

User Manual



CONTENTS

1.	SAFETY INSTRUCTIONS	1
2.	FEATURES	3
3.	FIXTURE OVERVIEW	4
4.	DRAWINGS	5
5.	INSTALLATION INSTRUCTIONS	8
6.	DMX-512 CONTROL CONNECTION	10
7.	DMX-512 CONNECTION WITH DMX TERMINATOR	10
8.	DEVICE DMX START ADDRESS SELECTION	10
9.	OPERTING INSTRUCTIONS OF THE INTERNAL DMX WIRELESS SYSTEM	11
10.	DISPLAY	12
11.	DMX PROTOCOL	32
12.	ERROR MESSAGES	41
12	CLEANING AND MAINTENANCE	13



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.

The light source of this product is made of laser diodes. It complies with the related safety standard and classified as:

Class 1 Laser product (IEC 60825-1:2014)

equipment.

RG3 (IEC 62471:2006)

Laser projectors shall not be delivered to any other party under an agreement of sale, lease or loan unless and until the recipient demonstrates that they have a variance in effect at the time of delivery that permits them to produce laser light shows incorporating such projector(s).

No direct exposure to the beam shall be permitted.

Operators shall control access to the beam within the hazard distance or install the product at a height that will prevent eye exposure within the hazard distance.

	RISK GROUP 3
	WARNING: POSSIBLY HAZARDOUS OPTICAL RADIATION EMITTED FROM
*	THIS PRODUCT, DO NOT LOOK AT OPERATING LAMP SOURCE.
	EYE INJURY MAY RESULT.
^	CAUTION!
4	HIGH VOLTAGE. RISK OF SEVERE OR FATAL ELECTRIC SHOCK.
	CAUTION!
	ALWAYS DISCONNECT MAINS SUPPLY BEFORE REMOVING ANY FIXTURE
	COVERS.
^	CAUTION!
	NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE.
	SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK.
^	CAUTION!
	NEVER TOUCH THE DEVICE DURING OPERATION.
<u></u>	COVERS MAY BE HOT
^	CAUTION!
	THE LUMINAIRE SHOULD BE POSITIONED SO THAT PROLONGED
/ Ø 🔻	STARING INTO THE LUMINAIRE AT A DISTANCE CLOSER THAN 58.3 M IS
	NOT EXPECTED
	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

1

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 powerCON 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:
 Min. 25.0 m distance to the illuminated surface (narrowest zoom with full power)
 - Min. 15.0 m distance to the illuminated surface (narrowest zoom with 78% intensity)
 - Min. 8.0 m distance to the illuminated surface (narrowest zoom with 51% intensity)
- According to IEC 62471-5, the distance from RG3 to RG1 is 45 meters.

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 outdoor use.

- Scanning, projection, or reflection of laser and collateral radiation into audience or other accessible uncontrolled areas shall not be permitted except for diffuse reflections produced by the atmosphere, added atmospheric scattering media, and target screens.
- Laser radiation levels in excess of the limits of Class I shall not be permitted at any point less than 3.0 meters above any surface upon which persons other than operators, performers, or employees are permitted to stand or 2.5 meters below or in lateral separation from any place where such persons are permitted to be. Operators, performers, and employees shall not be required or allowed to view radiation above the limits of Class I or be exposed to radiation above Class IIIa.
- All laser light shows shall be under the direct and personal control of trained, competent operator(s). The operator(s) shall:
 - (1) Be an employee of the variance holder who will be responsible for the training and the conduct of the operator;
 - (2) Be located where all beam paths can be directly observed at all times;
 - (3) Immediately terminate the emission of light show radiation in the event of any unsafe condition; or for outdoor shows, upon request by any air traffic control officials.
- The projection system shall be securely mounted or immobilized to prevent unintended movement or misalignment. Beam masking will be provided as an inherent part of the system design to prevent overfilling of screens, beam stops, targets, etc.
- This fixture is only allowed to be operated within the maximum alternating current as stated in the technical specifications in section 2 of this manual.
- Handle the device with care, avoid shaking or using force when installing or maintaining the device.
- If you use the quick lock cam when rigging the device, make sure the quick lock fasteners are located in the quick lock holes correctly and securely.
- Operate the device only after having familiarized yourself with its functions. Do not permit
 operation by persons not qualified for operating the device. Most damage is the result of
 unprofessional operation.
- Please use the original packaging if the device is to be transported.
- The applicable temperature for the device is between -20°C to 45°C.Do not use the device outside of this temperature range. (Note: When the temperature detected by laser source between -20°C to 0°C, it needs to wait some minutes for the heater to heat up the temperature to be above 0°C before lighting on.)

