- Dimmer：0%~100% full range dimming.
- Stepless frost：0%~100% linear change frost
- IP rating：IP20

DISPLAY

- Advanced and convenient color LCD screen，with rechargeable battery
- Locked automatically after standby for 15 seconds to prevent error；hold the button for 10 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

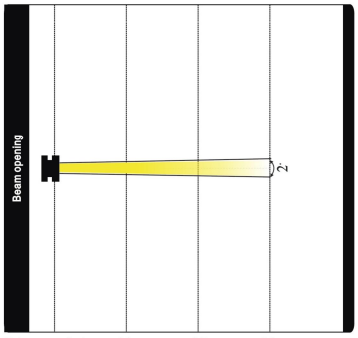
WHIGHT

Net weight：23.75 kg

PHOTOMETRIC DATA

Min. Beam angle
Intensity LUX (2°)

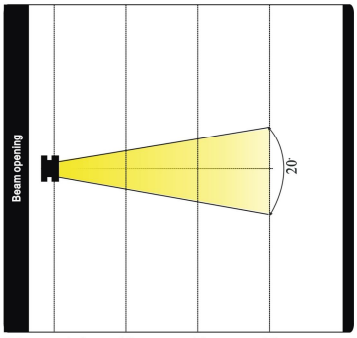
190W @ Full leds	238200	111200	61080
240W @ Full leds	309000	165200	92350
280W @ Full leds	411500	186300	99740



Distance(m)	10	15	20
Diametre(m)	Φ0.35	Φ0.53	Φ0.71

Max. Beam angle
Intensity LUX (20°)

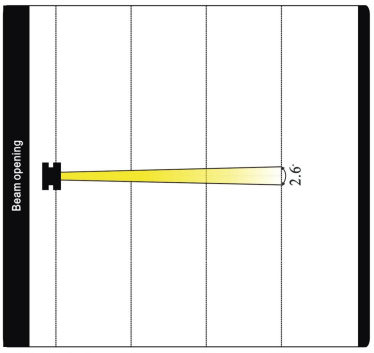
190W @ Full leds	3314	1523	907
240W @ Full leds	5318	2423	1317
280W @ Full leds	5785	2648	1465



Distance(m)	10	15	20
Diametre(m)	Φ3.52	Φ5.28	Φ7.04

Min. Spot angle
Intensity LUX (2.6°)

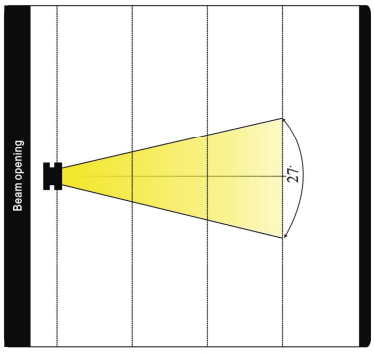
190W @ Full leds	47950	22430	12550
240W @ Full leds	67290	30600	17670
280W @ Full leds	78600	36350	20690



Distance(m)	10	15	20
Diametre(m)	Φ0.46	Φ0.68	Φ0.91

Max. Spot angle
Intensity LUX (27°)

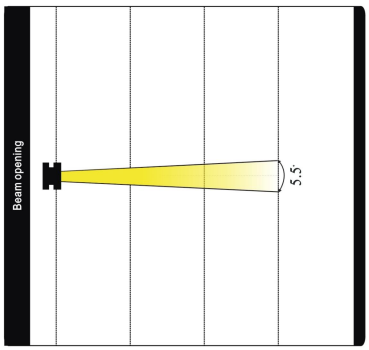
190W @ Full leds	520	244	144
240W @ Full leds	710	336	195
280W @ Full leds	872	411	239



Distance(m)	10	15	20
Diametre(m)	Φ4.8	Φ7.2	Φ9.6

Min. Wash angle
Intensity LUX (5.5°)

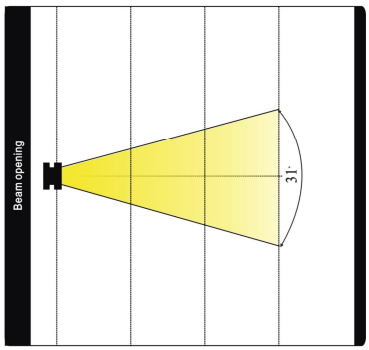
190W @ Full leds	9915	4653	2726
240W @ Full leds	13280	6416	3761
280W @ Full leds	16080	7680	4515



Distance(m)	10	15	20
Diametre(m)	Φ0.96	Φ1.44	Φ1.91

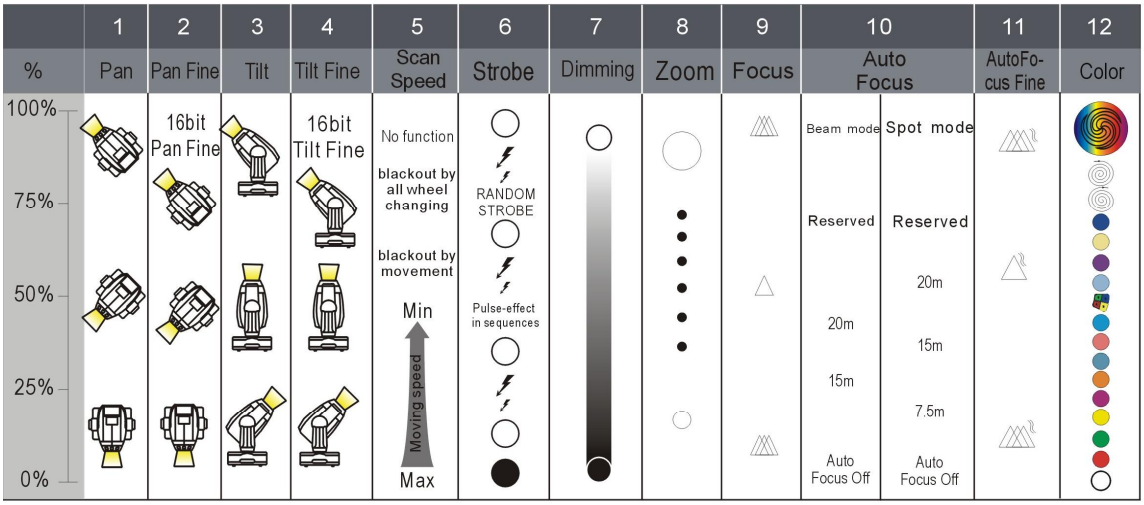
Max. Wash angle
Intensity LUX (31°)

