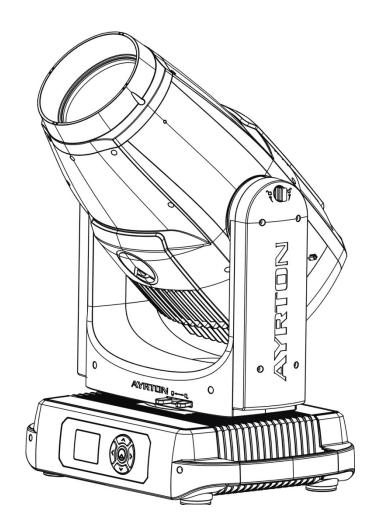


# Manuel d'utilisation



# perseos



# **CONTENTS**

1.	SAFETY INSTRUCTIONS	2
2.	FEATURES	4
3.	FIXTURE OVERVIEW	7
4.	DIMENSIONAL DRAWINGS	8
5.	INSTALLATION INSTRUCTIONS	11
6.	DMX-512 CONTROL CONNECTION	14
7.	DMX-512 CONNECTION WITH DMX TERMINATOR	14
8.	DEVICE DMX START ADDRESS SELECTION	15
9.	OPERTING INSTRUCTIONS OF THE INTERNAL DMX WIRELESS SYSTEM	15
10.	DISPLAY	17
11.	DMX PROTOCOL	34
12.	ERROR MESSAGES	45
13.	CLEANING AND MAINTENANCE	49

#### 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!**

FIXTURE EXPOSED TO SALT WATER SHOULD NOT BE STORED IN ITS FOAM INSERT WITHOUT BEING CLEANED WITH FRESH WATER FIRST. IT IS BEST PRACTICE THAT FIXTURE BE STORED DRY.



#### **CAUTION!**

NEVER TOUCH THE DEVICE DURING OPERATION! COVERS MAY BE HOT



#### **BLUE LIGHT HAZARD:**

**RISK GROUP 2** 

# **CAUTION! Warning:** Changes or modifications to this unit not expressly approved by the party

responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAN ICES-3 (A)/NMB-3(A)



#### 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.
- Ensure the sealing rubber covers of power CON and XLR connectors are fitted properly when the device is not in use, to avoid water ingress.
- 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. 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.
- Do not focus the beam onto flammable surfaces. The minimum distance between the exiting lens of the device and the illuminated surface must be greater than 2 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 and outdoor use.
- 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.
- 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 damage is 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 -20°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.
- The luminaire should be positioned so that prolonged staring into the luminaire at a distance closer than 9.8 m is not expected.
- Suitable for theaters, studios, and similar locations.
- The installation must only be carried out by a qualified person.
- Indicate the luminaire shall be fixed install and not for portable use.

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

- AC100-240V~, 50/60Hz
- Power Consumption: 800W

#### **LIGHT SOURCE**

- LED: White LED500W,  $8000 \pm 500$ K Color Temperature
- Extremely long Life: >50,000H

#### **MOVEMENT**

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

#### **COLORS**

- CMY + CTO color mixing, uniform, linear and speed can be adjustable
- 1 Color wheel: 7 dichroic filters + open, indexable, rainbow effect
- Additional 1 dichroic filters, for color correction

#### **GOBOS**

- Rotating gobo wheel: 7 interchangeable, rotating, and indexable, gobo+open
- "Slot in & out" gobo wheel system
- Static gobo wheel: 11 + open, with different speed gobo shaking and gobo indexing

#### **FEATURES**

- 4 Control channel modes: 40/38/61/58 channels
- 2 Operation modes: DMX-512, Master / Slave mode
- Strobe effect with 1-25 flashes per second and pulse effect
- Rotating prism: 5-Facet Prism and Linear Prism
- Animation wheel: can make special dynamic flame or water effect
- Focus: Motorized focus
- 2 frosts: one light, one heavy
- Stepless iris: 5%~100% linear change iris, pulse iris effect
- Dimmer: 0%~100% full range dimming

#### **DISPLAY**

- Advanced and convenient full –color LCD
- Locked automatically after standby for 15 seconds to prevent error; hold the button for 10 seconds to activate
- Pan and Tilt homing bypass: long press the center button to lock pan / tilt homing
- Can be changed 180° reverse to fit for different installation position

#### **SOFTWARE**

8 pre-installed programs available upon selection
Upgrades: fast and convenient through DMX cable with DMX-512 controller
Reset DMX address, remote lamp control, reset can all be done by the DMX controller
Running time of fixture on display for reference

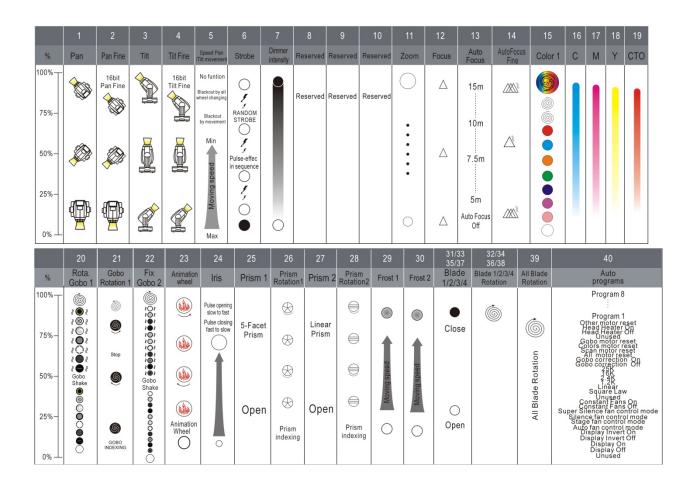
#### **OTHER SPEC**

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

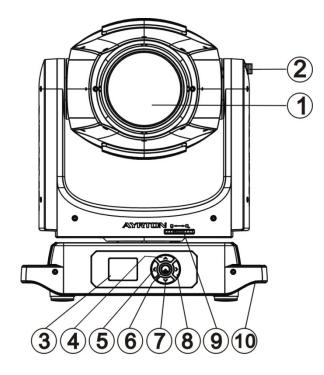
#### WEIGHT

Net weight: 40.23 kg

#### **DMX CHANNEL CHART**



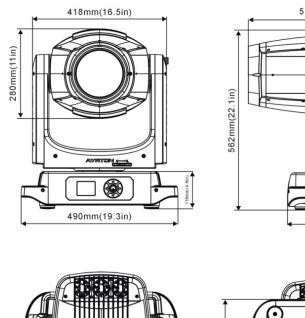
# 3. FIXTURE OVERVIEW

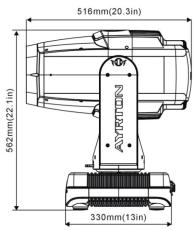


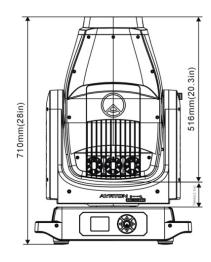
- 1) Lens
- 2) Tilt Lock
- 3) Display
- 4) Up-button
- 5) Left-button
- 6) Center-button
- 7) Down-button
- 8) Right-button
- 9) Pan Lock
- 10) Handle
- 11) Power In
- 12) Fuse
- 13) RJ45 In
- 14) RJ45 Out
- 15) DMX In
- 16) DMX Out