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:

• AC100-240V~, 50/60Hz

Power Consumption: 480W

LIGHT SOURCE:

Laser: 260W, White, Color Temperature 9000~10000K

Extremely long Life: >12,000H

MOVEMENT:

- Pan movement: infinite rotation
- Tilt movement: infinite rotation
- Advanced moving system: fast, stable and quite, auto X-Y repositioning

COLORS:

- CMY + CTO color mixing, uniform, linear and speed can be adjustable
- 1 Color wheel: 27 dichroic filters + open, indexable

GOBOS:

- Rotating gobo wheel: 12 interchangeable, rotating and indexable gobo + open
- "Slot in & out"gobo wheel system
- Fix gobo wheel: 79 + open, with different speed gobo shaking and gobo indexing

FEATURES:

- 3 Control channel modes: 35/33/45 channels
- 2 Operation modes: DMX-512, Master / Slave mode
- Strobe effect with 1-25 flashes per second and pulse effect
- 8 Rotating Prisms: 6-facet circular (2), 8-facet circular, 16-facet circular, 4-facet linear (2), 6-facet linear (2)
- Animation effect: can make special dynamic effect
- Focus: Motorized focus
- Frost: 2 frost filters
- Dimmer: 0%~100% full range dimming

DISPLAY:

- Advanced and convenient full-color LCD
- Pan and Tilt homing bypass: long press the center button to lock pan / tilt homing
- Can be changed 180° reverse to fit for different installation position

SOFTWARE:

- 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

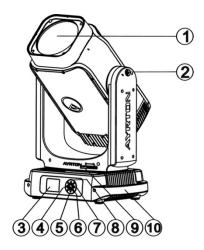
OTHER SPEC:

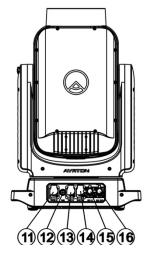
- Input signal isolation: guarantees stable signal transmission without interference
- Advanced RDM function

WEIGHT

Net weight: 33 kg

3. FIXTURE OVERVIEW



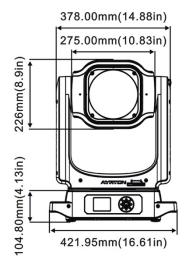


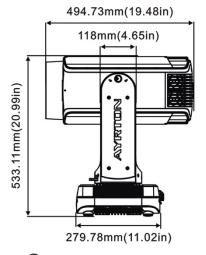
- Front Lens 1)
- 2) Tilt Lock
- 3) Display
- 4) Left-button
- 5) Down-button
- 6) Center-button
- 7) Right-button
- 8) Up-button
- 9) Pan Lock
- 10) Handle

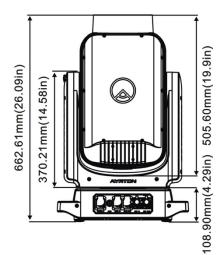
- 11) Power In
- 12) Fuse
- 13) RJ45 In
- 14) RJ45 Out
- 15) DMX In
- 16) DMX Out

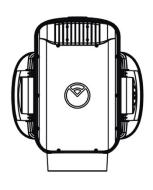
4. DRAWINGS

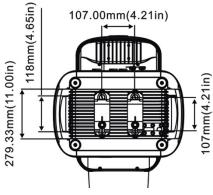
4.1. Fixture Dimension





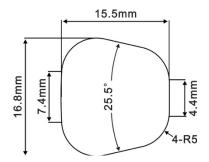








4.2. Color Wheel



Outer Ring Color: Inner Ring Color:

1. Green 20. Congo blue

2. Orange 21. UV

3. Blue 22. Minus Green 1/4

4. Red 23. Minus Green 1/2

5. Pink 24. CTB 1/4

6. Medium Yellow 25. CTB 1/2

7. Deep purple 26. CTB

8. Velvet green 27. Light Amber

9. Amber

10. Light blue

11. Light red

12. Follies pink

13. Yellow

14. Slate blue

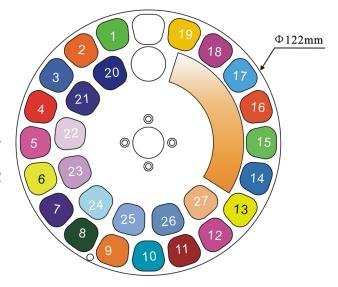
15. Dark Green

16. Dark amber

17.Medium Blue

18.Magical magenta

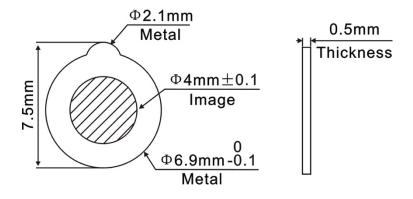
19.Oklahoma yellow

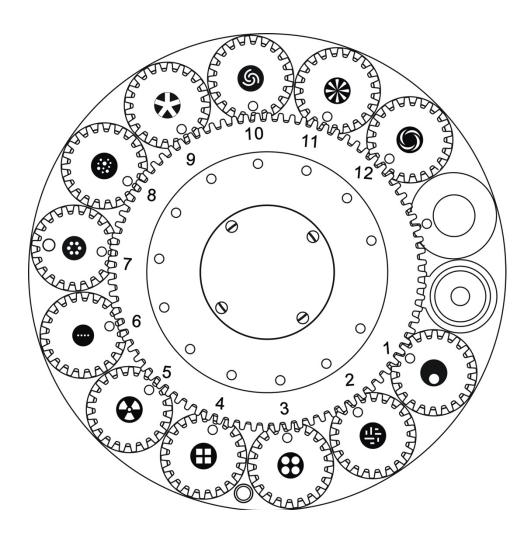


4.3. Rotating Gobo Wheel

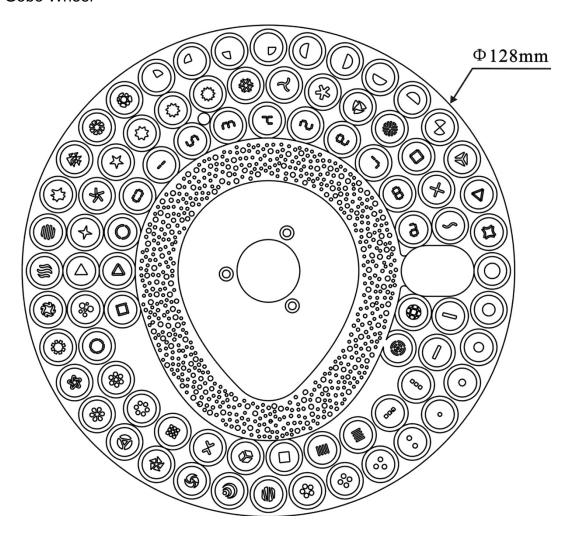
Rotating Gobo:

Metal Gobo:





4.4. Fix Gobo Wheel



5. INSTALLATION INSTRUCTIONS

5.1. Rigging the device



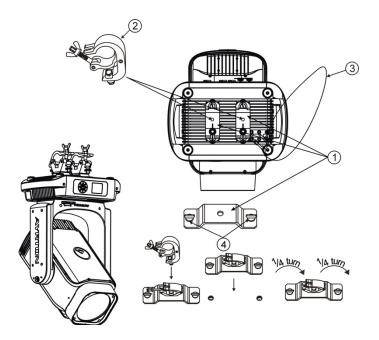
CAUTION!

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.



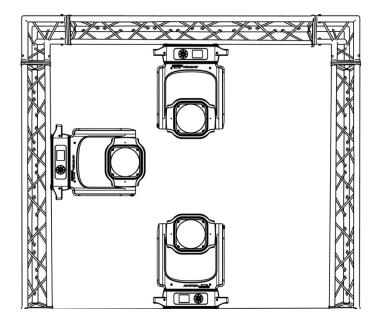
- 1) Omega bracket
- 2) Clamp
- 3) Safety rope
- 4) Quick-lock fastener

- 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.

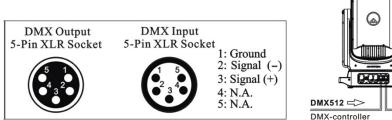


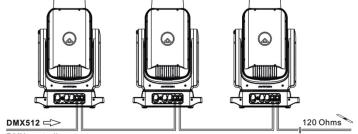
- Be sure this fixture is kept at least 0.1m away from any flammable materials (decoration etc.).
- Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.
- Rig the projector high enough to provide clearance for people who may walk beneath the beam path or establishing a restricted access area that extends beyond the beam hazard distance.

- While fixed installation at locations other than cinema theaters should be installed at a height not lower than 3 m vertically. The lowest tip of the Hazard Zone should be no lower than 3 m measured vertically above the floor. Horizontal clearance to the Hazard Zone should be 2.5 m measured horizontally. Any human access to the Hazard Zone, if applicable, is to be restricted by barriers. The fixed installation should be performed by authorized installers, who are trained to perform installations in accordance with the manufacturer's instructions.
- 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.

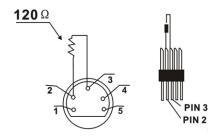




Address 1 Address 36 Address 71

7. DMX-512 CONNECTION WITH DMX TERMINATOR

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



8. DEVICE DMX START ADDRESS SELECTION

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

correct address number on the display located on the base of the device.

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

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

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

In the case of the LED moving head, in 35 channel mode, you should set the starting address of the first unit to 1, the second unit to 36 (35 + 1), the third unit to 71 (35 + 36), 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 buttons features: you can set the starting address, run the pre-programmed program or reset the device.

The main menu is accessed by double clicking Center-button until the display starts flashing. Browse through the menu by pressing the Up-button, Down-button, Left-button or Right-button.