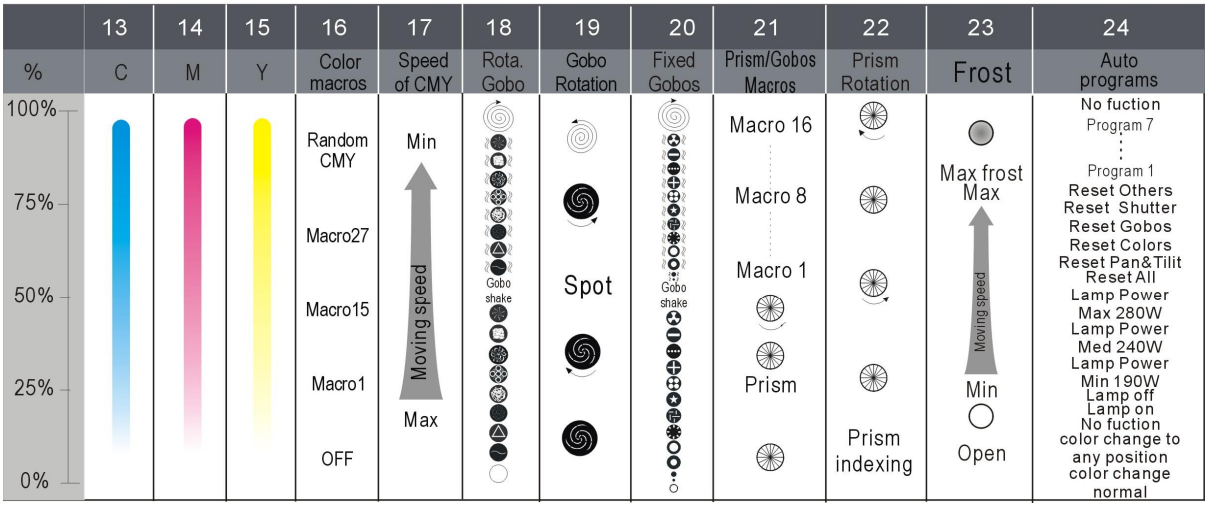
190W @ Full leds	402	192	114
240W @ Full leds	550	260	149
280W @ Full leds	677	317	186



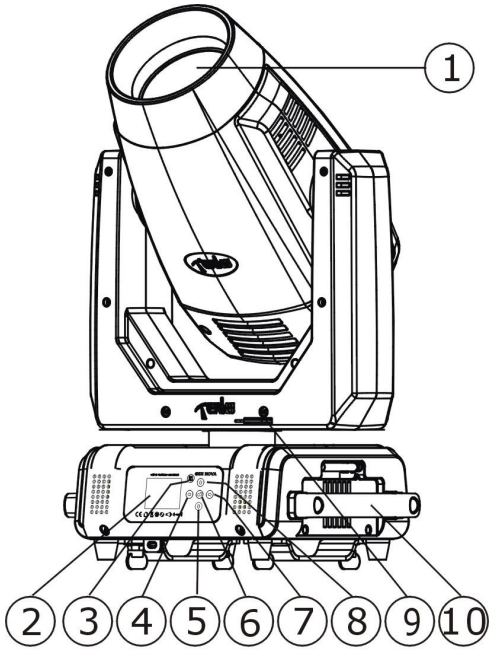
Distance(m)	10	15	20
Diametre(m)	Φ5.54	Φ8.31	Φ11.08

