

# **User Manual**



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# 1. SAFETY INSTRUCTIONS

# 1.1. IMPORTANT SAFETY WARNINGS

This device has left the factory in perfect condition. In order to maintain this condition and to ensure safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

In order to install, operate and maintain the lighting fixture safely and correctly we suggest that the installation and operation be carried out by qualified technicians and these instructions be carefully followed.

4	CAUTION! HIGH VOLTAGE. RISK OF SEVERE OR FATAL ELECTRIC SHOCK.
	CAUTION! ALWAYS DISCONNECT MAINS SUPPLY BEFORE REMOVING ANY FIXTURE COVERS.
$\triangle$	CAUTION!  NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE.  SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK.
*	CAUTION! BLUE LIGHT HAZARD : RISK GROUP 2.
<u></u>	CAUTION!  NEVER TOUCH THE DEVICE DURING OPERATION.  COVERS MAY BE HOT
F©	Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.  NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**Important:** Damage caused by the disregard of this user manual is not subject to warranty. The dealer and manufacturer will not accept liability for any resulting defects or problems.

- If the device has been exposed to temperature changes due to environmental conditions, do not power on immediately. The resulting condensation could damage the device. Leave the device powered off until it has reached room temperature.
- This device falls under protection-class I. Therefore, it is essential that the device be earthed.
- If either lenses or display are damaged (damage may include cracks or gashes in the material) they must be replaced.
- Electrical connections, such as replacing the power plug, must be performed by a qualified person.
- Make sure that the available voltage is not higher than that which is stated 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.

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- If the external flexible power cord of this device is damaged, it shall be exclusively replaced by the manufacturer or their service agent or a similar qualified person in order to avoid injury.
- When the device is not in use or before performing maintenance, always disconnect the
  device from the mains. Only handle the power cord from the plug. Never pull the plug out of
  a socket by tugging the power cord.
- When powered on for the first time, some smoke or smell may occur. This is caused by coating on metal parts when heated and is normal. If you are concerned, please contact your distributor.
- Do not focus the beam onto flammable surfaces. The minimum distance between the exiting lens of the device and the illuminated surface must be greater than 1 meter.

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

# 1.2. GENERAL GUIDELINES

- This device is a lighting effect for professional use on stages, in discotheques, theatres, etc. the device was designed for indoor use.
- This fixture is only allowed to be operated within the maximum alternating current as stated in the technical specifications in section 2 of this manual.
- Handle the device with care, avoid shaking or using force when installing or maintaining the device.
- If you use the quick lock cam when rigging the device, make sure the quick lock fasteners
  are located in the quick lock holes correctly and securely.
- Operate the device only after having familiarized yourself with its functions. Do not permit
  operation by persons not qualified for operating the device. Most damage is the result of
  unprofessional operation.
- Please use the original packaging if the device is to be transported.
- The applicable temperature for the device is between -10°C to 45°C. Do not use the device outside of this temperature range.
- The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

**Important:** For safety reasons, please be aware that all modifications to the device are forbidden. If this device is operated in any way different to the ones described in this manual, the product may suffer damage and the warranty becomes void. Furthermore, any other operation may lead to short-circuits, burns, electric shocks etc.

# 2. FEATURES

# **POWER SUPPLY:**

AC120-240V~, 50/60Hz

Power Consumption: 1500W

# **LIGHT SOURCE:**

• LED: 217 pcs White LEDs

Extremely long Life: >20,000H

# **MOVEMENT:**

Pan movement: 540°/630° Optional (16 bit)

• Tilt movement: 245° (16 bit)

Advanced moving system: fast, stable and quite, auto X-Y repositioning

# **FEATURES:**

• 2 Control channel modes: 14/30 channels

• 2 Operation modes: DMX-512, Master / Slave mode

- Strobe effect with 1-25 flashes per second and pulse effect
- Dimmer: 0%~100% full range dimming

# **DISPLAY:**

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

# SOFTWARE:

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

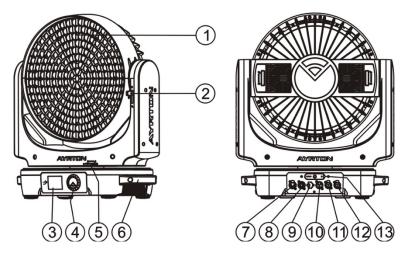
# **OTHER SPEC:**

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

# **WEIGHT**

Net weight: 26,9 kg

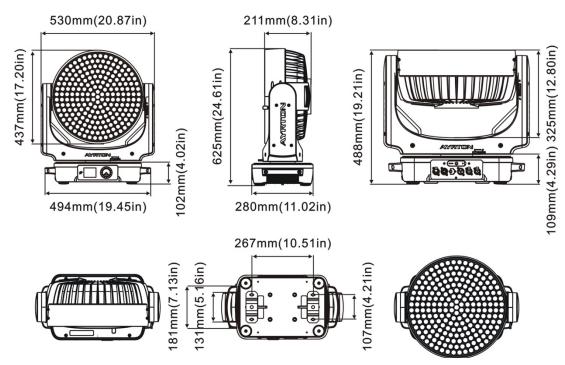
# 3. FIXTURE OVERVIEW



- 1) Lenses Assembly
- 2) Tilt Lock
- 3) Display
- 4) Jog Wheel
- 5) Pan Lock
- 6) Handle
- 7) DMX Out
- 8) DMX In
- 9) USB
- 10) Power In
- 11) RJ45 Out
- 12) RJ45 In
- 13) Battery

# 4. DRAWINGS

# **4.1.** Fixture Dimension



# 5. INSTALLATION INSTRUCTIONS

# 5.1. Rigging the device

# $\triangle$

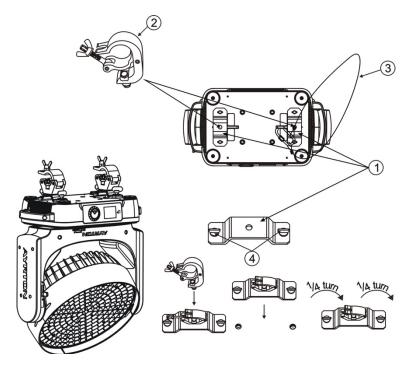
# **CAUTION!**

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 harmful 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.



