



# **User Manual**



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### 1. SAFETY INSTRUCTIONS

### 1.1. IMPORTANT SAFETY WARNINGS

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.
$\triangle$	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
F©	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.

**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.

Under no circumstances should the fixture be pointed at the sun. Sunlight, combined with the high efficiency lenses used in the product can cause significant damage to the fixture.

Be aware that even when lens is not pointed directly at the sun damage may occur. It is best practice to ensure that the lens is pointed away from the sub, preferably in the opposite direction.

Always dry and clean your fixture before storing it for any length of time.

Never use any abrasive cleaning products on the fixture as this may damage the coating of the fixture impacting its anti-corrosion protection.

- 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 in 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.
- 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 5 meter.

**Important:** 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 -10°C to 45°C.Do not use the device outside of this temperature range.
- The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.

**Important:** 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:**

- AC120-240V~, 50/60Hz
- Power Consumption: 1600W

### **LIGHT SOURCE:**

- LED: White LED1050W, 8200±400K Color Temperature
- Extremely long Life: >20,000H

### **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+CTB+CTP color mixing, uniform, linear and speed can be adjustable
- 1 Color wheel: 6 dichroic filters + open, indexable

### GOBOS:

- 2 Rotating gobo wheel: 7 interchangeable, rotating and indexable gobo + open
- "Slot in & out"gobo wheel system

### **FEATURES:**

- 3 Control channel modes: 46/44/70 channels
- 2 Operation modes: DMX-512, Master / Slave mode
- Strobe effect with 1-25 flashes per second and pulse effect
- 2 Rotating Prisms: 5-facet circular and Linear Prism
- 2 Animation effect: can make special dynamic effect
- Focus: Motorized focus
- Blade System
- Frost: 0%~100% linear change frost
- Iris: 5%~100% linear change iris, pulse iris effect
- Dimmer: 0%~100% full range dimming

### **DISPLAY:**

- Advanced and convenient full-color LCD
- Can be changed 180° reverse to fit for different installation position

### SOFTWARE:

- Upgrades: fast and convenient through DMX cable with DMX-512 controller
- Reset DMX address, reset can all be done by the DMX controller
- Running time of fixture on display for reference

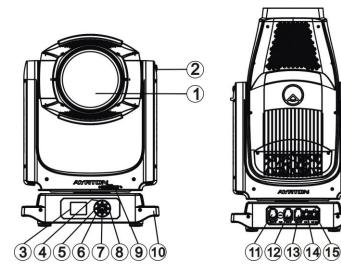
### **OTHER SPEC:**

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

### **WEIGHT**

Net weight: 60 kg

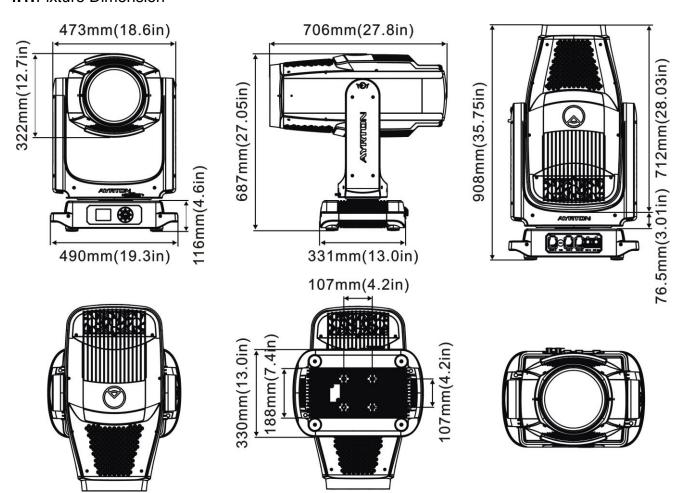
# 3. FIXTURE OVERVIEW



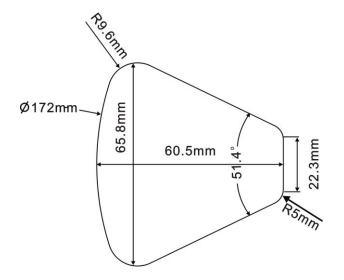
- 1) Lens
- 2) Tilt Lock
- 3) Display
- 4) Up-button
- 5) Left-button
- 6) Center-button
- 7) Down-button
- 8) Right-button
- 9) Pan Lock
- 10) Handle
- 11) Power In 12) RJ45 In
- 13) RJ45 Out
- 14) DMX In
- 15) DMX Out

# 4. DRAWINGS

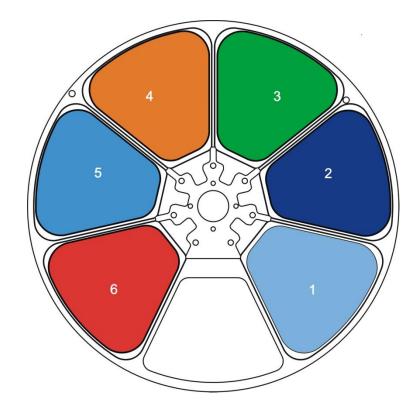
# 4.1. Fixture Dimension



# 4.2. Color Filter Dimension

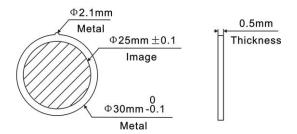


- 1. CTB1/4 (6.03.05.03.2864)
- 2. Congo Blue (6.03.05.03.2855)
- 3. Green (6.03.05.03.2856)
- 4. Orange (6.03.05.03.2857)
- 5. Blue (6.03.05.03.2858)
- 6. Red (6.03.05.03.2859)