Pressing the Center-button for 2 seconds in order to exit menu, double click the Center-button to confirm. After accessing the edit mode, the unit will automatically exit to the main menu after 15 seconds from the last button press.

When the unit is powered on, if no data signal is connected after 1 minute, then the display will switch off automatically.

Default settings shaded

/	Address	Address	DMX address:001-XXX :	DMX address setting

Mode	User Mode	Stand Mode Basic Mode Extend Mode User Mode A User Mode B User Mode C		User's mode to change channel numbers
	Edit User ModeA	Edit User Max channel ModeA PAN .		Preset User modes A,B,C:
	Status	No DMX Mode Sun protection Pan Reverse Tilt Reverse Pan Degree Tilt Degree Feedback Init PAN Init TILT Prerig INIT Reset Mode Pan/Tilt Spd CMY Spd CTO Control Zoom/Focus Spd Reset LED Fade Hibernation DMX Output	Close/Hold/Auto ON/OFF ON/OFF ON/OFF 630/540 270/540 ON/OFF ON/OFF ON/OFF ON/OFF Fast /All Rot Gobos Medium/Fast/Slow Slow/Medium/Fast Color Wheel/Separate Ch Fast/Medium/Slow ON/OFF OFF, 01M~99M ON/OFF	Hold if no DMX Sun protection movement Pan Reverse movement Tilt Reverse movement Pan Degree Select Tilt Degree Movement Feedback Init PAN Init TILT Prerig INIT Reset Mode Movement Speed CMY Spd CTO Control Zoom/Focus Spd Reset LED Fade Stand by Mode Ethernet to DMX
Options	Service PIN	Service PIN Set Ip Set Mask Ip DHCP Cross Load SW Clr Laser Timer Clr Error Info	Password=XXX 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 Laser Timer Clr Error Info
	Fans Control	Fans Speed Constant Fans	Auto Stage Silence Super Silence ON/OFF	Fans Speed select Constant Fans
	Disp.Setting	Shutoff Time Flip Display Key Lock DispFlash	02~60m05m 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

	NASSILLE DAAY	Activate WDMX		Activate WDMX	
	Wireless DMX	Rest WDMX		Rest WDMX	
	Dim Curve	Square Law Linear	Dim Curve		
	Refresh Select	1.2K 2.4K 16K 25K		Refresh Select	
	Prism Mode	Simple/Full			
	Reset P/T Fade	ON/OFF		Reset P/T Fade	
	Illumination Limit	25m Distance /15m	Distance/8m Distance	Illumination Limit	
	Beam Mode	Limited Range/Full	Range	Beam Mode	
		DMX Value Disp.	PAN	DMX Value Disp.	
	Trigger	Set To Slave	Slave1,Slave2,Slave3	Set To Slave	
		Auto Program	Master / Alone	Auto Program	
	ResetDefault	ON/OFF	T	Restore factory set.	
		Address	DMX address:001-XXX	DMX address setting	
	Reset User set	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 Laser Hours Timer PIN Clr Last Run		XXXX(Hours) XXXX(Hours) XXXX(Hours) XXXX(Hours) Password=XXX ON/OFF	
و	Temp. Info	Head Temp.		XXX°C/°F	
Info	Humidity	x%		Humidity Information	
	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 Other
	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 Replace	Gobo Wheel 1	Gobo Replace	
	Select Prog.	Prog. Part 1 = Prog Prog. Part 2 = Prog Prog. Part 3 = Prog		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
<u>a</u>	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", "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 Settings

No DMX Status

With this function, when no DMX signal is detected, the unit will keep the last DMX status or close the shutter or run an automatic sequence. 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

With this function you can activate the Sun Protection-movement. Unit will automatically tilt down the head when no signal is detected.

- 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", Turn the rotary knob 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.

Tilt Degree

With this function, you can select tilt degree for 270° 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 "Tilt Degree".
- 5. Double clicking center button to access "Tilt Degree", The display will show "270", Tap the <Up/Down> button to select "540".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

Feedback

This function allows you to activate or deactivate the automatic repositioning of the Pan & Tilt in case of an accidental/manual move of the yoke.

- 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

This function allows you to deactivate the Pan movement during init process.

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

This function allows you to deactivate the Tilt movement during init process.

- 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 Medium, Fast and Slow.

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

CMY Spd

With this function, you can select CMY mode from Slow and Fast.

- 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", Turn the rotary knob to select "Slow", "Medium", "Fast".
- 6. Double click the center button to confirm or long press the center button to return to the main menu.

CTO Control

- 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 "CTO Control".
- 5. Double clicking center button to access "CTO Control", The display will show "Color Wheel", Turn the rotary knob to select "Separete Ch".
- 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 mode from Fast Medium and Slow.

- 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.

Reset LED 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 "Status".
- 4. Double clicking center button to access "Status "menu, Tap the <Up/Down> button to select "Reset LED Fade".
- 5. Double clicking center button to access "Reset LED Fade", 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.