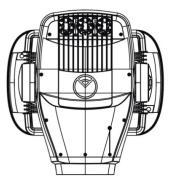
# 4. DIMENSIONAL DRAWINGS

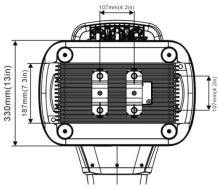
# **4.1.** Fixture Dimension









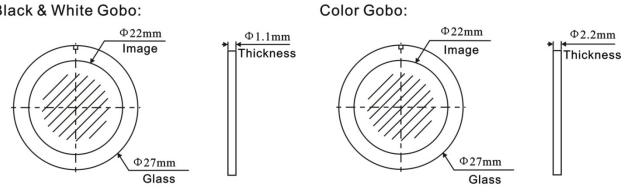




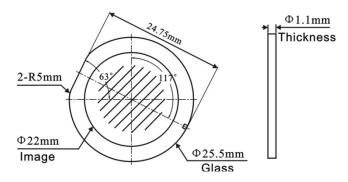
# **4.2.** Gobo Filter Dimension

# **Rotating Gobo:**

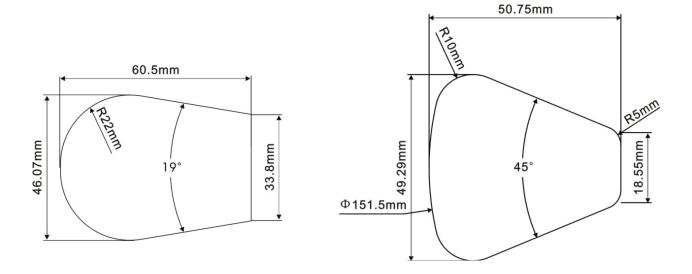
Black & White Gobo:



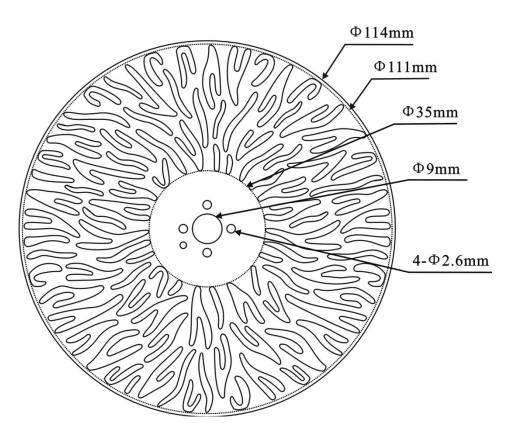
#### Fixed Gobo:



# **4.3.** Color Filter Dimension



# **4.4.** Animation Dimension



#### 5. INSTALLATION INSTRUCTIONS

#### **5.1.** Rigging the device

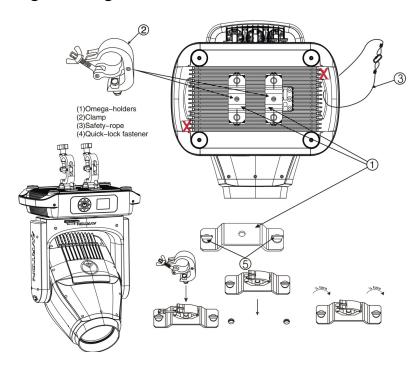
# $\bigwedge$

#### **CAUTION!**

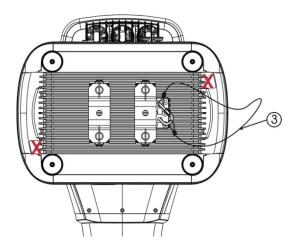
PLEASE CONSIDER THE RESPECTIVE NATIONAL NORMS DURING INSTALLATION. THE INSTALLATION MUST ONLY BE CARRIED OUT BY A QUALIFIED PERSON.

- The applicable temperature for the lighting is between -20°C to 45°C. Do not use the lighting under or above the temperature range.
- The installation of the effect has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.
- The installation must always be secured with a secondary safety attachment, e. g. an appropriate safety rope.
- Never stand directly below the device when mounting, removing or servicing the fixture.
- The operator has to make sure the safety relating and machine technical installations are approved by an expert before taking the device into operation for the first time.
- These installations have to be approved by a skilled person once a year.
- Overhead mounting requires extensive experience, including amongst others calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the device. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

### **5.2.** Rigging using the omega brackets



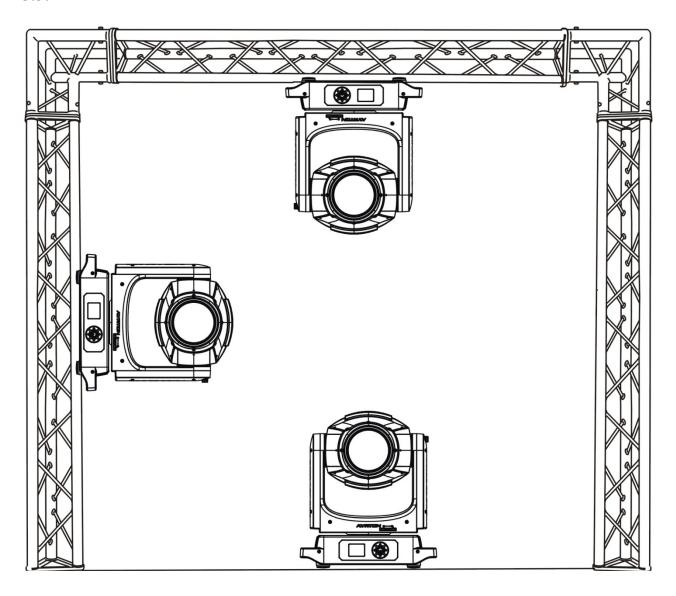
- Fix the clamp to the bracket by tightening the M12 nut and bolt to the bracket through the  $\Phi$ 13 hole in the middle of the bracket.
- Insert the quick-lock fasteners of the first Omega holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise.
- Install the second Omega holder.
- Pull the safety cable through the handle of the base and over the trussing system or another suitable rigging point. Insert the end into the carabiner and tighten the safety screw.
- Do NOT attach the safety cable to the holes marked "X" on the drawing.
- For fixture of later productions, the safety cable can be attached to either the handle of the base or the hole on the bottom of the base (as shown below):



Important:

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

#### **5.3.** RIGGING DRAWINGS



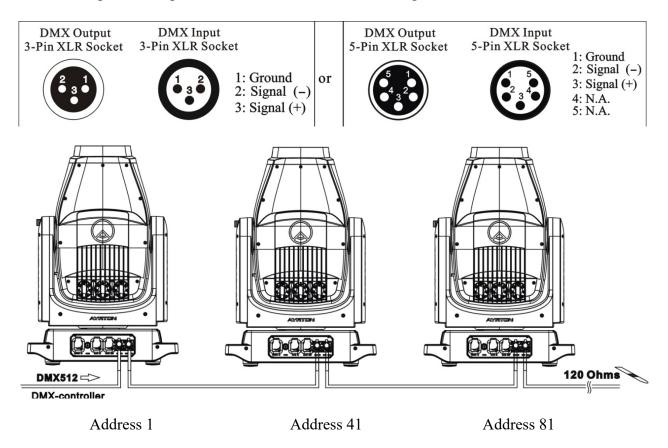
- Be sure this fixture is kept at least 0.2 m away from any flammable materials (decoration etc.).
- Always use and install a safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

# Important:

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

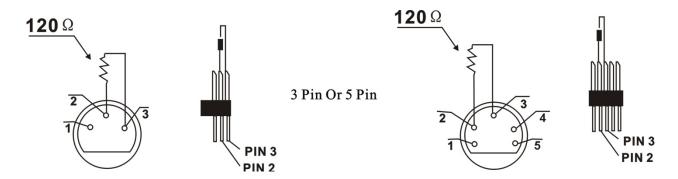
#### 6. DMX-512 CONTROL CONNECTION

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



#### 7. DMX-512 CONNECTION WITH DMX TERMINATOR

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



#### 8. DEVICE DMX START ADDRESS SELECTION

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

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

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

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

In the case of the LED moving head, in 40 channel mode, you should set the starting address of the first unit to 1, the second unit to 41 (40 + 1), the third unit to 81 (40 + 41), and so on.