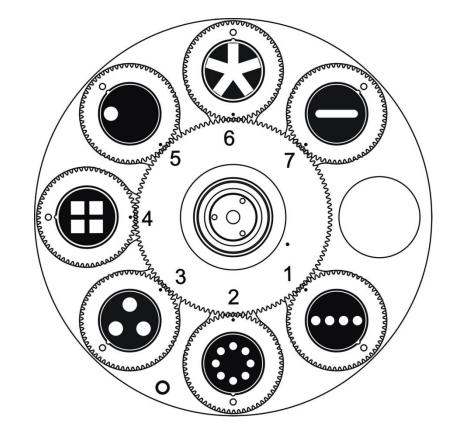
# 4.3. Gobo Filter Dimension

### Metal Gobo:



# **Rotating Gobo 1:**

- 1. 314 Dot Line 4 (6.03.03.05.1968)
- 2. 322 Dot Ring 8 (6.03.03.05.1969)
- 3. 326 Dot Triangle 3 (6.03.03.05.2026)
- 4. 332 Square Beam 4 (6.03.03.05.1967)
- 5. 310 Eccentric Dot (6.03.03.05.1970)
- 6. 342 Five Spokes (6.03.03.05.2019)
- 7. 347 Beam Shaper (6.03.03.05.2020)



# Black & White Gobo:

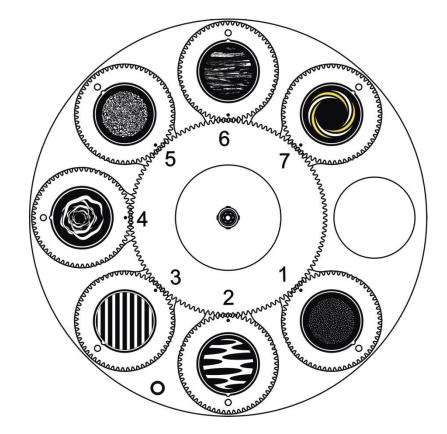
Glass

# Φ25mm±0.15 Image Thickness Φ30mm -0.2 1.1mm Φ25mm±0.15 Image Thickness

Color Gobo:

# **Rotating Gobo 2:**

- 1. 074 Star Dust (6.03.03.01.1172-A)
- 2. 077 Water (6.03.03.01.1575-0)
- 3. 275 Prison Bars (6.03.03.01.1576-0)
- 4. 049 Smoke Rings (6.03.03.01.1177-A)
- 5. 101 Deep Forest (6.03.03.01.1182-0)
- 6. 105 Tree Bark (6.03.03.01.1183-A)
- 7. 112Y Nested Ring Yellow (6.03.03.06.0124)

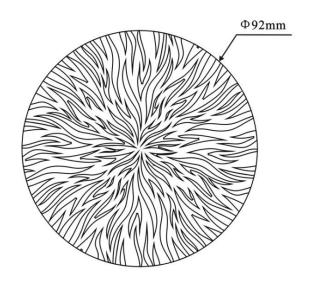


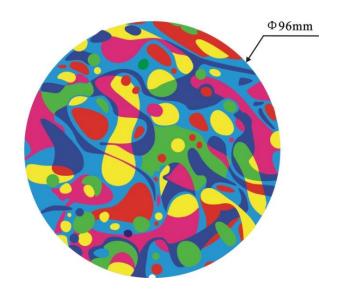
Glass

### 4.4. Animation Dimension

### Black & White Animation:

### Color Animation:





### 5. INSTALLATION INSTRUCTIONS

# 5.1. Rigging the device



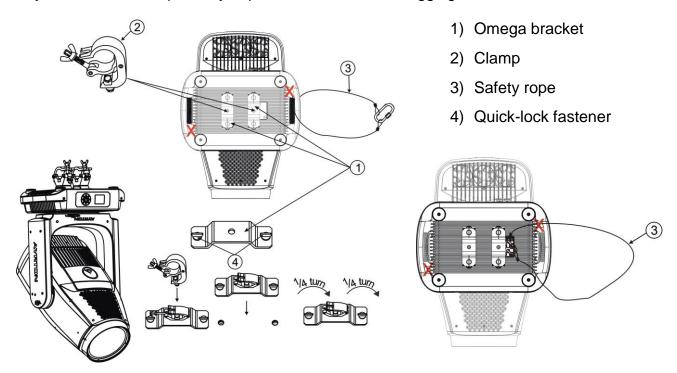
### **CAUTION!**

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

- 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

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

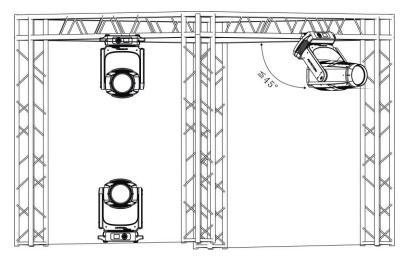


- Fix the clamp to the bracket by tightening the M12 nut and bolt to the bracket through the Φ13 hole in the middle of the bracket.
- Insert the quick-lock fasteners of the first Omega holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise.
- Install 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.