Hibernation: Standby mode

The device and step motors will be powered off if the fixture stay without DMX signal for 15 mins (Factory default). The fixture will perform a reset sequence once DMX is back.

- 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 activate 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 "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.

Cross Load SW

This function allows you to update one unit from another one.

- 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 Laser Timer

This function allows you to clear the Laser 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 "CIr Laser Timer".
- 5. Double clicking center button to access "Clr Laser 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 fans speed. The selections have Auto Stage Silence and Super Silence.

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

When set to ON, this setting allows the fans to be constantly on to avoid any new noise.

- 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. Display Setting

Shut off Time

With this function you can shut off the LCD display after 2 to 60minutes. 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 3seconds if you do not need this function.

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

DispFlash

When set to ON, the display will flash when in case of loss of signal.

- 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 "Celsius", Tap the <Up/Down> button to select "Fahrenheit".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

10.3.7. Initial Pos.

With this function you can display initial effect position.

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

10.3.8. Wireless DMX

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

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

10.3.9. Dim Curve

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

10.3.10. Refresh Select

- 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. Prism 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 "Prism Mode".
- 4. Double clicking center button to access "Prism Mode", The display will show "Full", Tap the <Up/Down> button to select "Simple".
- 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. Illumination Limit

- 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 "Illumination Limit".
- 4. Double clicking center button to access "Illumination Limit", The display will show "25m Distance", Tap the <Up/Down> button to select "15m Distance", "8m Distance".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

10.3.14. Beanm 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 "Beanm Mode".
- 4. Double clicking center button to access "Beanm Mode", The display will show "Limited Range", Tap the <Up/Down> button to select "Full Range".
- 5. Double click the center button to confirm or long press the center button to return to the main menu.

10.3.15. 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 "**Selectprogram**". You can set the number of steps under "**Edit program**". You can edit the individual scenesunder "**Edit scenes**". With this function, you can run the individual scenes either automatically, i.e.with theadjusted 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.

10.3.16. 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.

10.3.17. Reset User Set

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 Set".
- 4. Double clicking center button to access "Reset User Set" 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 Set".
- Double clicking center button to access "Reset User Set" 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 Set".
- 4. Double clicking center button to access "Reset User Set" 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 Set".
- 4. Double clicking center button to access "Reset User Set" 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 information

Current Time

With this function, you can display the temporary running time of the device from the last power on. The display shows "XXXX", "XXXX" stands for the number of hours. The counter is 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.

TtlLifeHrs

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.

Laser 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 "Laser Hours".
- 5. Double clicking center button to access "Laser 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 enter the timer password.

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

CIr 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 head (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**

With this function, you can display the percentage of humidity in the unit .

- 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 fans speed.

- 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" and 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 "IP", Turn the center button to select "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.

- 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.

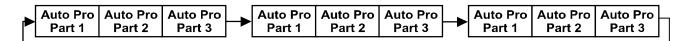
10.5.5. Gobo Replace

- 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".
- 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.



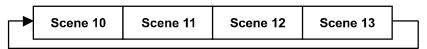
- 1. If the slave fixture chooses Run For Slave 1 from the menu of 1-3, then it will receive the part 1's automatic program from link, in the same way, when the slave fixture chooses Run For Slave 2, then it will receive the part 2's automatic program from link.
- 2. Enter the menu of 1-3 Function Mode---Set 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:

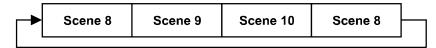
Part 2, Part3 repeat in accordance with the Part1's repeat. For example: When Part 1 uses Program 2, Part 2 uses Program 4, Part 3 uses Program 6, Assume: Program 2 includes scene of 10, 11, 12, 13; Program4 includes scene of 8, 9, 10; Program 6 includes scene of 12, 13, 14, 15; Then it will run as below.

Example:

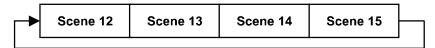
Part 1:



Part 2:



Part 3:



11. DMX PROTOCOL

DM	DMX channel's functions and their values (45DMX channels):						
Mod	Mode/Channel \		Value	Function			
St	Ва	Ex					
1	1	1		PAN Movement 8bit :			
1	ı	I	0-255	Pan Movement			
2		2		Pan Fine 16bit			
		2	0-255	Fine control of Pan movement			
3	2	3		TILT Movement 8bit :			
3		5	0-255	Tilt Movement			
4		4		Tilt Fine 16bit			
4			0-255	Fine control of Tilt movement			
	3	5		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			
				Pan Motor continuous rotation			
			0-63	stop rotation by spinout			
6	4	6	64-127	stop rotation by shortcut			
U	4	U	128-189	Forwards Pan rotation from fast to slow			
			190-193	No rotation			
			194-255	Backwards Pan rotation from slow to fast			