# 9. OPERTING INSTRUCTIONS OF THE INTERNAL DMX WIRELESS SYSTEM

#### 9.1 Equipments:

DMX 512 controller, wireless transmitter, and the fixtures with wireless receiver.

#### 9.2 Message from the LED indicator:

- 1) Rapid flashing red/Green: logging in to a transmitter.
- 2) Slow flashing Red/Green: Logged on a transmitter and the DMX line is idle (No DMX is connected to transmitter).
- 3) Solid Green: Logged on to a transmitter and receiving DMX data.
- 4) Solid Red: Not logged on to a transmitter (free).

#### 9.3 WDMX in the menu of the fixture:

On a fixture installed with wireless system, in order to switch between wireless control system and traditional DMX control (with cable), a new menu WDMX is added to the display board.

ON: (Activate WDMX)

- 1) When the fixture is on power, and the WDMX is activated to ON status, but did not connect to the controller and did not log in to the transmitter, the fixture will search for the DMX signal source. If the fixture is connected to the DMX controller it can be controlled by DMX controller; if it is log in to the wireless transmitter, it can be controlled by the Transmitter.
- 2) When the fixture is power off, and the WDMX is in ON status, if the fixture is connected

to DMX controller. After the fixture is power on, it can be controlled only by the DMX controller which connected. The fixture can log in the wireless transmitter, and receive only radio signal from transmitter, but not DMX from the transmitter.

OFF: (De-activate WDMX)

In this status, wireless system is not activated, so the fixture can not log in the transmitter.

REST: (reset WDMX memory)

Can remove the fixture from the connection with the transmitter, the fixture become free and ready to log in any transmitter.

#### 9.4 Setup the wireless system:

- 1) Connect the transmitter with the DMX controller.
- 2) To make the fixture installed with wireless receiver log in to the transmitter.
  - a) Initially, the indicator on the receiver fixture should be in Solid red.
  - b) Press and hold the configuration button on transmitter for less than 3 seconds the red/green LEDs on the transmitter and the receiver fixture will flash rapidly for about 5~10 seconds while the system goes through its setup procedure.
  - c) Once the receiver fixture is logged in to the transmitter (T1), the fixture with wireless receiver will keep the memory, even if restart the power, this unit will log in the transmitter (T1) automatically.
- 3) Use the DMX 512 to control the fixture

#### 9.5 Remove the receivers from transmitter(T1) and to log in to another transmitter(T2):

Case 1: Remove a receiver:

- a) On the control board of the fixture, enter menu to activated the function of REST;
- b) The LED for wireless on the fixture should turn to Solid red; the receiver can log out from the transmitter (T1):
- c) press the configuration button on transmitter (T2) for less than 3 second, then the fixture will start to connect with the transmitter (T2).

Case 2: Remove all receivers from a transmitter (T1) to log in to T2:

- a) Press and hold the configuration button on the T1 as least 5 seconds, can clear the connection with all the fixtures;
- b) All the red/green LEDs on the receiver fixtures will turn to Solid red to indicate that the receivers are unassigned and removed from the transmitter (T1);
- c) Press and hold the configuration button on the T2 less than 3 second, the fixtures will connect with the T2.

#### PS:

- 1. Please log the receivers out from the transmitter after every job, so that the receivers are in free un assigned state and ready to be assigned to a transmitter.
- 2. Do not connect the fixture which is under the communication of wireless system to the DMX controller, otherwise it will cause interference from the DMX controller.

#### 10. 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 double clicking button until the display starts flashing. Browse through the menu by pressing the button, button, button, button, button or button.

Press of for 2 seconds in order to exit menu, double click of for confirm. 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.

#### Default settings shaded

Address	Address	DMX address:001-XX	XX	DMX address setting
Mode	Stand Mode Basic Mode Extend Mode User Mode User Mode A User Mode B User Mode C		User's mode to change channel numbers	
	Edit User ModeA	Max channel PAN :		Preset User modes A,B,C:
Options	Status	No DMX Mode Sun Protection Pan Reverse Tilt Reverse Pan Degree Feedback Init PAN Init TILT Reset Mode Pan/Tilt Spd Hibernation Art-Net to DMX	Close/Hold/Auto ON/OFF ON/OFF ON/OFF 630/540 ON/OFF ON/OFF ON/OFF Fast/All Rot Gobos Speed 1~ 4 OFF, 01M~99M ON/OFF	Auto run if no DMX Sun Protection Pan Reverse movement Tilt Reverse movement Pan Degree Select Movement Feedback Init PAN Init TILT Reset Mode Movement Speed Stand by Mode Art-Net to DMX

		Service PIN	Password=XXX	Service Password"=050"		
		Set Ip	XXX.XXX.XXX	Set Ip		
	Service PIN	Cross Load SW	ON/OFF	Cross Load SW		
		Clr LED Time	ON/OFF	Clr LED Time		
			Auto	on DDD Time		
			Stage			
	T. C.	Fans Speed	Silence	Fans Speed select		
	Fans Control		Super Silence			
		Constant Fans	ON/OFF	Constant Fans		
		Shutoff Time	02~60m 05m	Display shutoff time		
		Flip Display	ON/OFF	Reverse 180 degree		
	Disp.Setting	Key Lock	ON/OFF	Key Lock		
		DispFlash	ON/OFF	DispFlash		
		-	ON/OFF			
		DMX	DMX			
	Signal Select	WDMX		WDMX		
		Art—Net		Art-Net		
		sACN	sACN			
	Temp. C/F	Celsius	Temperature switch			
		Fahrenheit PAN =XXX		between °C/°F		
	Initial Pos.	Initial effect position				
		Activate WDMX		Activate WDMX		
	Wireless DMX	Act&Data Out		Act&Data Out		
		Rest WDMX		Rest WDMX		
	Dim Curve	Square Law Linear		Dim Curve		
	Refresh Select	1.2K 2.4K 16K 25K		Refresh Select		
	Gobo Correction	ON/OFF		Gobo Correction		
	Head Heater	ON/OFF	Head Heater			
		DMX Value Disp.	PAN	DMX Value Disp.		
	Trigger	Set To Slave	Slave1,Slave2,Slave3	Set To Slave		
		Auto Program	Master / Alone	Auto Program		
	ResetDefault	ON/OFF		Restore factory set.		
		Current Time	XXXX(Hours)			
		Ttl Life Hrs	XXXX(Hours)			
	Time Info.	Last Run Hrs	XXXX(Hours)			
	Time imo.	LED Hours	XXXX(Hours)			
fo		Timer PIN		Password=XXX		
Info		Clr Last Run		ON/OFF		
	Temp. Info	XXX°C/°F		Temp. Infomation		
	Head Humidity	x%		Head Humidity		
	Fan Info.	xxxxRPM	Fan information			
1	Software Ver	V1.0		Software version		