### 5.3. RIGGING DRAWINGS

### **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.

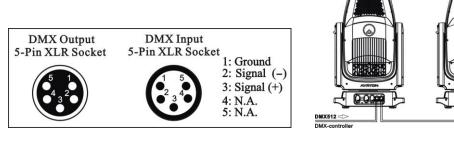


- Be sure this fixture is kept at least 0.1m away from any flammable materials (decoration etc.).
- Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

- Warnings! Please DO NOT let other external intense lights to shine through the fixture front lens, it may cause significant internal damages!
- When install fixture outdoor at day time (with power off), please make sure that the fixture front lens is NOT facing the sun.
- When use fixture outdoor at day time (with power on), please advoid fixture front lens facing the sun.
- When fixture is on standby outdoor at day time (with power on), please make sure the "sun protection" mode is ON (default).

### 6. DMX-512 CONTROL CONNECTION

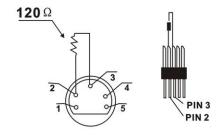
Connect the provided male side of the XLR cable to the female XLR output of your controller and the female side of the XLR cable to the male XLR input of the device. You can connect multiple devices together in a serial fashion. The cable needed should be two core, screened cable with XLR input and output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



Address 1 Address 47 Address 93

### 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 46 channel mode, you should set the starting address of the first unit to 1, the second unit to 47 (46 + 1), the third unit to 93 (46 + 47), 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 then 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, O -button, O -button or O -
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

Delaut Settings shaded					
Address	Address DMX address:001-XXX :		DMX address setting		
Mode	User Mode	Stand Mode Basic Mode Extend Mode Domino Mode User Mode A User Mode B	User's mode to change channel numbers		

		User Mode C		
	Edit User ModeA	Max channel PAN :		Preset User modes A,B,C
	Status	No DMX Mode Sun Protection Pan Reverse Tilt Reverse Pan Degree Feedback Init PAN Init TILT Prerig INIT Reset Mode Pan/Tilt Spd  CMY Spd Zoom/Focus Spd Hibernation DMX Output	Close/Hold/Auto ON/OFF ON/OFF ON/OFF 630/540 ON/OFF ON/OFF ON/OFF ON/OFF Fast /All Rot Gobos Medium/Fast/Slow/F S Mode Fast/ Medium/Slow Fast/Medium/Slow 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 Prerig INIT Reset Mode Movement Speed CMY Spd Zoom/Focus Speed Stand by Mode DMX Output
Options	Service PIN	Service PIN Set Ip Set Mask Ip DHCP Cross Load SW CIr LED Time CIr Error Info	Password=XXX xxx.xxx.xxx xxx.xxx.xxx ON/OFF ON/OFF ON/OFF ON/OFF	Service Password"=050" Set Ip Set Mask Ip DHCP Cross Load SW Clr LED Time Clr Error Info
dO	Fans Control	Fans Dpeed	Auto Stage Silence Super Silence	Fans Speed select
		Constant Fans	ON/OFF	Constant Fans
	Disp.Setting	Shutoff Time Flip Display Key Lock DispFlash	02~60m 05m ON/OFF ON/OFF ON/OFF	Display shutoff time Reverse 180 degree Key Lock DispFlash
	Signal Select	DMX WDMX Art-Net sACN		DMX WDMX Art-Net sACN
	Temp. C/F	Celsius Fahrenheit		Temperature switch between °C/°F
	Initial Pos.	PAN =XXX		Initial effect position
	Wireless	Activate WDMX Rest WDMX		Activate 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	
	Reset P/T Fade	ON/OFF		Reset P/T Fade
	Frost (Progressive)	ON/OFF		Frost (Progressive)
	Trigger	DMXValue Disp. Set To Slave Auto Program	PAN Slave1,Slave2,Slave3 Master / Alone	DMX Value Disp. Set To Slave Auto Program
	ResetDefault	ON/OFF		Restore factory set.
		Address	DMX address:001-XXX :	DMX address setting
	Reset User	Mode	Stand Mode Basic Mode Extend Mode User Mode A User Mode B User Mode C	User's mode to change channel numbers
		Fans Speed	Auto Stage Silence Super Silence	Fans Speed select
		Constant Fans	ON/OFF	Constant Fans
	Time Info.	Current Time Ttl Life Hrs Last Run Hrs LED Hours Timer PIN Clr Last Run		XXXX(Hours) XXXX(Hours) XXXX(Hours) XXXX(Hours) Password=XXX ON/OFF
Info	Temp. Info	Head Temp.		XXX°C/°F
<u> </u>	Humidity	x%		Humidity
	Fan Info.	xxxxRPM		Fan information
	Software Ver	V1.0		Software version
	Network	IP,Mask,Mac		Network
	Error Info.	Error Record 1 :		Error Info.