				Tilt Motor continuous rotation
	_	_	0-63	stop rotation by spinout
			64-127	stop rotation by shortcut
7	5	7	128-189	Forwards Tilt rotation from fast to slow
			190-193	No rotation
			194-255	Backwards Tilt rotation from slow to fast
				Shutter, strobe:
			0-10	Shutter closed
			11-20	No function (shutter open)
			21-117	Strobe effect slow to fast
8	6	8	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	0		Dimmer intensity:
9	′	9	0-255	Intensity 0 to 100%
		10		Fine Dimmer intensity:
		10	0-255	Dimmer intensity fine
10	0	11		CTO Color:
10	8		0-255	CTO (0-white, 255-100% CTO)
11	9	12		CTO Color Fine :
1 1	9	12	0-255	CTO Fine
12	10	13		Reserved
13	11	14		Zoom:
13	11	14	0-255	Zoom adjustment from small to big
		15		Zoom Fine:
		10	0-255	Zoom adjustment Fine
14	12	16		Focus:
17	12	10	0-255	Continuous adjustment from near to far
		17		Focus Fine:
		17	0-255	Continuous adjustment Fine
				Auto Focus :
			0-50	Auto Focus Off
15	13	18	51-100	5m
	10	10	101-150	7.5m
			151-200	10m
			201-255	15m
16	14	19		AutoFocus Fine:
10	17	10	0-255	Continuous adjustment Fine
				Zoom mode:
17	15	20	0-84	Beam mode
'	15	5 20	85-169	Spot mode
			170-255	Special mode
18	16	21		Color Wheel:

0 Open	0	0 Open	
1-63 CTO (0-1	1-63	1-63 CTO (0-100% CTO)	
64 Color 1	64	64 Color 1	
65 Color 2	65	65 Color 2	
66 Color 3	66	66 Color 3	
67 Color 4	67	67 Color 4	
68 Color 5	68	68 Color 5	
69 Color 6	69	69 Color 6	
70 Color 7	70	70 Color 7	
71 Color 8	71	71 Color 8	
72 Color 9	72	72 Color 9	
73 Color 10	73	73 Color 10	
74 Color 11	74	74 Color 11	
75 Color 12	75	75 Color 12	
76 Color 13	76	76 Color 13	
77 Color 14	77	77 Color 14	
78 Color 15	78	78 Color 15	
79 Color 16	79	79 Color 16	
80 Color 17	80	80 Color 17	
81 Color 18	81	81 Color 18	
82 Color 19	82	82 Color 19	
83 Color 20	83	83 Color 20	
84 Color 21	84	84 Color 21	
85 Color 22	85	85 Color 22	
86 Color 23	86	86 Color 23	
87 Color 24	87	87 Color 24	
88 Color 25	88	88 Color 25	
89 Color 26	89	89 Color 26	
90 Color 27	90	90 Color 27	
1-127 unused	91-127	91-127 unused	
28-189 Forwards	128-189	128-189 Forwards rainbow effect from fast to slow	
90-193 No rotation	190-193	190-193 No rotation	
94-255 Backward	194-255	194-255 Backwards rainbow effect from slow to fast	
Color Wh		Color Wheel Fine:	
0-255 Color Wh	0-255	0-255 Color Wheel colour change to any position Fine	
Cyan Co		Cyan Color :	
0-255 Cyan (0-v	0-255	0-255 Cyan (0-white, 255-100% Cyan)	
Cyan Co		Cyan Color Fine :	
0-255 Cyan Fine	0-255	0-255 Cyan Fine	
<u>Magenta</u>		Magenta Color :	
0-255 Magenta	0-255	0-255 Magenta (0-white, 255-100% magenta)	
<u>Magenta</u>		Magenta Color Fine :	
0-255 Magenta	0-255	0-255 Magenta Fine	
Yellow C		Yellow Color :	
0-255 Yellow (0	0-255	0-255 Yellow (0-white, 255-100% Yellow)	
87 Color 24 88 Color 25 89 Color 26 90 Color 27 01-127 unused 28-189 Forwards 90-193 No rotation 94-255 Backward Color Wh Cyan Color Wh Cyan Color Wh Cyan Color Wh Cyan Color Wh Magenta 0-255 Magenta Magenta O-255 Magenta Yellow C	87 88 89 90 91-127 128-189 190-193 194-255 0-255 0-255	87	