	Network	IP,Mask,Mac		Network			
		All		Reset All			
		Pan&Tilt		Reset Pan&Tilt			
	Home	Color	Color				
		Gobo	Gobo				
		Other		Reset Others			
Test	Test Channel	PAN		Test function			
Ī	Manual Ctrl.	PAN =XXX:		Fine adjustment of the lamp			
		-Password-		Password "050"			
	Calibration	-Password- PAN		Calbrate and adjust the			
				effects to standard/right			
		:		position			
		Prog. Part 1 = Program	m $1 \sim 10$ Program 1				
	Select Prog.	Prog. Part $2 = Program$	m $1 \sim 10$ Program 2	Select programs to be run			
		Prog. Part 3 = Program	n 1 ~ 10 Program 3				
	Edit Prog.	Program 1	Program Test	Testing program			
et		:	Step 01=SCxxx	Program in loop			
Preset		Program 10	Step 64=SCxxx	Save and exit			
			Pan,Tilt,				
	Edit Scenes	Edit Scene 001Fade Time		Save and automatically			
	Late Seemes	~ Edit Scene 250	Secne Time	return manual scenes edit			
			Input By Outside				
	Scenes Input	XX~XX		Scenes Input			

#### 10.1. Address

#### 10.1.1. Set DMX Address

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Address" is displayed.
- 3. Double clicking center button, the display will show "Set DMX Address".
- 4. Tap the <Up/Down> button, the display will show "001~XXX".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### **10.2.Mode**

#### **10.2.1. User Mode**

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

- 1. Double clicking center button to access main menu; Tap the <Up/Down> button until "Mode" is displayed. Double clicking center button to enter.
- 2. Press <Up/Down>, the display will show "User Mode".
- 3. Double clicking center button to enter.
- 4. When in "Extend Mode", Press < Up/Down> button to select "Basic Mode", "Stand Mode", "Ghibli Mode", "User Mode A", "User Mode B" and "User Mode C".
- 5. Double click the center button to confirm or long press the center button to return to the

main menu.

#### 10.2.2. Edit User Mode

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

- 1. Double clicking center button to access main menu; Tap the <Up/Down> button until "Mode" is displayed. Double clicking center button to enter.
- 2. Press <Up/Down>, the display will show "Edit User Mode".
- 3. Double clicking center button to enter.
- 4. Set up "Max Channel=xxx" and select channel value.
- 5. Set up "Mode B" and "Mode C" by the same way.
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3. Options

#### 10.3.1. Status

#### **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. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "No DMX Status".
- 5. Double clicking center button to access "No DMX Status", The display will show "Hold", Tap the <Up/Down> button to select "Close", "Auto".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Sun Protection**

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "Sun Protection".
- 5. Double clicking center button to access "Sun Protection", The display will show "ON", Tap the <Up/Down> button to select "OFF".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### Pan Reverse

With this function you can reverse the Pan-movement.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select

- "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "Pan Reverse".
- 5. Double clicking center button to access "Pan Reverse", The display will show "OFF", Tap the <Up/Down> button to select "NO".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Tilt Reverse**

With this function you can reverse the Tilt-movement.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "Tilt Reverse".
- 5. Double clicking center button to access "Tilt Reverse", The display will show "OFF", Tap the <Up/Down> button to select "NO".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### Pan Degree

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "Pan Degree".
- 5. Double clicking center button to access "Pan Degree", The display will show "540", Tap the <Up/Down> button to select "630".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Feedback**

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "Feedback".
- 5. Double clicking center button to access "Feedback", The display will show "ON", Tap the <Up/Down> button to select "OFF".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Init PAN**

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "Init PAN".
- 5. Double clicking center button to access "Init PAN", The display will show "ON", Tap the <Up/Down> button to select "OFF".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Init TILT**

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "Init TILT".
- 5. Double clicking center button to access "Init TILT", The display will show "ON", Tap the <Up/Down> button to select "OFF".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Reset Mode**

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "Reset Mode".
- 5. Double clicking center button to access "Reset Mode", The display will show "Fast", Tap the <Up/Down> button to select "All Rot Gobos".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### Pan/Tilt Spd

With this function, you can select scan mode from 1 to 4.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "Pan/Tilt Spd".

- 5. Double clicking center button to access "Pan/Tilt Spd", The display will show "Speed 1", Tap the <Up/Down> button to select "Speed 1", "Speed 2", "Speed 3", "Speed 4".
- 6. Double click the center button to confirm or long press the center button 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. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "Hibernation".
- 5. Double clicking center button to access "Hibernation", The display will show "OFF", Tap the <Up/Down> button to select "01M", "02M" . . . "99M".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Art-Net to DMX**

With this function, you can select Art-Net to DMX.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Status".
- 4. Double clicking center button to access "Status" menu, Tap the <Up/Down> button to select "Art-Net to DMX".
- 5. Double clicking center button to access "Art-Net to DMX", The display will show "OFF", Tap the <Up/Down> button to select "ON".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3.2. Service PIN

#### **Password**

The Password for this function is "050".

#### **Set IP**

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Service PIN".
- 4. Double clicking center button to access "Service PIN" menu, Tap the <Up/Down>button to select "Set IP".
- 5. Double clicking center button to access "Set IP", The display will show "XXX. XXX. XXX. XXX".

6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Cross Load SW**

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Service PIN".
- 4. Double clicking center button to access "Service PIN" menu, Tap the <Up/Down> button to select "Cross Load SW".
- 5. Double clicking center button to access "Cross Load SW", The display will show "OFF", Tap the <Up/Down> button to select "ON".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Clr LED Timer**

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Service PIN".
- 4. Double clicking center button to access "Service PIN" menu, Tap the <Up/Down> button to select "Clr LED Timer".
- 5. Double clicking center button to access "Clr LED Timer", The display will show "OFF", Tap the <Up/Down> button to select "ON".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3.3. Fans Control

#### **Fans Speed**

With this function you can set the speed of the running fans. The selections have Auto, Stage, Silence and Super Silence.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access" Options", Tap the <Up/Down> button to select "Fans Control".
- 4. Double clicking center button to access "Fans Control" menu, Tap the <Up/Down> button to select "Fans Speed".
- 5. Double clicking center button to access "Fans Speed 1", The display will show "Auto", Tap the <Up/Down> button to select "Stage", "Silence", "Super Silence".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Constant Fans**

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Fans Control".

- 4. Double clicking center button to access "Fans Control" menu, Tap the <Up/Down> button to select "Constant Fans".
- 5. Double clicking center button to access "Constant Fans", The display will show "OFF", Tap the <Up/Down> button to select "ON".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3.4. Disp. Setting

#### **Shut off Time**

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Display Setting".
- 4. Double clicking center button to access "Display Setting" menu, Tap the <Up/Down> button to select "Shut off Time".
- 5. Double clicking center button to access "Shut off Time", The display will show "05m", Tap the  $\langle \text{Up/Down} \rangle$  button to select "02 $\sim$ 60m".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### Flip Display

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Display Setting".
- 4. Double clicking center button to access "Display Setting" menu, Tap the <Up/Down>button to select "Flip Display".
- 5. Double clicking center button to access "Flip Display", The display will show "OFF", Tap the <Up/Down> button to select "ON".
- 6. Double click the center button to confirm or long press the center button 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. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Display Setting".
- 4. Double clicking center button to access "Display Setting" menu, Tap the <Up/Down> button to select "Key Lock".
- 5. Double clicking center button to access "Key Lock", The display will show "OFF",

- Tap the <Up/Down> button to select "ON".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### DispFlash

With this function you can the entire display to be flipped by 180° to allow for better view when the fixture is hung from truss or a ceiling. This function is disabled as default.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Display Setting".
- 4. Double clicking center button to access "Display Setting" menu, Tap the <Up/Down>button to select "DispFlash".
- 5. Double clicking center button to access "DispFlash", The display will show "OFF", Tap the <Up/Down> button to select "ON".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3.5. Signal Select

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Signal Select".
- 4. Double clicking center button to access "Signal Select", The display will show "DMX", Tap the <Up/Down> button to select "DMX", "WDMX", "Art--Net", "sACN".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3.6. Temperature C/F

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Temperature C/F".
- 4. Double clicking center button to access "Temperature C/F", The display will show "Fahrenheit", Tap the  $\langle Up/Down \rangle$  button to select "Celsius".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### **10.3.7.** Initial Pos.