DMX CHANNEL DATA IMAGE





3. FIXTURE OVERVIEW



1） Lens

2） Display

3） Mode/Esc-button

4） Left-button

5） Down-button

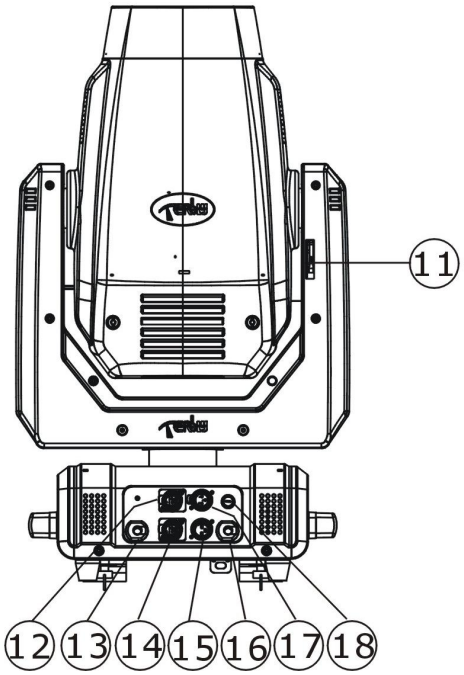
6） Enter-button

7） Right-button

8） Up-button

9） Pan Lock

10） Handle



11） Tilt Lock

12） RJ45 in

13） Power out

14） RJ45 out

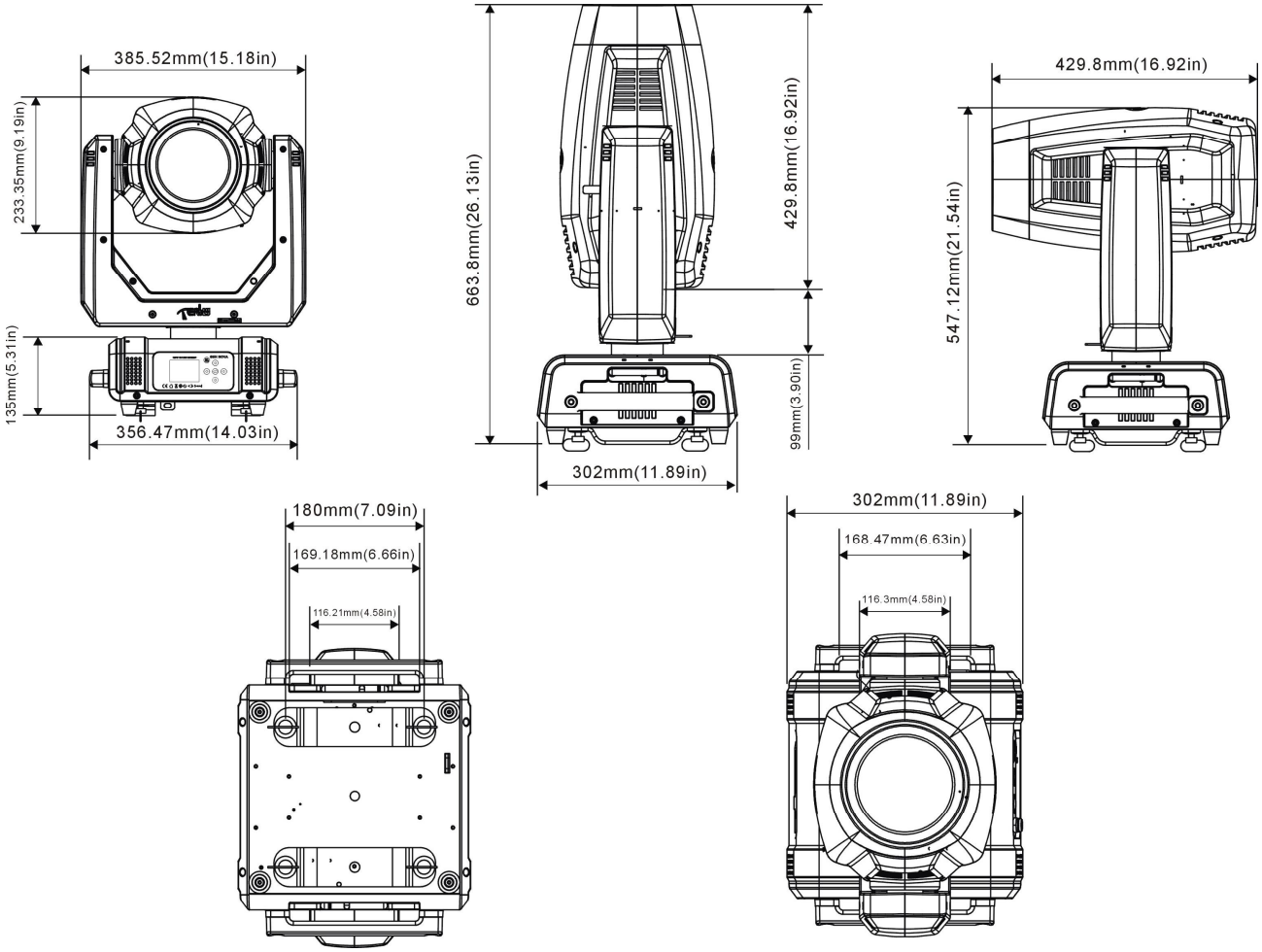
15） DMX out

16） Power in

17） DMX in

18） Fuse

4. DIMENSIONAL DRAWINGS



5. INSTALLATION INSTRUCTIONS

5.1. INSTALLING OR REPLACING THE LAMP

CAUTION! ONLY INSTALL THE LAMP WITH THE DEVICE UNPLUGGED FROM THE MAINS
CAUTION! THE LAMP HAS TO BE REPLACED WHEN IT IS DAMAGED OR DEFORMED

Lamp must be replaced between 2000-6000 hours based on usage as indicated on display. Use only genuine original Philips Platinum Flex lamps. Other lamp brands may cause damage and void the warranty.

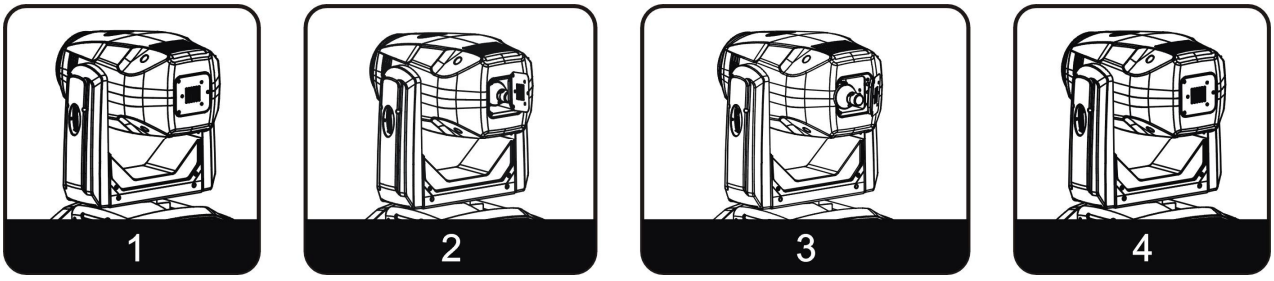
Before replacing the lamp let the lamp cool down, because during operation, the lamp can reach very high temperature.

During the installation of HID lamps do not touch the glass bulbs bare handed. Always use a gloves or a cloth to handle the lamps during insertion and removal.

Do not install lamps with a higher wattage. They generate higher temperatures than which the device was designed for.

WARNING! **THE BULB SHOULD BE REPLACED WHEN DAMAGED OR HEAT DISTORTION.**
CAUTION! **DISCONNECT THE FIXTURE FROM POWER AND ALLOW IT TO COOL FOR TEN MIN**

Procedures:



1) Please put the fixture on a smooth desk, release the screw A, B, C. Then open the plate for lamp-socket.
2) Before taking off the lamp, please release the two red wires which connect to the lamp. Then take off the plate of the lamp carefully, please press the lamp and cover for lamp-socket.

Make sure remove the lamp from left to right until the lamp is took off. Attention, wrap the lamp with soft cloth which go with the lamp to avoid your finger touching the glass of lamp directly.

3) Replace lamp and make it stable. Please be noted that there's only one installation direction for the lamp. Make sure the replaced lamp has the same installation direction with the old one. Once again, make sure it's stable.
4) Put on the plate of lamp socket and tighten screw A, B, C.
5) Please reset the lamp life-time. Otherwise it is likely to trigger the protecting firmware of system to make the replaced lamp close itself automatically.

Please remember the lamp is not a hot-restrike type, you must wait for approximately 10 minutes after having turned off the lamp before you can turn it back on again.