	Home	All Pan&Tilt Color Gobo Other	Reset All Reset Pan&Tilt Reset Color Reset Gobo Reset Others	
	Test Channel	PAN	Test function	
Test	Manual Ctrl.	PAN =XXX :	Fine adjustment of the lamp	
	Calibration	-Password- PAN :		Password "050" Calbrate and adjust the effects to standard/right position
	Gobo	Gobo Wheel 1		Gobo Wheel 1
	Replace	Gobo Wheel 2		Gobo Wheel 2
	Select Prog.	Prog. Part 1 = Program 1 ~ 10Program 1 Prog. Part 2 = Program 1 ~ 10Program 2 Prog. Part 3 = Program 1 ~ 10Program 3		Select programs to be run
Preset	Edit Prog.	Program 1: Program 10	Program Test Step 01=SCxxx Step 64=SCxxx	Testing program Program in loop Save and exit
- Ā	Edit Scene 001  - Edit Scene 250		Pan,Tilt,Fade TimeSecne Time Input By Outside	Save and automatically return manual scenes edit
	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", "Domino 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.

### **Prerig INIT**

- 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 "Prerig INIT".
- 5. Double clicking center button to access "Prerig INIT", 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.

### **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 "Medium", Tap the <Up/Down> button to select "Medium", "Fast", "Slow", "FS Mode".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

### CMY Spd

- 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 "CMY Spd".
- 5. Double clicking center button to access "CMY Spd", The display will show "Slow", Tap the <Up/Down> button to select "Fast", "Medium", "Slow".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

# Zoom/Focus Spd

With this function, you can select Zoom/Focus from 1 to 3.

- 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 "Zoom/Focus Spd".
- 5. Double clicking center button to access "Zoom/Focus Spd", The display will show "Fast", Tap the <Up/Down> button to select "Fast", "Medium", "Slow".
- 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.

### **DMX Output**

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 "DMX Output".
- 5. Double clicking center button to access "DMX Output", 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.

### Set Mask 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 Mask IP".
- 5. Double clicking center button to access "Set Mask 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.

### DHCP

- 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 "DHCP".
- 5. Double clicking center button to access "DHCP", 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.

### **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.

### **CIr 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.

### **CIr Error Info**

- 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 "CIr Error Info".
- 5. Double clicking center button to access "Clr Error Info", 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 and Studio.

- 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", 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 <Up/Down> button to select "02~60m".
- 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 3 seconds 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 <Up/Down> 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 "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", "25K".
- 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. Reset P/T Fade

- 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 P/T Fade".
- 4. Double clicking center button to access "Reset P/T Fade", 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.

# 10.3.13. Frost (Progressive)

- 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 "Frost (Progressive)".
- 4. Double clicking center button to access "Frost (Progressive)", 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.

### 10.3.14. 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.

### 10.3.15. 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.

### 10.3.16. Reset User

### Address

- 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 User".
- 4. Double clicking center button to access "Reset User" menu, Tap the <Up/Down>button to select "Address".
- 5. Double clicking center button to access "Address", The display will show "001~XXX".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

### 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 "Reset User".
- 4. Double clicking center button to access "Reset User" menu, Tap the <Up/Down>button to select "Mode".
- 5. Double clicking center button to access "Mode", The display will show "Extend Mode". Tap the <Up/Down> button to select "Basic mode", "Stand Mode", "User Mode A", "User Mode B" and "User Mode C".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

# **Fans Speed**

- 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 User".
- 4. Double clicking center button to access "Reset User" menu, Tap the <Up/Down>button to select "Fans Speed".
- 5. Double clicking center button to access "Fans Speed", 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 "Reset User".
- 4. Double clicking center button to access "Reset User" 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.

### 10.4. 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.
- 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 °C/ °F".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

# 10.4.3. **Humidity**

- 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 "Humidity".
- 4. Double clicking center button to access "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 "V1.0......".
- 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.

### 10.4.7. Error Info

- 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 "Error Info".
- 4. Double clicking center button to access "Error Info", The display will show "Error Record 1", ".....".
- 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.

# 10.5.5. Gobo Replace

- 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 "Gobo Replace".
- 4. Double clicking center button to access "Gobo Replace", The display will show "Gobo Wheel 1", "Gobo Wheel 2".
- 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.



- 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)

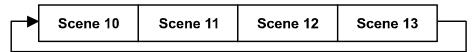
- 5. Enter the menu of 8-2 Edit Program---Edit Program. Edit the program's connection, connect the scene in order
- 6. The editor of the scene, there are as many as 250 scenario editors, and every scene can have a program connection of 10.

### Note:

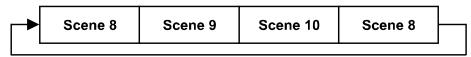
Part 2, Part 3 repeat in accordance with the Part1's repeat. For example: When Part 1 uses Program 2, Part 2 uses Program 4, Part 3 uses Program 6, Assume: Program 2 includes scene of 10, 11, 12, 13; Program 4 includes scene of 8, 9, 10; Program 6 includes scene of 12, 13, 14, 15; Then it will run as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

# Example:

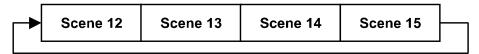
### Part 1:



### Part 2:



### Part 3:



# 11. DMX PROTOCOL

	DMX channel's functions and their values (70DMX channels):  Mode/Channel Value Function						
			Value	Function			
St	Ва	Ex					
1	1	1		PAN Movement 8bit :			
•	-		0-255	Pan Movement			
2		2		Pan Fine 16bit			
			0-255	Fine control of Pan movement			
3	2	3		TILT Movement 8bit :			
<u> </u>		3	0-255	Tilt Movement			
4		4		Tilt Fine 16bit			
7		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			
				Shutter, strobe:			
			0-10	Shutter closed			
			11-20	No function (shutter open)			
	4		21-117	Strobe effect slow to fast			
6		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)			
	_	_		Dimmer intensity:			
7	5	7	0-255	Intensity 0 to 100%			
		_		Fine Dimmer intensity:			
		8	0-255	Dimmer intensity fine			
	_	_		Zoom :			
8	6	9	0-255	Zoom adjustment from small to big			
				Zoom Fine:			
		10	0-255	Zoom adjustment Fine			
				Focus:			
9	7	11	0-255	Continuous adjustment from near to far			
			0 200	Focus Fine:			
		12	0-255	Continuous adjustment Fine			
				Auto Focus :			
	8		0-50	Auto Focus Off			
10		13	51-100	5m			
10			101-150	7.5m			
						151-200	10m
			131-200	TUIII			

			201-255	15m
4.4	0	4.4		AutoFocus Fine:
11	9	14	0-255	Continuous adjustment Fine
				Color Wheel:
			0-3	Open / white
			4-7	Color 1
			8-11	Color 2
			12-15	Color 3
40	40	4.5	16-19	Color 4
12	10	15	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
		16		Color Wheel Fine:
		10	0-255	Color Wheel colour change to any position Fine
13	11	17		Cyan Color :
13	1 1	17	0-255	Cyan (0-white, 255-100% Cyan)
		18		Cyan Color Fine :
		10	0-255	Cyan Fine
14	12	19		Magenta Color :
14			0-255	Magenta (0-white, 255-100% magenta)
		20		Magenta Color Fine :
		20	0-255	Magenta Fine
15	13	13 21		Yellow Color :
	10		0-255	Yellow (0-white, 255-100% Yellow)
		22		Yellow Color Fine :
			0-255	Yellow Fine
16	6 14	23		CTO Color :
			0-255	CTO (0-white, 255-100% CTO)
		24		CTO Color Fine :
			0-255	CTO Fine
17	15	25		CTB Color :
	'0		0-255	CTB (0-white, 255-100% CTO)
		26		CTB Color Fine :
		20	0-255	CTB Fine
18	16	27	0.27-	CTP Color:
			0-255	CTP (0-white, 255-100% CTO)
		28	0.055	CTP Color Fine :
			0-255	CTP Fine
19		29	0.055	Color Presets:
				0-255
20	18	30		Reserved

21	19	31		Reserved
22	20	32		Reserved
				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
23	21	33	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
	22			Rotating gobo index,rotating gobo rotation 1:
		34	0-127	Gobo indexing
24			128-189	Forwards gobo rotation from fast to slow
			190-193	No rotation
			194-255	Backwards gobo rotation from slow to fast
		35		Rotating gobo indexing Fine 1:
			0-255	Fine indexing
				Rotating gobos, cont. rotation 2:
			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
25	23	36	60-69	Rot. gobo 6
	20		70-77	Rot. Gobo 7
			78-93	Gobo 1 shake slow to fast
			94-109	Gobo 2 shake slow to fast
			110-125	Gobo 3 shake slow to fast
			126-141	Gobo 4 shake slow to fast
			142-157	Gobo 5 shake slow to fast
			158-173	Gobo 6 shake slow to fast
			174-189	Gobo 7 shake slow to fast

			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
				Rotating gobo index,rotating gobo rotation 2:
			0-127	Gobo indexing
26	24	37	128-189	Forwards gobo rotation from fast to slow
			190-193	No rotation
			194-255	Backwards gobo rotation from slow to fast
				Rotating gobo indexing Fine 2:
		38	0-255	Fine indexing
				Animation wheel 1:
			0-7	No rotation
27	25	39	8-127	Forwards rotation from fast to slow
			128-135	No rotation
			136-255	Backwards rotation from slow to fast
20	2	40		Animation wheel 2:
28	26	40	0-255	Animation indexing
				Rotating Animation wheel 2:
			0-7	No rotation
29	27	41	8-127	Forwards rotation from fast to slow
		•	128-135	No rotation
			136-255	Backwards rotation from slow to fast
				<u>Iris:</u>
30	28	42	0-191	Max. diameter to Min.diameter
30	20		192-223	Pulse closing fast to slow
			224-255	Pulse opening slow to fast
		43		<u>Iris Fine:</u>
		75	0-255	Iris Fine
				Prism 1:
31	29	44	0-127	Open
			128-255	Prism 1
				Rotating prism index, rotating prism rotation 1
			0-127	Prism indexing
32	30	45	128-189	Forwards prism rotation from fast to slow
			190-193	No rotation
			194-255	Backwards prism rotation from slow to fast
		46		Rotating prism indexing Fine 1:
			0-255	Fine indexing
				Prism 2:
33	31	47	0-127	Open
			128-255	Prism 2
_				Rotating prism index, rotating prism rotation 2
34	32	48	0-127	Prism indexing
			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:
		49	0-255	Fine indexing
35	33	50		Frost 1:
33	33	50	0-255	0-100%
36	34	51		Frost 2:
30	34	31	0-255	0-100%
37	35	52		Blade 1A:
31	33	32	0-255	Open to Close
		53		Blade 1A Fine :
		00	0-255	Open to Close Fine
38	36	54		Blade 1B :
	00	0.	0-255	Open to Close
		55		Blade 1B Fine :
			0-255	Open to Close Fine
39	37	56		Blade 2A :
	<u> </u>		0-255	Open to Close
		57		Blade 2A Fine :
			0-255	Open to Close Fine
40	38	58		Blade 2B:
			0-255	Open to Close
		59	0.055	Blade 2B Fine :
			0-255	Open to Close Fine
41	39	60	0.055	Blade 3A:
			0-255	Open to Close
		61	0.255	Blade 3A Fine :
			0-255	Open to Close Fine
42	40	62	0-255	Blade 3B:
			0-255	Open to Close
		63	0-255	Blade 3B Fine : Open to Close Fine
			0-233	Blade 4A:
43	41	64	0-255	Open to Close
			0-233	Blade 4A Fine :
		65	0-255	Open to Close Fine
			0 200	Blade 4B:
44	42	66	0-255	Open to Close
			0 200	Blade 4B Fine :
		67	0-255	Open to Close Fine
			0 200	All Blade Rotation :
45	43	68	0-255	All Blade Rotation
			0 200	All Blade Rotation Fine :
		69	0-255	All Blade Rotation Fine
			0-200	All Diago Notation Fills