With this function you can display initial effect position.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Initial Pos.".
- 4. Double clicking center button to access "Initial Pos.", The display will show "PAN=XXX".

5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3.8. Wireless DMX

From factory, this projector is prepared for wireless data transmission (W-DMX). If you wish to de-activate W-DMX control, you can select the function "De-activate WDMX" by turning the encoder. With the function "rest", you can log out the projector from the wireless sender.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Wireless DMX".
- 4. Double clicking center button to access "Wireless DMX", The display will show "Activate WDMX", Tap the <Up/Down> button to select "Act&Data Out", "Rest WDMX".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3.9. Dim Curve

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Dim Curve".
- 4. Double clicking center button to access "Dim Curve", The display will show "Square Law", Tap the <Up/Down> button to select "Linear".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3.10. Refresh Select

With this function you can select the refresh.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Refresh Select".
- 4. Double clicking center button to access "Refresh Select", The display will show "1.2K", Tap the <Up/Down> button to select "2.4K", "16K".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3.11. Gobo Correction

With this function you can select the CTB.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Gobo Correction".
- 4. Double clicking center button to access "Gobo Correction", The display will show "ON", Tap the <Up/Down> button to select "OFF".
- 5. Double click the center button to confirm or long press the center button to return to the

main menu.

#### 10.3.12. Head Heater

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Head Heater".
- 4. Double clicking center button to access "Head Heater", The display will show "ON", Tap the <Up/Down> button to select "OFF".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3.13. Trigger

#### DMX Value Disp.

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Trigger".
- 4. Double clicking center button to access "Trigger" menu, Tap the <Up/Down> button to select "DMX Value Disp".
- 5. Double clicking center button to access "DMX Value Disp", The display will show "PAN=.....".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Set To Slave**

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Trigger".
- 4. Double clicking center button to access "Trigger" menu, Tap the <Up/Down> button to select "Set To Slave".
- 5. Double clicking center button to access "Set To Slave", The display will show "Slave1", "Slave2", "Slave3".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **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. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.

- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Trigger".
- 4. Double clicking center button to access "Trigger" menu, Tap the <Up/Down> button to select "Auto Program".
- 5. Double clicking center button to access "Auto Program", The display will show "Master", "Alone".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.3.14. Reset Default

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Options" is displayed.
- 3. Double clicking center button to access "Options", Tap the <Up/Down> button to select "Reset Default".
- 4. Double clicking center button to access "Reset Default" menu, The display will show "OFF", Tap the <Up/Down> button to select "ON".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.4. Info

#### 10.4.1. Time Info.

#### **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 reset after turning the device off.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Info" is displayed.
- 3. Double clicking center button to access "Info", Tap the <Up/Down> button to select "Time Info.".
- 4. Double clicking center button to access "Time Info.", Tap the <Up/Down> button to select "Current Time".
- 5. Double clicking center button to access "Current Time", The display will show "XXXX (Hours)".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### Ttl Life Hrs

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Info" is displayed.
- 3. Double clicking center button to access "Info", Tap the <Up/Down> button to select "Time Info.".
- 4. Double clicking center button to access "Time Info.", Tap the <Up/Down> button to select "Ttl Life Hrs".

- 5. Double clicking center button to access "Ttl Life Hrs", The display will show "XXXX (Hours)".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Last Run Hrs**

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. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Info" is displayed.
- 3. Double clicking center button to access "Info", Tap the <Up/Down> button to select "Time Info.".
- 4. Double clicking center button to access "Time Info.", Tap the <Up/Down> button to select "Last Run Hrs".
- 5. Double clicking center button to access "Last Run Hrs", The display will show "XXXX (Hours)".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **LED Hours**

With this function, you can display the time of LED. The display shows "XXXX", "XXXX" stands for the time of LED.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Info" is displayed.
- 3. Double clicking center button to access "Info", Tap the <Up/Down> button to select "Time Info.".
- 4. Double clicking center button to access "Time Info.", Tap the <Up/Down> button to select "LED Hours".
- 5. Double clicking center button to access "LED Hours", The display will show "XXXX (Hours)".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Timer PIN**

With this function, you can display the timer password.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Info" is displayed.
- 3. Double clicking center button to access "Info", Tap the <Up/Down> button to select "Time Info.".
- 4. Double clicking center button to access "Time Info.", Tap the <Up/Down> button to select "Timer PIN".
- 5. Double clicking center button to access "Timer PIN", The display will show "Password=038".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### **Clr 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. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Info" is displayed.
- 3. Double clicking center button to access "Info", Tap the <Up/Down> button to select "Time Info.".
- 4. Double clicking center button to access "Time Info.", Tap the <Up/Down> button to select "Clear Last Run".
- 5. Double clicking center button to access "Clear Last Run", The display will show "OFF", Tap the <Up/Down> button to select "ON".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.4.2. Temp. Info

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Info" is displayed.
- 3. Double clicking center button to access "Info", Tap the <Up/Down> button to select "Temp Info".
- 4. Double clicking center button to access "Time Info.", The display will show "XXX  $^{\circ}$ C/  $^{\circ}$ F".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.4.3. Head Humidity

With this function you can display the humidity on the display board.

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Info" is displayed.
- 3. Double clicking center button to access "Info", Tap the <Up/Down> button to select "Head Humidity".
- 4. Double clicking center button to access "Head Humidity", The display will show "x%".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.4.4. Fan Info.

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Info" is displayed.
- 3. Double clicking center button to access "Info", Tap the <Up/Down> button to select "Fan Info.".
- 4. Double clicking center button to access "Fan Info.", The display will show "xxxxRPM".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.4.5. Software Ver

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Info" is displayed.
- 3. Double clicking center button to access "Info", Tap the <Up/Down> button to select "Software Ver".
- 4. Double clicking center button to access "Software Ver", The display will show "Ver x.x.x".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.4.6. Network

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Info" is displayed.
- 3. Double clicking center button to access "Info", Tap the <Up/Down> button to select "Network".
- 4. Double clicking center button to access "Network", The display will show "IP", Turn the center button to select "Mask", "Mac".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.5. Test

#### 10.5.1. Home

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Test" is displayed.
- 3. Double clicking center button to access "Test", Tap the <Up/Down> button to select "Home".
- 4. Double clicking center button to access "Home", The display will show "All", Tap the <Up/Down> button to select "All", "Pan&Tilt", "Color", "Gobo", "Other".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.5.2. Test Channel

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Test" is displayed.
- 3. Double clicking center button to access "Test", Tap the <Up/Down> button to select "Test Channel".
- 4. Double clicking center button to access "Test Channel", The display will show "Pan", Tap the <Up/Down> button to select other channel.
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.5.3. 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. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Test" is displayed.
- 3. Double clicking center button to access "Test", Tap the <Up/Down> button to select "Manual control".
- 4. Double clicking center button to access "Manual control", The display will show "PAN=XXX".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### 10.5.4. Calibration

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

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Test" is displayed.
- 3. Double clicking center button to access "Test", Tap the <Up/Down> button to select "Calibration".
- 4. Double clicking center button to access "Calibration", The display will show "Password=050".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

#### **10.6.** Preset

- 1. Double clicking center button to access main menu.
- 2. Tap the <Up/Down> button until "Preset" is displayed.
- 3. Double clicking center button to access "Preset", Tap the <Up/Down> button to select "Select prog.", "Edit prog.", "Edit Scenes", "Scenes Input".
- 4. Double click the center button to confirm or long press the center button 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.