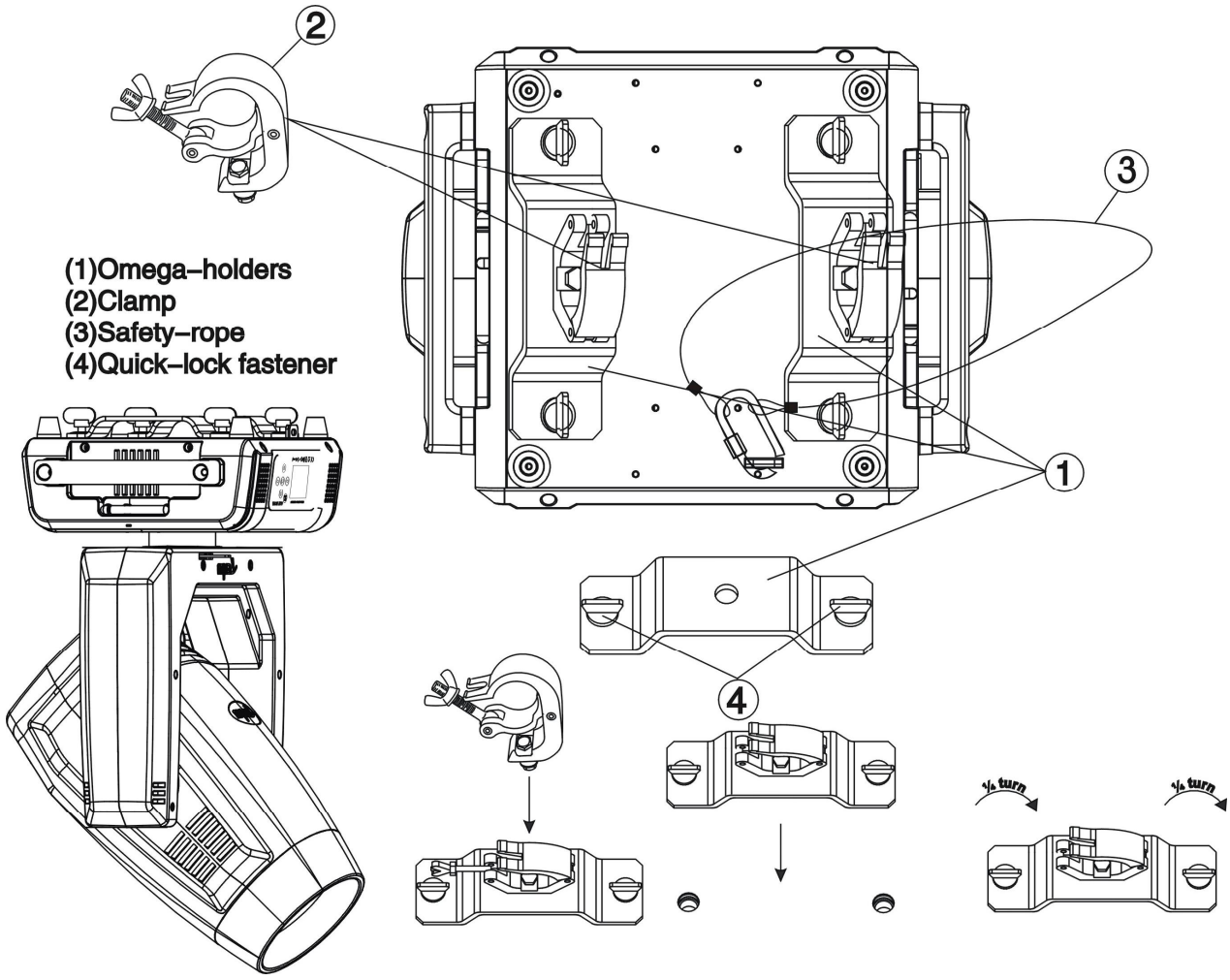
CAUTION!
DO NOT OPERATE THIS DEVICE WITH OPEN COVER

5.2. 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.