				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			
		29-30 31-32 33-34		Silence fan control mode			
				Super Silence fan control mode			
				Constant Fans Off			
			35-36	Constant Fans On			
			37-44	unused			
			45-49	Square Law			
			50-54	Linear			
			55-58	1.2K			
	59-62 63-66 67-69 70-74		59-62	2.4K			
			63-66	16K			
			67-69	25K			
			70-74	Gobo correction Off			
46	44	70	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	Reset P/T Fade Off			
			96	Reset P/T Fade On			
			97-99	Other motor reset			
			100-102	Frost Progressive Off			
			103-105	Frost Progressive On			
			106-108	CMY speed Fast			
			109-111	CMY speed Medium			
			112-114	CMY speed Slow			
			115-117	Pan/Tilt Spd Medium			
			118-120	Pan/Tilt Spd Fast			
			121-123	Pan/Tilt Spd Slow			
			124-126	Pan/Tilt Spd FS Mode			
			127-129	Prerig INIT Off			
			130-132	Prerig INIT On			
			133-255	unused			

Mode/Channel	Value	Function				
Domino Mode						
4		PAN Movement 8bit :				
1	0-255	Pan Movement				
2		Pan Fine 16bit				
2	0-255	Fine control of Pan movement				
3		TILT Movement 8bit :				
S	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				
10		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:				
15	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				
		Color Wheel:				
	0-3	Open / white				
	4-7	Color 1				
	8-11	Color 2				
	12-15	Color 3				
	16-19	Color 4				
18	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				
40		Color Wheel Fine:				
19	0-255	Color Wheel colour change to any position Fine				
		CTB/CRI:				
20	0-63	Open				
20	64-127	СТВ				
	128-255	unused				
04		Cyan Color :				
21	0-255	Cyan (0-white, 255-100% Cyan)				
22		Cyan Color Fine :				
22	0-255	Cyan Fine				
23		Magenta Color :				
23	0-255	Magenta (0-white, 255-100% magenta)				
24		Magenta Color Fine :				
24	0-255	Magenta Fine				
25		Yellow Color :				
25	0-255	Yellow (0-white, 255-100% Yellow)				
26		Yellow Color Fine :				
20	0-255	Yellow Fine				
27		CTO Color :				
21	0-255	CTO (0-white, 255-100% CTO)				
28		CTO Color Fine :				
20	0-255	CTO Fine				
9 Reserved		Reserved				
10	10 Reserved					
11		Reserved				
		Rotating gobos, cont. rotation 1:				
	0-9	Open				
29	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			
	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			
		Rotating gobo index,rotating gobo rotation 1:			
	0-127	Gobo indexing			
30	128-189	Forwards gobo rotation from fast to slow			
	190-193	No rotation			
	194-255	Backwards gobo rotation from slow to fast			
31		Rotating gobo indexing Fine 1:			
31	0-255	Fine indexing			
		Rotating gobos, cont. rotation 2:			
	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			
32	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			
		Rotating gobo index,rotating gobo rotation 2:			
33	0-127	Gobo indexing			

	190-193	No rotation				
	194-255	Backwards gobo rotation from slow to fast				
24		Rotating gobo indexing Fine 2:				
34	0-255	Fine indexing				
		Animation wheel 1:				
35	0	open				
33	1-239	Animation indexing				
	240-255	shake slow to fast				
		Animation wheel 1:				
	0-7	No rotation				
36	8-127	Forwards rotation from fast to slow				
	128-135	No rotation				
	136-255	Backwards rotation from slow to fast				
		Animation wheel 2:				
	0-7	open				
37	8-127	Forwards rotation from fast to slow				
	128-135	No rotation				
	136-255	Backwards rotation from slow to fast				
		Iris:				
20	0-191	Max. diameter to Min.diameter				
38	192-223	Pulse closing fast to slow				
	224-255	Pulse opening slow to fast				
20		Iris Fine:				
39	0-255	Iris Fine				
		Prism 1:				
40	0-127	Open				
	128-255	5-Facet Prism				
		Rotating prism index, rotating prism rotation 1				
	0-127	Prism indexing				
41	128-189	Forwards prism rotation from fast to slow				
	190-193	No rotation				
	194-255	Backwards prism rotation from slow to fast				
42		Rotating prism indexing Fine 1:				
42	0-255	Fine indexing				
		Prism 2:				
43	0-127	Open				
	128-255	Linear Prism				
		Rotating prism index, rotating prism rotation 2				
	0-127	Prism indexing				
44	128-189	Forwards prism rotation from fast to slow				
	190-193	No rotation				
1	194-255	Backwards prism rotation from slow to fast				
45		Rotating prism indexing Fine 2:				