Auto Pro	_								
Part 1	Part 2	Part 3	Part 1	Part 2	Part 3	Part 1	Part 2	Part 3	

- 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

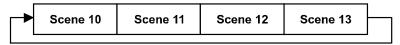
- groups driven program---Part1, Part2, Part3(Part1 program runs the same effect as the host)
- 5. Enter the menu of 8-2 Edit Program---Edit Program. Edit the program's connection, connect the scene in order
- 6. The editor of the scene, there are as many as 250 scenario editors, and every scene can have a program connection of 10.

#### Note:

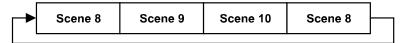
Part 2, Part 3 repeat in accordance with the Part1's repeat. For example: When Part 1 uses Program 2, Part 2 uses Program 4, Part 3 uses Program 6, Assume: Program 2 includes scene of 10, 11, 12, 13; Program 4 includes scene of 8, 9, 10; Program 6 includes scene of 12, 13, 14, 15; Then it will run as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

#### Example:

#### Part 1:



#### Part 2:



#### Part 3:

		Scene 12	Scene 13	Scene 14	Scene 15	
--	--	----------	----------	----------	----------	--

#### 11. DMX PROTOCOL

DM	DMX channel's functions and their values (61DMX channels):						
Mode/Channel		Value	Function				
St	Ba	Ex					
1	1	1		PAN Movement 8bit :			
1	1	1	0-255	Pan Movement			
2		2		Pan Fine 16bit			
2	2	0-255	Fine control of Pan movement				
3	2	3		TILT Movement 8bit :			
3	2	2	3	0-255	Tilt Movement		
4		4		Tilt Fine 16bit			
4		4	0-255	Fine control of Tilt movement			
				Speed Pan/Tilt movement:			
			0-225	max to min speed			
5	3	5	226-235	blackout by movement			
			236-245	blackout by all wheel changing			
			246-255	no function			
6	4	6		Shutter, strobe:			

			0-10	Shutter closed
			11-20	No function (shutter open)
			21-117	Strobe effect slow to fast
			118-126	No function (shutter open)
			127-180	Pulse-effect in sequences
			181-191	No function (shutter open)
			192-245	Random strobe effect slow to fast
			246-255	No function (shutter open)
		7		Dimmer intensity:
7	5	7	0-255	Intensity 0 to 100%
		0		Fine Dimmer intensity:
		8	0-255	Dimmer intensity fine
8	6	9		Reserved
9	7	10		Reserved
10	8	11		Reserved
1.1	0	10		Zoom:
11	9	12	0-255	Zoom adjustment from small to big
		13		Zoom Fine:
			0-255	Zoom adjustment Fine
10	1.0	1 /		Focus:
12	10	14	0-255	Continuous adjustment from near to far
		1.5		Focus Fine:
		15	0-255	Continuous adjustment Fine
				Auto Focus:
			0-50	Auto Focus Off
12	11	16	51-100	5m
13	11	16	101-150	7.5m
			151-200	10m
			201-255	15m
1.4	12	17		AutoFocus Fine:
14	12	1 /	0-255	Continuous adjustment Fine
				Color Wheel:
			0-3	Open / white
			4-7	Color 1
			8-11	Color 2
			12-15	Color 3
15	13	18	16-19	Color 4
13	13	18	20-23	Color 5
			24-27	Color 6
			28-31	Color 7
			32-127	Color indexing
			120 100	
1 1			128-189	Forwards rainbow effect from fast to slow

			194-255	Backwards rainbow effect from slow to fast
		10		Color Wheel Fine:
		19	0-255	Color Wheel colour change to any position Fine
1.6	1.4	20		Cyan Color:
16	14	20	0-255	Cyan (0-white, 255-100% Cyan)
		21		Cyan Color Fine :
		21	0-255	Cyan Fine
17	15	22		Magenta Color:
1 /	13	22	0-255	Magenta (0-white, 255-100% magenta)
		23		Magenta Color Fine :
		23	0-255	Magenta Fine
10	16	24		Yellow Color:
18	16	24	0-255	Yellow (0-white, 255-100% Yellow)
		25		Yellow Color Fine:
		25	0-255	Yellow Fine
10	17	26		CTO Color:
19	17	26	0-255	CTO (0-white, 255-100% CTO)
		27		CTO Color Fine :
		27	0-255	CTO Fine
				Rotating gobos, cont. rotation 1:
			0-9	Open
		28	10-19	Rot. gobo 1
			20-29	Rot. gobo 2
			30-39	Rot. gobo 3
			40-49	Rot. gobo 4
			50-59	Rot. gobo 5
			60-69	Rot. gobo 6
			70-77	Rot. Gobo 7
20	18		78-93	Gobo 1 shake slow to fast
			94-109	Gobo 2 shake slow to fast
			110-125	Gobo 3 shake slow to fast
			126-141	Gobo 4 shake slow to fast
			142-157	Gobo 5 shake slow to fast
			158-173	Gobo 6 shake slow to fast
			174-189	Gobo 7 shake slow to fast
			190-221	Gobo wheel rotation forwards from fast to slow
			222-223	No rotation
			224-255	Gobo wheel rotation f backwards from slow to fast
		29		Rotating gobo index,rotating gobo rotation 1:
	19		0-127	Gobo indexing
21			128-189	Forwards gobo rotation from fast to slow
			190-193	No rotation
			194-255	Backwards gobo rotation from slow to fast

		20		Rotating gobo indexing Fine 1:
		30	0-255	Fine indexing
				Fixed Gobo2:
			0-13	open
			14-18	Gobo 1
			19-23	Gobo 2
			24-28	Gobo 3
			29-33	Gobo 4
			34-38	Gobo 5
			39-43	Gobo 6
			44-48	Gobo 7
			49-53	Gobo 8
			54-58	Gobo 9
			59-63	Gobo 10
			64-68	Gobo 11
22	20	31	69-79	Gobo 1 shake slow to fast
			80-90	Gobo 2 shake slow to fast
			91-101	Gobo 3 shake slow to fast
			102-112	Gobo 4 shake slow to fast
			113-123	Gobo 5 shake slow to fast
			124-134	Gobo 6 shake slow to fast
			135-145	Gobo 7 shake slow to fast
			146-156	Gobo 8 shake slow to fast
			157-167	Gobo 9 shake slow to fast
			168-178	Gobo 10 shake slow to fast
			179-189	Gobo 11 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
				Animation wheel:
			0-7	open
23	21	1 32	8-127	Forwards rotation from fast to slow
			128-135	No rotation
			136-255	Backwards rotation from slow to fast
		33		<u>Iris:</u>
24	22		0-191	Max. diameter to Min.diameter
∠ <b>+</b>	<i>LL</i>	33	192-223	Pulse closing fast to slow
			224-255	Pulse opening slow to fast
		34		Iris Fine:
		٦,	0-255	Iris Fine
				Prism 1:
25	23	35	0-127	Open
			128-255	5-Facet Prism