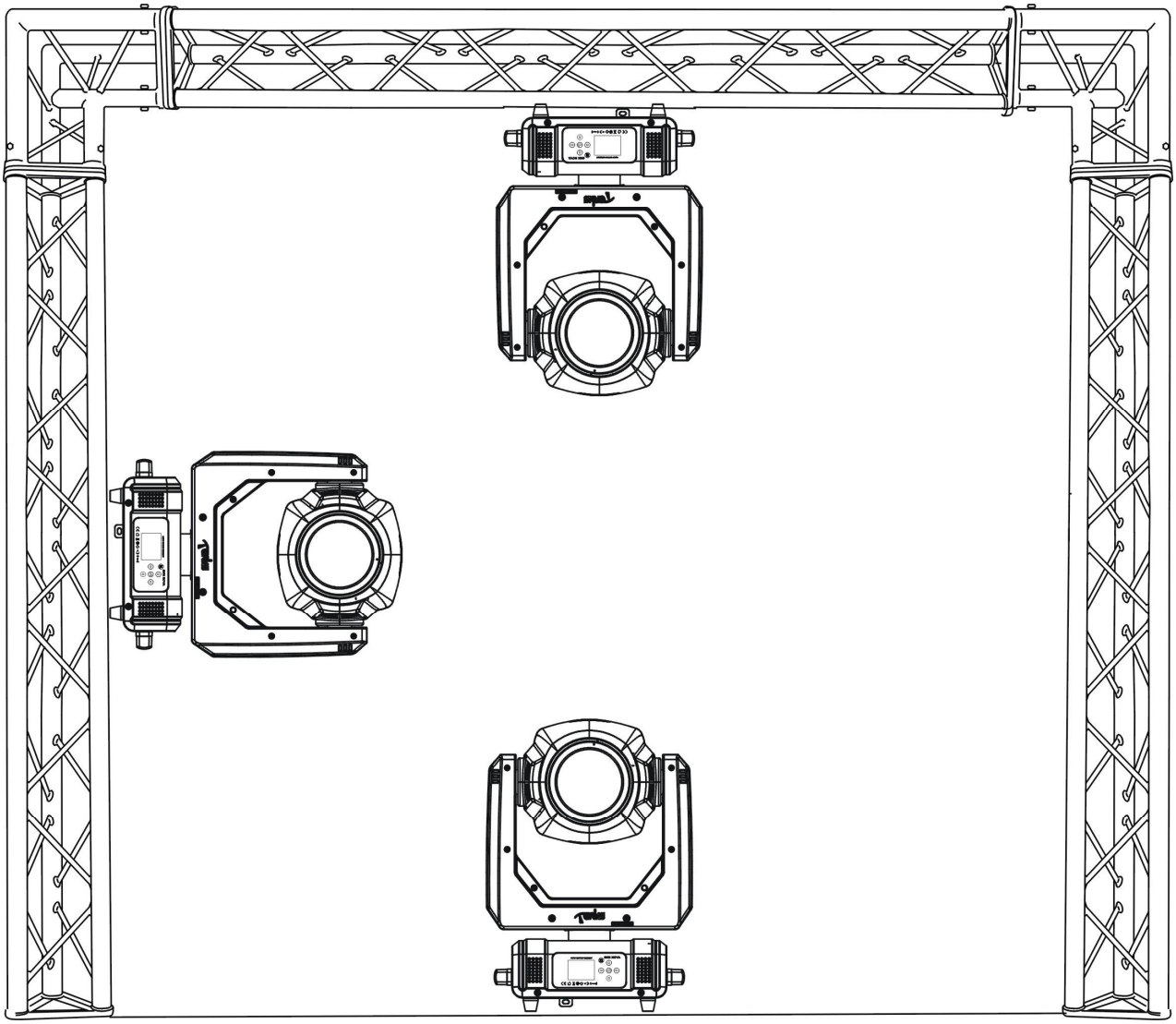
5.3. RIGGING USING THE OMEGA BRACKETS



- Fix the clamp to the bracket by tightening the M12 nut and bolt to the bracket through the Φ13 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.

5.4. RIGGING DRAWINGS



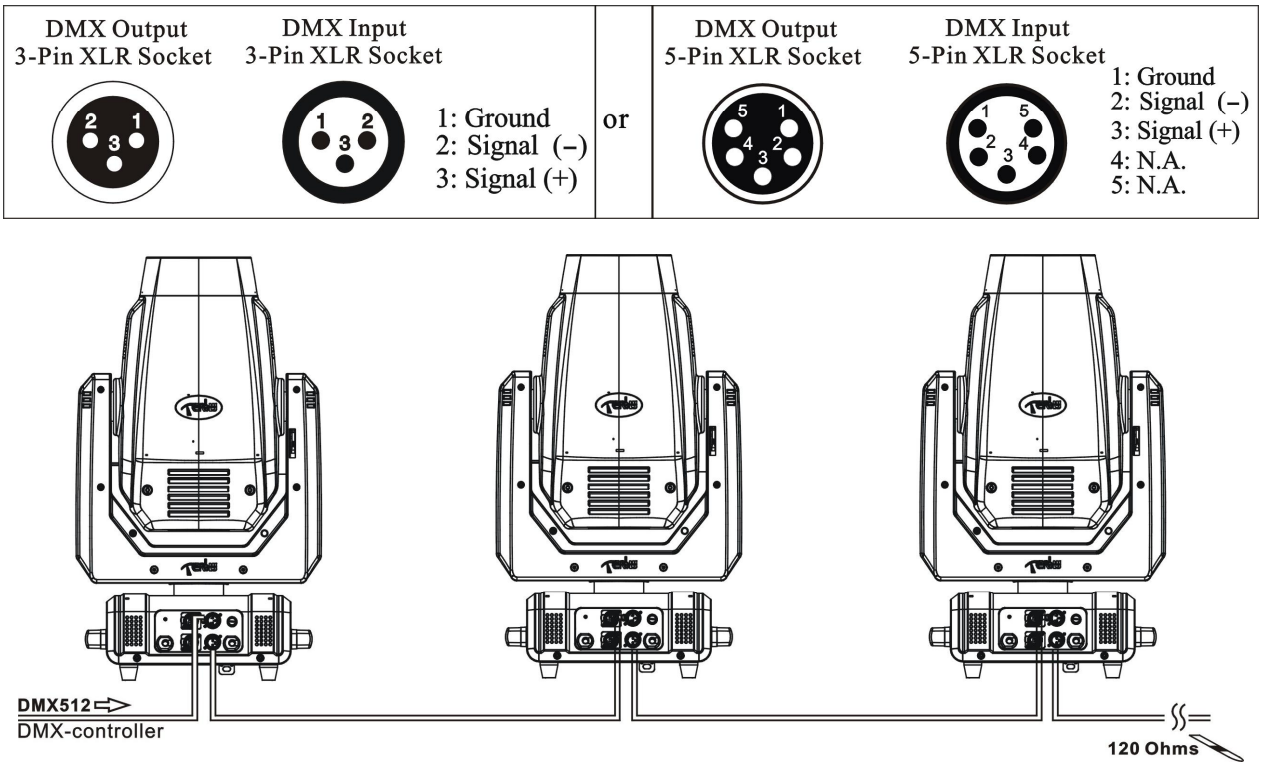
- The device can be rigged in any of the orientations shown in the image above.
- The device must be kept at least 0.1 m away from any flammable materials (decoration etc.) .
- Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event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