	0-255	Fine indexing				
40		Frost 1:				
46	0-255	0-100%				
47		Frost 2:				
47	0-255	0-100%				
40		Blade 1A:				
48	0-255	Open to Close				
49		Blade 1A Fine :				
49	0-255	Open to Close Fine				
50		Blade 1B:				
50	0-255	Open to Close				
51		Blade 1B Fine :				
31	0-255	Open to Close Fine				
52		Blade 2A:				
32	0-255	Open to Close				
53		Blade 2A Fine :				
33	0-255	Open to Close Fine				
54		Blade 2B:				
34	0-255	Open to Close				
55		Blade 2B Fine :				
33	0-255	Open to Close Fine				
56		Blade 3A:				
30	0-255	Open to Close				
57		Blade 3A Fine :				
37	0-255	Open to Close Fine				
58		Blade 3B:				
30	0-255	Open to Close				
59		Blade 3B Fine :				
	0-255	Open to Close Fine				
60		Blade 4A:				
	0-255	Open to Close				
61		Blade 4A Fine :				
	0-255	Open to Close Fine				
62		Blade 4B:				
	0-255	Open to Close				
63		Blade 4B Fine :				
	0-255	Open to Close Fine				
64		All Blade Rotation :				
<u> </u>	0-255	All Blade Rotation				
65		All Blade Rotation Fine :				
	0-255	All Blade Rotation Fine				
66		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
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
55-57	1.2K
58-60	2.4K
61-63	16K
64-69	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	Reset P/T Fade Off
96	Reset P/T Fade On
97-99	Other motor reset
100-102	Frost Progressive Off
103-105	Frost Progressive On
106-108	CMY speed Fast
109-111	CMY speed Medium
112-114	CMY speed Slow
115-117	Pan/Tilt Spd Medium
118-120	Pan/Tilt Spd Fast
121-123	Pan/Tilt Spd Slow
124-126	Pan/Tilt Spd FS Mode
127-129	Prerig INIT Off
130-132	Prerig INIT On
133-255	unused

Appendix:				
name				
(=DMX	color name			
value)				
EC003	LAVENDER TINT			
EC004	MEDIUM BASTARD AMBER			
EC007	PALE YELLOW			
EC008	DARK SALMON			
EC009	PALE AMBER GOLD			
EC010	MEDIUM YELLOW			
EC013	STRAW TINT			
EC015	DEEP STRAW			
EC017	SURPRISE PEACH			
EC020	MEDIUM AMBER			
EC021	GOLD AMBER			
EC022	DARK AMBER			
EC024	SCARLET			
EC025	SUNSET RED			
EC026	BRIGHT RED			
EC029	PALSA RED			
EC035	LIGHT PINK			
EC036	MEDIUM PINK			
EC046	DARK MAGENTA			
EC048	DARK PURPLE			
EC052	LIGHT LAVENDER			
EC053	PALE LAVENDER			
EC058	LAVENDER			
EC063	PALE BLUE			
EC068	SKY BLUE			
EC071	TOKIO BLUE			
EC075	EVENING BLUE			
EC079	JUST BLUE			
EC085	DEEPER BLUE			
EC088	LIME GREEN			
EC089	MOSS GREEN			
EC090	DARKYELLOW GREEN			
EC100	SPRING YELLOW			
EC101	YELLOW			
EC102	LIGHT AMBER			
EC103	STRAW			
EC104	DEEP AMBER			
EC105	ORANGE			
EC106	PRIMAY RED			
EC107	LIGHT ROSE			
EC108	ENGLISH ROSE			
EC109	LIGHT SALMON			
EC110	MIDDLE ROSE			
EC111	DARK PINK			
EC113	MAGENTA			
EC116	MEDIUM BLUE GREEN			