				Rotating prism index, rotating prism rotation 1
26	24	36	0-127	Prism indexing
20	Z4	30	128-189	Forwards prism rotation from fast to slow
		-	190-193	No rotation
		-	194-255	Backwards prism rotation from slow to fast
		37		Rotating prism indexing Fine 1:
		31	0-255	Fine indexing
				Prism 2:
27	25	38	0-127	Open
			128-255	Linear Prism
				Rotating prism index, rotating prism rotation 2
28	26	39	0-127	Prism indexing
20	20	39	128-189	Forwards prism rotation from fast to slow
			190-193	No rotation
			194-255	Backwards prism rotation from slow to fast
		40		Rotating prism indexing Fine 2:
		40	0-255	Fine indexing
29	27	<i>1</i> 1		<u>Frost 1:</u>
29	21	41	0-255	0-100%
30	28	42		Frost 2:
30	20	42	0-255	0-100%
31	29	43		Blade 1A:
31	1 27	43	0-255	Open to Close
		44		Blade 1A Fine :
		77	0-255	Open to Close Fine
32	30	45		Blade 1B :
32	50	73	0-255	Open to Close
		46		Blade 1B Fine :
		-10	0-255	Open to Close Fine
33	31	47		Blade 2A:
33	<i>J</i> 1	- <b>T</b> /	0-255	Open to Close
		48		Blade 2A Fine :
		70	0-255	Open to Close Fine
34	32	49		Blade 2B :
J <del>+</del>	32	49	0-255	Open to Close
		50		Blade 2B Fine :
		50	0-255	Open to Close Fine
35	33	51		Blade 3A:
33	55	<i>J</i> 1	0-255	Open to Close
		52		Blade 3A Fine :
		32	0-255	Open to Close Fine
36	34	53		Blade 3B :
30	) <del>1</del>	55	0-255	Open to Close

				Blade 3B Fine :
		54	0-255	Open to Close Fine
27	25			Blade 4A:
37	35	55	0-255	Open to Close
				Blade 4A Fine :
		56	0-255	Open to Close Fine
				Blade 4B :
38	36	57	0-255	Open to Close
				Blade 4B Fine :
		58	0-255	Open to Close Fine
				All Blade Rotation :
39	37	59	0-255	All Blade Rotation
			·	All Blade Rotation Fine :
		60	0-255	All Blade Rotation Fine
			0 255	Control, reset, internal programs:
			0-4	unused
			5-9	Display Off
			10-14	Display On
			15-19	Display Invert Off
			20-24	Display Invert On
			25-26	Auto fan control mode
			27-28	Stage fan control mode
		61	29-30	Silence fan control mode
			31-32	Super Silence fan control mode
			33-34	Constant Fans Off
			35-36	Constant Fans On
			37-44	unused
			45-49	Square Law
			50-54	Linear
40	38		55-58	1.2K
			59-62	2.4K
			63-66	16K
			67-69	25K
			70-74	Gobo correction Off
			75-79	Gobo correction On
			80-84	All motor reset
			85-87	Scan motor reset
			88-90	Colors motor reset
			91-93	Gobo motor reset
			94	unused
			95	Head Heater Off
			96	Head Heater On
			97-99	Other motor reset
			100-119	Internal program 1 (scene1~8 of EEPROM)
			120-139	Internal program 2 (scene9~16 of EEPROM)

	140-159	Internal program 3 (scene17~24 of EEPROM)
	160-179	Internal program 4 (scene25~32 of EEPROM)
	180-199	Internal program 5 (scene33~40 of EEPROM)
	200-219	Internal program 6 (scene41~48 of EEPROM)
	220-239	Internal program 7 (scene49~56 of EEPROM)
	240-255	Internal program 8 (scene57~64 of EEPROM)

DMX channel's functions and their values:			
Mode/Channel	Value	Function	
Ghibli Mode			
1		PAN Movement 8bit :	
1	0-255	Pan Movement	
2		Pan Fine 16bit	
2	0-255	Fine control of Pan movement	
2		TILT Movement 8bit :	
3	0-255	Tilt Movement	
4		Tilt Fine 16bit	
4	0-255	Fine control of Tilt movement	
		Speed Pan/Tilt movement:	
	0-225	max to min speed	
5	226-235	blackout by movement	
	236-245	blackout by all wheel changing	
	246-255	no function	
		Shutter, strobe:	
	0-10	Shutter closed	
	11-20	No function (shutter open)	
	21-117	Strobe effect slow to fast	
6	118-126	No function (shutter open)	
	127-180	Pulse-effect in sequences	
	181-191	No function (shutter open)	
	192-245	Random strobe effect slow to fast	
	246-255	No function (shutter open)	
7		Dimmer intensity:	
7	0-255	Intensity 0 to 100%	
0		Fine Dimmer intensity:	
8	0-255	Dimmer intensity fine	
9		Reserved	
10		Reserved	
11		Reserved	
12		Zoom:	
12	0-255	Zoom adjustment from small to big	
13		Zoom Fine:	
13	0-255	Zoom adjustment Fine	
14		Focus:	
14	0-255	Continuous adjustment from near to far	
15		Focus Fine:	
13	0-255	Continuous adjustment Fine	
		Auto Focus:	
	0-50	Auto Focus Off	
16	51-100	5m	
10	101-150	7.5m	
	151-200	10m	
	201-255	15m	
17		AutoFocus Fine:	
	0-255	Continuous adjustment Fine	
18		Color Wheel:	

	0-3	Open / white
	4-7	Color 1
	8-11	Color 2
	12-15	Color 3
	16-19	Color 4
	20-23	Color 5
	24-27	Color 6
	28-127	Color indexing
	128-189	Forwards rainbow effect from fast to slow
	190-193	No rotation
	194-255	Backwards rainbow effect from slow to fast
		Color Wheel Fine:
19	0-255	Color Wheel colour change to any position Fine
		Cyan Color:
20	0-255	Cyan (0-white, 255-100% Cyan)
	0 200	Cyan Color Fine:
21	0-255	Cyan Fine
	0 200	Magenta Color:
22	0-255	Magenta (0-white, 255-100% magenta)
	0 200	Magenta Color Fine:
23	0-255	Magenta Fine
	0 200	Yellow Color:
24	0-255	Yellow (0-white, 255-100% Yellow)
	0 200	Yellow Color Fine:
25	0-255	Yellow Fine
	0 200	CTO Color:
26	0-255	CTO (0-white, 255-100% CTO)
	0 200	CTO Color Fine:
27	0-255	CTO Fine
	0 200	Rotating gobos, cont. rotation 1:
	0-9	Open
	10-19	Rot. gobo 1
	20-29	Rot. gobo 2
	30-39	Rot. gobo 3
	40-49	Rot. gobo 4
	50-59	Rot. gobo 5
	60-69	Rot. gobo 6
	70-77	Rot. Gobo 7
28	78-93	Gobo 1 shake slow to fast
	94-109	Gobo 2 shake slow to fast
	110-125	Gobo 3 shake slow to fast
	126-141	Gobo 4 shake slow to fast
	142-157	Gobo 5 shake slow to fast
	158-173	Gobo 6 shake slow to fast
	174-189	Gobo 7 shake slow to fast
	190-221	Gobo wheel rotation forwards from fast to slow
	222-223	No rotation
	224-255	Gobo wheel rotation f backwards from slow to fast
29		Rotating gobo index, rotating gobo rotation 1:
2)	<u> </u>	I I I I I I I I I I I I I I I I I I I