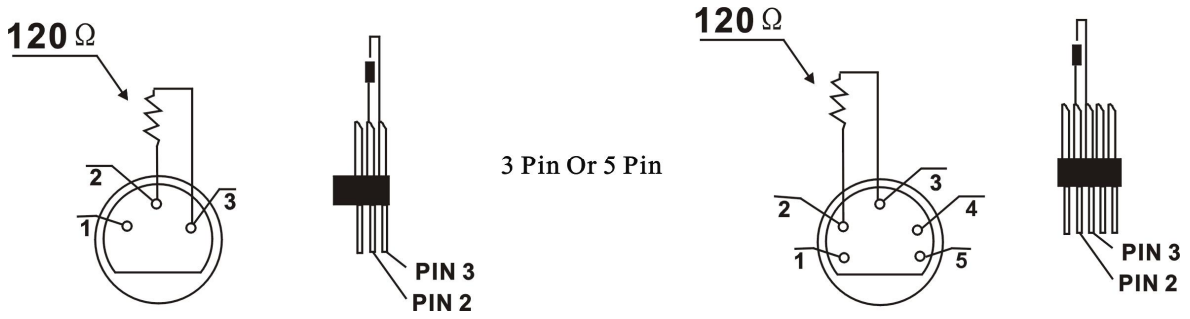
6. DMX-512 CONTROL CONNECTION

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 moving head，which is a 24 channel fixture，you should set the starting address of the first unit to 1，the second unit to 25(24 + 1)，the third unit to 49 (24+ 25)，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 MODE /ESC -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 MODE /ESC -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 MODE /ESC -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	PAN……		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 Lamp Time Info Lamp Off Time LastRun Password Clear Last Run LampTime Password Clear Lamp Time	XXXX(Hours) XXXX(Hours) XXXX(Hours) Total Time: XXXX(Hours) Active Time Idle Time: XXXX(Hours) Lamp Life: XXX% XXXX(Hours) Password=XXX ON/OFF Password=XXX ON/OFF	Power on running time Fixture running time Fixture Last times clear Lamp total time Lamp active time Lamp idle time Lamp life Lamp Off Time Timer Password 038 Clear Fixture Last time Lamp Password =”038” Clear lamp 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	1U_FAN1: ……		
	Encode Info	PAN ENCODE: TILT ENCODE:		Encode Info
	Software Version	V1.X.X……		Software version
Lamp Control	Lamp On/Off Automatic On Lamp On via DMX Lamp Off via DMX Lamp Power Mode.	ON/OFF ON/OFF ON/OFF ON/OFF 190W,240W,280W		Lamp on/off Lamp on/off Power on Lamp on via DMX Lamp off via DMX Lamp Power Mode.
Personality	Status Settings	Address Via DMX No DMX Status Pan Reverse Tilt Reverse Pan Degree Feedback Hibernation	ON/OFF Close/Hold/Auto ON/OFF ON/OFF 630/540 ON/OFF OFF, 01M~99M，15M	Add. via DMX Auto run if no DMX Pan Reverse movement Tilt Reverse movement Pan Degree Select Movement Feedback Stand by Mode
	Service Setting	Password RDM UID	Password=XXX XXXXXX	Service Password“=050” RDM UID
	Display Setting	Shutoff Time Display Reverse Key Lock	02~60m 05m ON/OFF/AUTO ON/OFF	Display shutoff time Reverse 180 degree Key Lock

	Temperature C/F	Celsius Fahrenheit	Temperature switch between ℃/℉
	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	0~32767	Set Art-Net Universe
	Reset Default	ON/ OFF	Restore factory set.
Reset Function	Reset All Reset Pan&Tilt Reset Colors Reset Gobos Reset Shutter Reset Others		Reset All Reset Pan&Tilt Reset Colors Reset Gobos Reset Shutter 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” Calbrate 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,B,C	Max Channel = XX PAN = CH01 :	Preset User modes A,B,C
Edit Program	Select Program	Auto Pro Part 1 = Program 1 ~ 10 Program 1 Auto Pro Part 2 = Program 1 ~ 10 Program 2 Auto Pro Part 3 = Program 1 ~ 10 Program 3	Select programs to be run
	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	Save and automatically return manual scenes edit
	Rec. Controller	XX~XX	Automat. scenes rec

Language Set	English/Chinese		Language Setting

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.

Lamp Time Info

With this function，you can display the lamp time information.

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 “ Lamp Hours ” .
3. Press< ENTER>，the display will show “ Lamp Hours ” .
4. The display will show “ Total Time：XXXX(Hours)”，“ Active Time”，“ Idle Time：

XXXX(Hours)”，“ Lamp Life：XXX% ”.

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

Lamp off time

With this function，you can display the temporary running time of the lamp from the last lamp on. The display shows “ XXXX”， “ XXXX ” stands for the number of hours. The counter is resetted after turning the lamp 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 “ Lamp Off Time ”.
3. Press< ENTER>，the display will show “ Lamp Off 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.

Lamp Time Password

With this function，you can display the timer password. The time password is 038.

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 “ Lamp Time Password ”.

3. Press< ENTER>，the display will show “ Lamp Time Password”，the time password is 038.
4. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Clear Lamp Time

With this function you can clear the running time of the lamp. Please clear the lamp time every time you replace the lamp.

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 Lamp Time ”.
3. press< ENTER>，the display will show “ Clear Lamp Time ”.
4. The display will show “ OFF ”.
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.2.2. Temperature Info

Head Temperature

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. Encode 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 " Encode Info ".
3. Press< ENTER>, the display will show " Encode Info ".
4. The display show " PAN ENCODE:", " TILT ENCODE: "
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.2.6. 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.

9.3. Lamp Control

When the real temperature around the lamp is higher than the preset value, the lamp will be shut down in 5 minutes automatically.

· When the LCD display shows " Off", it means the lamp must be turned on again manually;

· When the LCD display shows " Hot", it means the actual temperature around the lamp is still higher than the preset value, so even the lamp can not be striked even the menu Lamp is turned to ON, as the lamp switch is compelled to turned off.

· When the temperature unit after the temperature value come to lowercase letter " c " or " f", it means menu Lamp is turned to ON, but the lamp is not full dimming up.

· When the temperature unit after the temperature value come to capital letter" C "or" F", it menu Lamp is turned to ON, and the lamp is full intensity.

9.3.1. Lamp on/off

With this function you can switch the lamp on or off via the Control Board.

1. Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until " Lamp Control " is displayed. Press <ENTER>, the display will show " Lamp Control ".
2. Tap the <Up/Down>button until the display will show " Lamp On or Off ".
3. Press <ENTER>, the display will show " Lamp On or Off ".
4. Press <Up/Down>, the display will show " OFF " or " ON ".
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

Remark: The menu Lamp On/Off is the software command only, the lamp can be striked successfully only when the menu Lamp is set to ON and the actual temperature is lower than the limited value.

9.3.2. Automatic on

With this function you can select if the lamp will be switched on when switching the power on. Select" ON "by turning the encoder if you wish to enable this function or " OFF "if you don't.

1. Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until

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

2. Tap the <Up/Down>button until the display will show “ Automatic On ” .
3. Press <ENTER>, the display will show “ Automatic On ” .
4. Press <Up/Down>, the display will show “ OFF ” or “ ON ” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.3.3. Lamp on via DMX

With this function you can select if you can switch the lamp on via an external controller (DMX-channel of internal programs, value 64-79) .Select “ ON ” by turning the encoder if you wish to enable this function or “ OFF ” if you don’t.

1. Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “ Lamp Control ” is displayed. Press <ENTER>, the display will show “ Lamp Control ” .
2. Tap the <Up/Down>button until the display will show “ Lamp On Via DMX ” .
3. Press <ENTER>, the display will show “ Lamp On Via DMX ” .
4. Press <Up/Down>, the display will show “ OFF ” or “ ON ” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.3.4. Lamp off via DMX

With this function you can select if you can switch the lamp off via an external controller (DMX-channel of internal programs, value 224-239) .Select “ ON ” by turning the encoder if you wish to enable this function or “ OFF ” if you don’t.

1. Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “ Lamp Control ” is displayed. Press <ENTER>, the display will show “ Lamp Control ” .
2. Tap the <Up/Down>button until the display will show “ Lamp Off Via DMX ” .
3. Press <ENTER>, the display will show “ Lamp Off Via DMX ” .
4. Press <Up/Down>, the display will show “ OFF ” or “ ON ” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.3.5. Lamp Power Mode.

1. Tap <MODE/ESC>button, access the main menu, Tap the <Up/Down>button until “ Lamp Control ” is displayed. Press <ENTER>, the display will show “ Lamp Control ” .
2. Tap the <Up/Down>button until the display will show “ Lamp Power Mode. ” .
3. Press <ENTER>, the display will show “ Lamp Power Mode. ” .
4. The display will show “ 280W”, Press <Up/Down>, the display will show “ 190W”, “ 240W”, “ 280W ” .
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.4. Personality

9.4.1. 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.

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.

9.4.2. Service Setting

Password

The Password for this function is " 050 ".

RDM UID

With this function you can call up various submenus via RDM.

This device is RDM ready. RDM stands for " remote device managemen " and makes remote control of devices connected to the DMX-bus possible. ANSI E1.20-2006 by ESTA specifies the RDM standard as an extension of the DMX512 protocol.

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 " RDM UID ".

3. Press< ENTER>，the display will show “ RDM UID ”.
4. The display show “ XXXX ”.
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.4.3. 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“ AUTO”，Press <Up/Down>，the display will show“ ON”，“ OFF”，“ AUTO ”.
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.

9.4.4. 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“ Celsius”，Press <Up/Down>，the display will show“ Fahrenheit ”.
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.4.5. 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.

9.4.6. 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.

9.4.7. 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.

9.4.8. 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.

9.4.9. 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.

9.4.10. 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.

9.5. 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 Colors"," Reset Gobos"," Reset Shutter"," Reset Others ".
5. Press <ENTER> to confirm or press <MODE/ESC> to return to the main menu.

9.6. Effect Adjust

9.6.1. 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.

9.6.2. 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.

9.6.3. 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 " 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.

9.7. 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 Basic Mode，Standard 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.

9.7.1. User Mode

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

9.7.2. Edit User Mode A/B/C

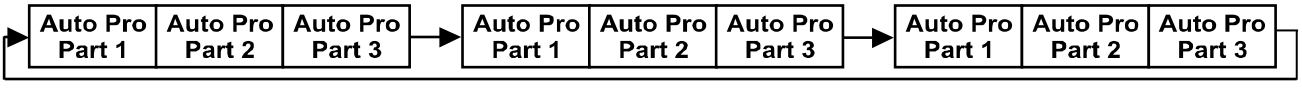
With this function，you can adjust the rest user defined channel order.

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.

9.8. EDIT PROGRAM

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

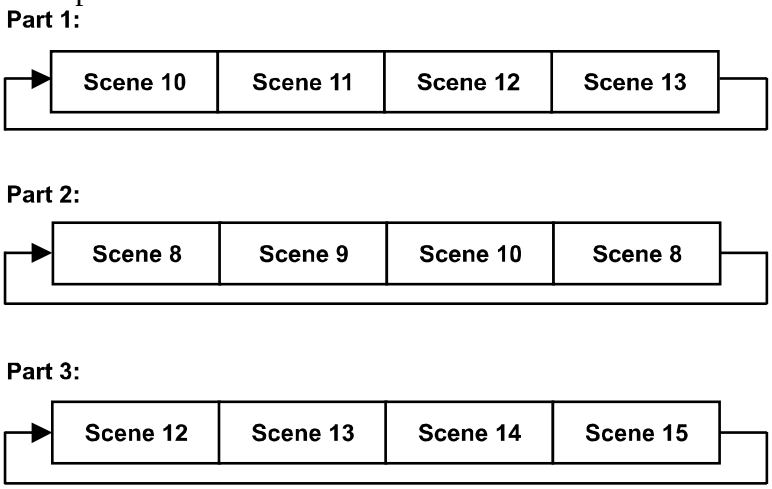
chooses Run For Slave 2,then it will receive the part 2's automatic program from link.

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：



9.9. 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 (22/24/34 DMX channels):				
Mode/Channel			Value	Function
Ba	St	Ex		
1	1	1		**PAN Movement 8bit :**
			0-255	Pan Movement
	2	2		**Pan Fine 16bit**
			0-255	Fine control of Pan movement
2	3	3		**TILT Movement 8bit :**
			0-255	Tilt Movement
	4	4		**Tilt Fine 16bit**
			0-255	Fine control of Tilt movement
3	5	5		**Speed Pan/Tilt movement:**
			0-225	max to min speed
			226-235	blackout by movement
			236-245	blackout by all wheel changing
			246-255	no function
4	6	6		**Shutter, strobe:**
			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)
5	7	7		**Dimmer intensity:**
			0-255	Intensity 0 to 100%
		8		**Fine Dimmer intensity:**
			0-255	Dimmer intensity fine
6	8	9	0-255	**Zoom :**
				Zoom adjustment from small to big
				Beam mode (1.9° to 19°)
				Spot mode (2.6° to 27°)
				Wash mode (3.6° to 25°)
		10		**Zoom Fine:**
			0-255	Zoom adjustment Fine
7	9	11		**Focus :**
			0-255	Continuous adjustment from near to far
		12		**Focus Fine:**
			0-255	Continuous adjustment Fine
8	10	13	__	**Auto Focus:**
				Beam mode
			0-50	Auto Focus Off