		00		Yellow Color Fine :
		28	0-255	Yellow Fine
				Rotating gobos, cont. rotation :
			0-9	Open
			10-13	Rot. gobo 1
			14-17	Rot. gobo 2
			18-21	Rot. gobo 3
			22-25	Rot. gobo 4
			26-29	Rot. gobo 5
			30-33	Rot. gobo 6
			34-37	Rot. gobo 7
			38-41	Rot. gobo 8
			42-45	Rot. gobo 9
			46-49	Rot. gobo 10
			50-53	Rot. gobo 11
			54-57	Rot. gobo 12
22	20	29	58-68	Gobo 1 shake slow to fast
			69-79	Gobo 2 shake slow to fast
			80-90	Gobo 3 shake slow to fast
			91-101	Gobo 4 shake slow to fast
			102-112	Gobo 5 shake slow to fast
			113-123	Gobo 6 shake slow to fast
			124-134	Gobo 7 shake slow to fast
			135-145	Gobo 8 shake slow to fast
			146-156	Gobo 9 shake slow to fast
			157-167	Gobo 10 shake slow to fast
			168-178	Gobo 11 shake slow to fast
			179-189	Gobo 12 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:
		30	0-127	Gobo indexing
23	21		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 :
		<u> </u>	0-255	Fine indexing
	22			Fixed Gobo:
			0-2	Open
			3-14	Forwards rotation from fast to slow
24		32	15-17	No rotation
			18-29	Backwards rotation from slow to fast
			30	Gobo 1
			31	Gobo 2

32	Gobo 3
33	Gobo 4
34	Gobo 5
35	Gobo 6
36	Gobo 7
37	Gobo 8
38	Gobo 9
39	Gobo 10
40	Gobo 11
41	Gobo 12
42	Gobo 13
43	Gobo 14
44	Gobo 15
45	Gobo 16
46	Gobo 17
47	Gobo 18
48	Gobo 19
49	Gobo 20
50	Gobo 21
51	Gobo 22
52	Gobo 23
53	Gobo 24
54	Gobo 25
55	Gobo 26
56	Gobo 27
57	Gobo 28
58	Gobo 29
59	Gobo 30
60	Gobo 31
61	Gobo 32
62	Gobo 33
63	Gobo 34
64	Gobo 35
65	Open
66	Gobo 36
67	Gobo 37
68	Gobo 38
69	Gobo 39
70	Gobo 40
71	Gobo 41
72	Gobo 42
73	Gobo 43
74	Gobo 44
75	Gobo 45
76	Gobo 46

77	Gobo 47
78	Gobo 48
79	Gobo 49
80	Gobo 50
81	Gobo 51
82	Gobo 52
83	Gobo 53
84	Gobo 54
85	Gobo 55
86	Gobo 56
87	Gobo 57
88	Gobo 58
89	Gobo 59
90	Gobo 60
91	Gobo 61
92	Gobo 62
93	Gobo 63
94	Gobo 64
95	Open
96	Gobo 65
97	Gobo 66
98	Gobo 67
99	Gobo 68
100	Gobo 69
101	Gobo 70
102	Gobo 71
103	Gobo 72
104	Gobo 73
105	Gobo 74
106	Gobo 75
107	Gobo 76
108	Gobo 77
109	Gobo 78
110	Gobo 79
111	Gobo 1 shake slow to fast
112	Gobo 2 shake slow to fast
113	Gobo 3 shake slow to fast
114	Gobo 4 shake slow to fast
115	Gobo 5 shake slow to fast
116	Gobo 6 shake slow to fast
117	Gobo 7 shake slow to fast
118	Gobo 8 shake slow to fast
119	Gobo 9 shake slow to fast
120	Gobo 10 shake slow to fast
121	Gobo 11 shake slow to fast

122	Gobo 12 shake slow to fast
123	Gobo 13 shake slow to fast
124	Gobo 14 shake slow to fast
125	Gobo 15 shake slow to fast
126	Gobo 16 shake slow to fast
127	Gobo 17 shake slow to fast
128	Gobo 18 shake slow to fast
129	Gobo 19 shake slow to fast
130	Gobo 20 shake slow to fast
131	Gobo 21 shake slow to fast
132	Gobo 22 shake slow to fast
133	Gobo 23 shake slow to fast
134	Gobo 24 shake slow to fast
135	Gobo 25 shake slow to fast
136	Gobo 26 shake slow to fast
137	Gobo 27 shake slow to fast
138	Gobo 28 shake slow to fast
139	Gobo 29 shake slow to fast
140	Gobo 30 shake slow to fast
141	Gobo 31 shake slow to fast
142	Gobo 32 shake slow to fast
143	Gobo 33 shake slow to fast
144	Gobo 34 shake slow to fast
145	Gobo 35 shake slow to fast
146	Gobo 36 shake slow to fast
147	Gobo 37 shake slow to fast
148	Gobo 38 shake slow to fast
149	Gobo 39 shake slow to fast
150	Gobo 40 shake slow to fast
151	Gobo 41 shake slow to fast
152	Gobo 42 shake slow to fast
153	Gobo 43 shake slow to fast
154	Gobo 44 shake slow to fast
155	Gobo 45 shake slow to fast
156	Gobo 46 shake slow to fast
157	Gobo 47 shake slow to fast
158	Gobo 48 shake slow to fast
159	Gobo 49 shake slow to fast
160	Gobo 50 shake slow to fast
161	Gobo 50 shake slow to fast
	+
162	Gobo 52 shake slow to fast
163	Gobo 53 shake slow to fast
164	Gobo 54 shake slow to fast
165	Gobo 55 shake slow to fast
166	Gobo 56 shake slow to fast