EC119 DARK BLUE EC120 DEEP BLUE EC124 DARK GREEN EC126 MAUVE EC127 SMOKEY PINK EC128 BRIGHT PINK EC132 MEDIUM BLUE EC134 GOLDEN AMBER EC136 PALE LAVENDER EC137 SPECIAL LAVENDER EC138 PALE GREEN EC139 PRIMARY GREEN EC140 SUMMER BLUE EC141 BRIGHT BLUE EC142 PALE VIOLET	
EC120 DEEP BLUE EC124 DARK GREEN EC126 MAUVE EC127 SMOKEY PINK EC128 BRIGHT PINK EC132 MEDIUM BLUE EC134 GOLDEN AMBER EC136 PALE LAVENDER EC137 SPECIAL LAVENDER EC138 PALE GREEN EC139 PRIMARY GREEN EC140 SUMMER BLUE EC141 BRIGHT BLUE	
EC124 DARK GREEN EC126 MAUVE EC127 SMOKEY PINK EC128 BRIGHT PINK EC132 MEDIUM BLUE EC134 GOLDEN AMBER EC136 PALE LAVENDER EC137 SPECIAL LAVENDER EC138 PALE GREEN EC139 PRIMARY GREEN EC140 SUMMER BLUE EC141 BRIGHT BLUE	
EC126 MAUVE EC127 SMOKEY PINK EC128 BRIGHT PINK EC132 MEDIUM BLUE EC134 GOLDEN AMBER EC136 PALE LAVENDER EC137 SPECIAL LAVENDER EC138 PALE GREEN EC139 PRIMARY GREEN EC140 SUMMER BLUE EC141 BRIGHT BLUE	
EC127 SMOKEY PINK EC128 BRIGHT PINK EC132 MEDIUM BLUE EC134 GOLDEN AMBER EC136 PALE LAVENDER EC137 SPECIAL LAVENDER EC138 PALE GREEN EC139 PRIMARY GREEN EC140 SUMMER BLUE EC141 BRIGHT BLUE	
EC128 BRIGHT PINK  EC132 MEDIUM BLUE  EC134 GOLDEN AMBER  EC136 PALE LAVENDER  EC137 SPECIAL LAVENDER  EC138 PALE GREEN  EC139 PRIMARY GREEN  EC140 SUMMER BLUE  EC141 BRIGHT BLUE	
EC132 MEDIUM BLUE EC134 GOLDEN AMBER EC136 PALE LAVENDER EC137 SPECIAL LAVENDER EC138 PALE GREEN EC139 PRIMARY GREEN EC140 SUMMER BLUE EC141 BRIGHT BLUE	
EC134 GOLDEN AMBER EC136 PALE LAVENDER EC137 SPECIAL LAVENDER EC138 PALE GREEN EC139 PRIMARY GREEN EC140 SUMMER BLUE EC141 BRIGHT BLUE	
EC136 PALE LAVENDER EC137 SPECIAL LAVENDER EC138 PALE GREEN EC139 PRIMARY GREEN EC140 SUMMER BLUE EC141 BRIGHT BLUE	
EC137 SPECIAL LAVENDER EC138 PALE GREEN EC139 PRIMARY GREEN EC140 SUMMER BLUE EC141 BRIGHT BLUE	
EC139 PRIMARY GREEN EC140 SUMMER BLUE EC141 BRIGHT BLUE	
EC140 SUMMER BLUE EC141 BRIGHT BLUE	
EC141 BRIGHT BLUE	
EC142 PALE VIOLET	
EC143 PALE NAVY BLUE	
EC147 APRICOT	
EC148 BRIGHT ROSE	
EC151 GOLD TINT	
EC152 PALE GOLD	
EC153 PALE SALMON	
EC154 PALE ROSE	
EC156 CHOCOLATE	
EC158 DEEP ORANGE	
EC159 NO COLOR STRAW	
EC161 SLATE BLUE	
EC162 BASTARD AMBER	
EC164 FLAME RED	
EC165 DAYLIGHT BLUE	
EC169 LILAC TINT	
EC170 DEEP LAVENDER	
EC172 LAGOON BLUE	
EC174 DARK STEEL BLUE	
EC176 LOVING AMBER	
EC179 CHROME ORANGE	
EC180 DARK LAVENDER	
EC181 CONGO BLUE	
EC182 LIGHT RED	
EC183 MOONLIGHT BLUE	
EC192 FLESH PINK	
EC193 ROSY AMBER	
EC194 SURPRISE PINK	
EC195 ZENITH BLUE	
EC196 TRUE BLUE	
EC197 ALICE BLUE	
EC198 PALACE BLUE	

## 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 1 wheel Er

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

## Focus 2 wheel Er

(Focus 2 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 2 - 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 Gobo1 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 1 wheel Er**

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

## **Animation 2 wheel Er**

(Animation 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 Animation 2 - movement is not located in the default position after the reset.

## Iris wheel Er

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

# 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.

## Prism Linear wheel Er

(Prism\_ Linear 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\_ Linear - 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 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.

## 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 1 wheel Er

(Animation\_Rot 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 Animation\_Rot 1 - movement is not located in the default position after the reset.

# Animation Rot 2 wheel Er

(Animation\_Rot 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 Animation\_Rot 2 - movement is not located in the default position after the reset.

## 13. CLEANING AND MAINTENANCE



## **CAUTION!**

DISCONNECT FROM MAINS BEFORE STARTING MAINTENANCE OPERATION.

## **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 OPERATOR MUST FOLLOW STRICTLY THE VACUUM AND PRESSURE SETTING VALUES AS BELOW, OR USE THE CORRESPONDING PRESET FIXTURE MENU TO RUN THE IP TEST. ANY OVERPRESSURE OPERATION MAY CAUSE ACCIDENTAL DAMAGE OR INJURY.



AYRTON IP TEST KIT

	Minimum value		Maximum value		Steady time (Hold time)
	Kpa	Psi	Kpa	Psi	S
Vacuum	-35	-5.08	-40	5.80	10
Pressure	25	3.63	30	4.35	10

Once the covers removed and before set them back, check the cover gasket to avoid any leak due to gasket damage.

Cross tightening the die-casting covers HEX screws at the right torque value.

Use a Torque Screwdriver set at 14Kgf.cm for metal cover or 7Kgf.cm for plastic cover.

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.

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 fans each week to ensure maximum airflow and efficient thermal cooling. This will ensure the light source is operated in the best possible condition.
- 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.