			51-100	15m
			101-150	20m
			151-255	Reserved
			__	**Spot mode**
			0-50	Auto Focus Off
			51-100	7.5m
			101-150	15m
			151-200	20m
			201-255	Reserved
9	11	14		**Auto Focus Fine:**
			0-255	Continuous adjustment Fine
10	12	15		**Color Wheel :**
			0-10	Open / white
			11-19	Red
			20-28	Green
			29-37	Yellow
			38-46	Magenta
			47-55	Orange
			56-64	Aqua
			65-73	Pink
			74-82	Cyan
			83-91	QUAD COLOR
			92-100	CTB
			101-109	UV
			110-118	CTO
			119-127	BLUE
			128-189	Clock-wise scroll from fast to slow
			190-193	No rotation
			194-255	Counter clock-wise scroll from slow to fast
		16		**Color Wheel Fine :**
			0-255	Color Wheel color change to any position Fine
11	13	17		**Cyan Color :**
			0-255	Cyan (0-white, 255-100% Cyan)
		18		**Cyan Color Fine :**
			0-255	Cyan Fine
12	14	19		**Magenta Color :**
			0-255	Magenta (0-white, 255-100% magenta)
		20		**Magenta Color Fine :**
			0-255	Magenta Fine
13	15	21		**Yellow Color :**
			0-255	Yellow (0-white, 255-100% Yellow)
		22		**Yellow Color Fine :**
			0-255	Yellow Fine
14	16	23		**Colour macros - CMY and colour wheel:**

			0-31	OFF
			32-39	Macro1
			40-47	Macro2
			48-55	Macro3
			56-63	Macro4
			64-71	Macro5
			72-79	Macro6
			80-87	Macro7
			88-95	Macro8
			96-103	Macro9
			104-111	Macro10
			112-119	Macro11
			120-127	Macro12
			128-135	Macro13
			136-143	Macro14
			144-151	Macro15
			152-159	Macro16
			160-167	Macro17
			168-175	Macro18
			176-183	Macro19
			184-191	Macro20
			192-199	Macro21
			200-207	Macro22
			208-215	Macro23
			216-223	Macro24
			224-231	Macro25
			232-239	Macro26
			240-247	Macro27
			248-255	Random CMY
15	17	24		Speed Of CMY & Colour macro Speed:
			0-255	Speed Max －>Min
16	18	25		Rotating gobos, cont. rotation :
			0-10	Beam open
			11-21	Spot open
			22-31	Rot. gobo 1
			32-41	Rot. gobo 2
			42-51	Rot. gobo 3
			52-61	Rot. gobo 4
			62-71	Rot. gobo 5
			72-81	Rot. gobo 6
			82-91	Rot. gobo 7
			92-101	Rot. gobo 8
			102-112	Rot. gobo 1 shake
			113-123	Rot. gobo 2 shake
			124-134	Rot. gobo 3 shake

			135-145	Rot. gobo 4 shake
			146-156	Rot. gobo 5 shake
			157-167	Rot. gobo 6 shake
			168-178	Rot. Gobo 7 shake
			179-189	Rot. Gobo 8 shake
			190-221	Clock-wise scroll from fast to slow
			222-223	Reserved
			224-255	Counter clock-wise scroll from slow to fast
17	19	26		**Rotating gobo index, rotating gobo rotation :**
			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
		27		**Rotating gobo indexing Fine**
			0-255	Fine indexing
			0-9	hole
18	20	28	10-17	Gobo 1
			18-25	Gobo 2
			26-33	Gobo 3
			34-41	Gobo 4
			42-49	Gobo 5
			50-57	Gobo 6
			58-65	Gobo 7
			66-73	Gobo 8
			74-81	Gobo 9
			82-89	Gobo 10
			90-97	Gobo 11
			98-105	Gobo 12
			106-112	Gobo 1 shake slow to fast
			113-119	Gobo 2 shake slow to fast
			120-126	Gobo 3 shake slow to fast
			127-133	Gobo 4 shake slow to fast
			134-140	Gobo 5 shake slow to fast
			141-147	Gobo 6 shake slow to fast
			148-154	Gobo 7 shake slow to fast
			155-161	Gobo 8 shake slow to fast
			162-168	Gobo 9 shake slow to fast
			169-175	Gobo 10 shake slow to fast
			176-182	Gobo 11 shake slow to fast
			183-189	Gobo 12 shake slow to fast
			190-221	Clock-wise scroll from fast to slow
			222-223	Reserved
			224-255	Counter clock-wise scroll from slow to fast

		29		**Fixed gobo indexing Fine**
			0-255	Fixed gobo Fine indexing
19	21	30		**16 facet rotating prism/Line prism, Prism / Gobo macros:**
			0-31	Open position (hole)
			32-64	16 Prism
			65- 94	Line Prism
			95-127	16/Line Prism
			128-135	Macro 1
			136-143	Macro 2
			144-151	Macro 3
			152-159	Macro 4
			160-167	Macro 5
			168-175	Macro 6
			176-183	Macro 7
			184-191	Macro 8
			192-199	Macro 9
			200-207	Macro 10
			208-215	Macro 11
			216-223	Macro 12
			224-231	Macro 13
			232-239	Macro 14
			240-247	Macro 15
			248-255	Macro 16
20	22	31		**Rotating 16/Line prism:**
			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
		32		**Rotating 16/Line prism indexing Fine**
			0-255	Fine indexing
21	23	33	__	**Frost:**
			0-127	Disable frost
			128-255	Enable frost
22	24	34		**Lamp on/off, reset, internal programs:**
			0-19	color change normal
			20-29	color change to any position
			30-39	No fuction
			40-49	Lamp on
			50-59	Lamp off
			60-66	Lamp Power Min 190W
			67-73	Lamp Power Med 240W
			74-79	Lamp Power Max 280W
			80-84	Reset All
			85-87	Reset Pan&Tilit

			88-90	Reset Colors
			91-93	Reset Gobos
			94-96	Reset Shutter
			97-99	Reset Others
			100-119	Internal program 1
			120-139	Internal program 2
			140-159	Internal program 3
			160-179	Internal program 4
			180-199	Internal program 5
			200-219	Internal program 6
			220-239	Internal program 7
			240-255	No fuction

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 5 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.

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 1 wheel Er
(Gobo wheel 1- 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 - movement is not located in the default position after the reset.

Gobo Rotation wheel 1 Er
(Gobo Rotation wheel 1- 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_R 1 - movement is not located in the default position after the reset.

Dimmer wheel Er

(Dimmer 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 Dimmer - 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 .

Prism 3 wheel Er

(Prism 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 Prism 3 - movement is not located in the default position after the reset .

Prism Rotation 1 wheel Er

(Prism Rotation 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 Prism_R 1 - movement is not located in the default position after the reset .

Prism 16 wheel Er

(Prism 16 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 16 - 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 .

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 .

Frost wheel Er

(Frost 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 - 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
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.