	0-127	Gobo indexing
	128-189	Forwards gobo rotation from fast to slow
	190-193	No rotation
	194-255	Backwards gobo rotation from slow to fast
	174-233	Rotating gobo indexing Fine 1:
30	0-255	Fine indexing
	0-233	Fixed Gobo2:
	0-21	
		open Cala 1
	22-31	Gobo 1
	32-41	Gobo 2
	42-51	Gobo 3
	52-61	Gobo 4
	62-71	Gobo 5
	72-81	Gobo 6
	82-91	Gobo 7
	92-101	Gobo 8
31	102-112	Gobo 1 shake slow to fast
	113-123	Gobo 2 shake slow to fast
	124-134	Gobo 3 shake slow to fast
	135-145	Gobo 4 shake slow to fast
	146-156	Gobo 5 shake slow to fast
	157-167	Gobo 6 shake slow to fast
	168-178	Gobo 7 shake slow to fast
	179-189	Gobo 8 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
		Animation wheel:
	0-7	open
32	8-127	Forwards rotation from fast to slow
	128-135	No rotation
	136-255	Backwards rotation from slow to fast
		<u>Iris:</u>
33	0-191	Max. diameter to Min.diameter
33	192-223	Pulse closing fast to slow
	224-255	Pulse opening slow to fast
2.4		Iris Fine:
34	0-255	Iris Fine
		Prism 1:
35	0-127	Open
	128-255	5-Facet Prism
		Rotating prism index, rotating prism rotation 1
	0-127	Prism indexing
36	128-189	Forwards prism rotation from fast to slow
	190-193	No rotation
	194-255	Backwards prism rotation from slow to fast
	15 . 255	Rotating prism indexing Fine 1:
37	0-255	Fine indexing
38		Frost 1:
	Î	

	0-255	0-100%
	0 233	Frost 2:
39	0-255	0-100%
	0 233	Blade 1A:
40	0-255	Open to Close
	0 233	Blade 1A Fine :
41	0-255	Open to Close Fine
	0 233	Blade 1B :
42	0-255	Open to Close
	0 233	Blade 1B Fine :
43	0-255	Open to Close Fine
	0 233	Blade 2A:
44	0-255	Open to Close
	0 233	Blade 2A Fine :
45	0-255	Open to Close Fine
	0 233	Blade 2B :
46	0-255	Open to Close
	0 200	Blade 2B Fine :
47	0-255	Open to Close Fine
	0 200	Blade 3A:
48	0-255	Open to Close
	0 200	Blade 3A Fine :
49	0-255	Open to Close Fine
		Blade 3B :
50	0-255	Open to Close
<b>7.</b> 1		Blade 3B Fine :
51	0-255	Open to Close Fine
		Blade 4A:
52	0-255	Open to Close
<b></b>		Blade 4A Fine :
53	0-255	Open to Close Fine
		Blade 4B :
54	0-255	Open to Close
5.5		Blade 4B Fine :
55	0-255	Open to Close Fine
5.0		All Blade Rotation :
56	0-255	All Blade Rotation
57		All Blade Rotation Fine :
31	0-255	All Blade Rotation Fine
		Control, reset, internal programs:
	0-4	unused
	5-9	Display Off
	10-14	Display On
58	15-19	Display Invert Off
36	20-24	Display Invert On
	25-26	Auto fan control mode
	27-28	Stage fan control mode
	29-30	Silence fan control mode
	31-32	Super Silence fan control mode

33-	34	Constant Fans Off
35-	36 (	Constant Fans On
37-	44 t	ınused
45-	49 5	Square Law
50-	54 I	Linear
55-	58 1	1.2K
59-	62 2	2.4K
63-		16K
67-	69 2	25K
70-	74 (	Gobo correction Off
75-	79 (	Gobo correction On
80-		All motor reset
85-	87 S	Scan motor reset
88-	90 (	Colors motor reset
91-	93 (	Gobo motor reset
94		ınused
9:		Head Heater Off
90		Head Heater On
97-		Other motor reset
100-		Internal program 1 (scene1~8 of EEPROM)
120-		Internal program 2 (scene9~16 of EEPROM)
140-		Internal program 3 (scene17~24 of EEPROM)
160-		Internal program 4 (scene25~32 of EEPROM)
180-		Internal program 5 (scene33~40 of EEPROM)
200-		Internal program 6 (scene41~48 of EEPROM)
220-		Internal program 7 (scene49~56 of EEPROM)
240-	255 I	Internal program 8 (scene57~64 of EEPROM)

## 12. 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 6 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 (Optical Sensor or Magnetic Sensor fails) or the stepper motor is defective (or its driving IC on the main PCB). The Zoom - movement is not located in the default position after the reset.

#### Focus wheel Er

(Focus wheel error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (Optical Sensor or Magnetic Sensor fails) 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.

#### 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.

### Cyan Color wheel Er

(Cyan 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 CMY - movement is not located in the default position after the reset.

## Magenta Color wheel Er

(Magenta 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 CMY - movement is not located in the default position after the reset.

## Yellow Color wheel Er

(Yellow 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 CMY - movement is not located in the default position after the reset.

#### CTO wheel Er

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

## Rot Gobol wheel Er

(Rot\_Gobo1 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 Rot\_Gobo1 - movement is not located in the default position after the reset.

## Rot Gobo2 wheel Er

(Rot\_Gobo2 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 Rot\_Gobo2 - movement is not located in the default position after the reset.

### **Animation wheel Er**

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

#### Iris wheel Er

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

### 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 5 wheel Er

(Prism\_5 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\_5 - movement is not located in the default position after the reset.

#### Frost 1 wheel Er

(Frost 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 Frost 1 - movement is not located in the default position after the reset.

## Blade 1 wheel Er

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

### Blade 1 Rot wheel Er

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

#### Blade 2 wheel Er

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

### Blade 2 Rot wheel Er

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

### Blade 3 wheel Er

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

### Blade 3 Rot wheel Er

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

### Blade 4 wheel Er

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

## Blade 4 Rot wheel Er

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

## All Blade Rot wheel Er

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

#### Frost 2 wheel Er

(Frost 2 wheel - error) This message will appear after the reset of the fixture if the head's

magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Frost 2 - movement is not located in the default position after the reset.

# **Animation Rot wheel Er**

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

## 13. CLEANING AND MAINTENANCE



## **CAUTION!**

ALWAYS RUN AN IP TEST USING THE AYRTON IP TEST KIT FOLLOWING ANY MAINTENANCE OPERATION! FAILURE TO COMPLY WITH THIS CLAUSE WILL VOID THE WARRANTY!

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 outside lens each week to avoid loss of output due to accumulation of dust/ dirt on the lens.
- 2) Clean the outside 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

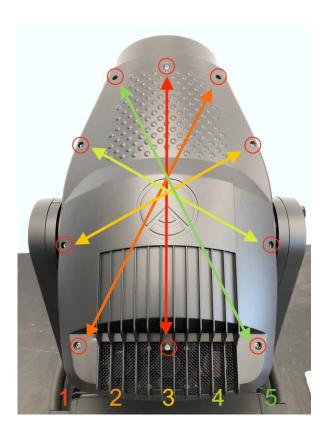
alcohol or solvents.

Please refer to the instructions under "Installation instructions".

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

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

# Head covers opening and closing procedure



Check the cover gasket to avoid any leak due to a crack Please, follow the order (1-5) to cross tightening the HEX screws at the right torque value.

Use a **Torque Screwdriver** set at **1,2Nm** (10,6in/lbf) to fasten correctly the (10) HEX head screws for each cover



Use the Ayrton IP TEST KIT to control the IP rating of the fixture.