			167	Gobo 57 shake slow to fast				
			168	Gobo 58 shake slow to fast				
			169					
				Gobo 59 shake slow to fast				
170				Gobo 60 shake slow to fast				
			171	Gobo 61 shake slow to fast				
			172	Gobo 62 shake slow to fast				
			173	Gobo 63 shake slow to fast				
			174	Gobo 64 shake slow to fast				
			175	Gobo 65 shake slow to fast				
	176			Gobo 66 shake slow to fast				
	177			Gobo 67 shake slow to fast				
	178			Gobo 68 shake slow to fast				
			179	Gobo 69 shake slow to fast				
			180	Gobo 70 shake slow to fast				
			181	Gobo 71 shake slow to fast				
			182	Gobo 72 shake slow to fast				
			183	Gobo 73 shake slow to fast				
			184	Gobo 74 shake slow to fast				
			185	Gobo 75 shake slow to fast				
	1		186	Gobo 76 shake slow to fast				
	187		187	Gobo 77 shake slow to fast				
			188	Gobo 78 shake slow to fast				
			189	Gobo 79 shake slow to fast				
			190-221	Clock-wise scroll from fast to slow				
			222-223	Reserved				
			224-255	Counter clock-wise scroll from slow to fast				
				Prism 1、Frost:				
			0-40	Open				
	23	33	41-83	Prism 1				
25			84-126	Prism 2				
			127-169	Prism 3				
			170-212	Prism 4				
			213-255	Frost				
				Rotating prism index, rotating prism rotation 1				
	24	34	0-127	Prism indexing				
26			128-189	Forwards prism rotation from fast to slow				
			190-193	No rotation				
			194-255	Backwards prism rotation from slow to fast				
				Rotating prism indexing Fine 1:				
		35	0-255	Fine indexing				
				Prism 2、Frost:				
	25	36	0-40	Open				
27			41-83	Prism 1				
			84-126	Prism 2				
			127-169	Prism 3				
			1 1 1					

			170-212	Prism 4			
			213-255	Frost			
				Rotating prism index, rotating prism rotation 2			
			0-127	Prism indexing			
28	26	37	128-189	Forwards prism rotation from fast to slow			
			190-193	No rotation			
			194-255	Backwards prism rotation from slow to fast			
		00		Rotating prism indexing Fine 2:			
		38	0-255	Fine indexing			
20	07	20		Pan degree blackout coarse			
29	27	39	0-255				
20	20	40		Pan degree blackout fine			
30	28		0-255				
31	20	41		Pan black out size			
31	29		0-255	0 to 100% : size of the black out zone			
32	30	42		Tilt degree blackout coarse			
32	30	42	0-255				
33	0.4	43		Tilt degree blackout fine			
33	31		0-255				
34	32	44		Tilt black out size			
34	52	44	0-255	0 to 100% : size of the black out zone			
		45		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		33-34	Constant Fans Off			
35			35-36	Constant Fans On			
33			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	Prism Mode Simple			
			75-79	Prism Mode Full			
			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	unused		
103-105	unused		
106-108	CMY speed Slow		
109-111	CMY speed Medium		
112-114	CMY speed Fast		
115-117	Prerig INIT Off		
118-120	Prerig INIT On		
121-123	Pan Degree 540°		
124-126	Pan Degree 630°		
127-129	Tilt Degree 540°		
130-132	Tilt Degree 270°		
133-135	CTO Control: Color Wheel		
136-138	CTO Control: Separate Ch		
139-141	Illumination Limit: 25m Distance		
142-144	Illumination Limit: 15m Distance		
145-147	Illumination Limit: 8m Distance		
148-150	Reset LED Fade Off		
151-153	153 Reset LED Fade On		
154-156	Beam Mode: Limited Range		
157-159	Beam Mode: Full Range		
160-255	unused		

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

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

Focus wheel Er

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

Color wheel Er

(Colorwheel- 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 wheelEr

(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 wheelEr

(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.

Rot Gobo wheel Er

(Rot_Gobo1wheel - 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.

Fix_Gobo wheel Er

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

Prism wheelEr

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

default position after the reset.

Frost wheelEr

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

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.



	Minimum value		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 1,4Nm (12,4in/lbf) to fasten correctly the (10) HEX head screws for each cover.

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.

3) A detailed electrical check by an approved electrician every quarter to make sure that the circuit contacts are in good condition. This will prevent poor circuit contacts and the resultant overheating.

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

Please refer to the instructions under "Installation instructions".

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