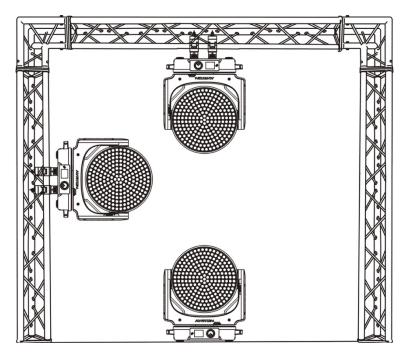
- 1) Omega bracket
- 2) Clamp
- 3) Safety rope
- 4) Quick-lock fastener

- 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:

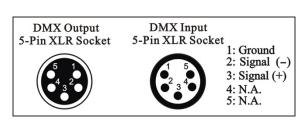
Overhead rigging requires extensive experience, including (but not limited to) calculating working load limits, specifying installation/ rigging materials, and periodic safety inspection of all installation material as well as the device. If you lack these qualifications, do not attempt the rigging of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

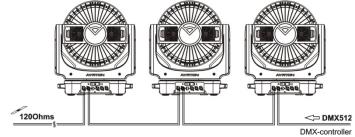


- Be sure this fixture is kept at least 0.1m away from any flammable materials (decoration etc.).
- Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.
- Rig the projector high enough to provide clearance for people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

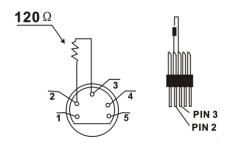
Connect the provided male side of the XLR cable to the female XLR output of your controller and the female side of the XLR cable to the male XLR input of the device. You can connect multiple devices together in a serial fashion. The cable needed should be two core, screened cable with XLR input and output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





# 7. DMX-512 CONNECTION WITH DMX TERMINATOR

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



# 8. DEVICE DMX START ADDRESS SELECTION

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

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

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

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

In the case of the LED moving head, in 14 channel mode, you should set the starting address of the first unit to 1, the second unit to 15 (14 + 1), the third unit to 29 (14+ 15), and so on.

# 9. DISPLAY

The Display offers Jog Wheel features: you can set the starting address, run the pre-programmed program or reset the device.

The main menu is accessed by double clicking the Jog Wheel. Browse through the menu by turning Jog Wheel clockwise or counterclockwise.

Double clicking in order to select the desired menu or long pressing to exit menu, double click the Jog wheel for confirm. After accessing the edit mode, the unit will automatically exit to the main menu after 15 seconds from the last button press. Clockwise is positive direction while counterclockwise is opposite direction.

When the unit is powered on, if no data signal is connected after 1 minute, then the display will switch off automatically. The Display does not need external power to operate in case there is battery, hold down the Jog Wheel for 6 seconds and the Display will turn on by using the unit's battery.

PS: No response when quick press the Jog Wheel.

To install the battery for the first time, please make sure the unit is not connected to AC power. Install the battery in the battery holder, then remove the battery and install it back. This procedure must be done only for the first battery installation.



# **CAUTION!**

THE BATTERY MUST BE A LI-ION RECHARGEABLE BATTERY, THE SPECIFICATION IS AS FOLLOWING:

Li-ion Rechargeable Battery ICR 14500 3.7V

Default settings shaded

Detaul	efault settings shaded						
Add ress	Address	DMX Address: xxx Decimal Universe: Net: xx Sub-Net: x Universe: x	DMX Address Decimal Universe Net Sub-Net Universe				
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/B/C	Max channel PAN :		Preset User modes A,B,C :			
Options	Status	No DMX Mode Pan Reverse Tilt Reverse Pan Degree Feedback Init PAN Init TILT Pan/Tilt Spd Hibernation DMX Output	Close/Hold/Auto ON/OFF ON/OFF 630/540 ON/OFF ON/OFF ON/OFF Fast/Medium/Slow OFF, 01M~99M ON/OFF	Auto run if no DMX Pan Reverse movement Tilt Reverse movement Pan Degree Select Movement Feedback Init PAN Init TILT Movement Speed Stand by Mode DMX Output			
	Service PIN	Service PIN RDM UID Set Ip Set Mask DHCP Cross Load SW USB Update CIr LED Timer CIr Error Info Set LED BIN	Password=XXX Xxxxxx xxx.xxx.xxx.xxx xxx.xxx.xxx.x	Service Password"=050" RDM UID Set Ip Set Mask DHCP Cross Load SW USB Update CIr LED Timer CIr LED Timer Set LED BIN			

	Fans Control	Fans Speed	Auto Stage Silence Super Silence	Fans Speed select	
		Constant Fans	ON/OFF	Constant Fans	
	Disp.Setting	Shutoff Time Flip Display Key Lock DispFlash	02~60m 05m ON/OFF ON/OFF ON/OFF	Display shutoff time Reverse 180 degree Key Lock DispFlash	
	Signal Select	DMX Art - Net sACN	DMX Art-Net sACN		
	Temp. C/F	Celsius Fahrenheit		Temperature switch between °C/°F	
	Initial Pos.	PAN =XXX		Initial effect position	
	Refresh Select	1.2K 2.4K 16K 25K		Refresh Select	
	Trigger	DMX Value Disp. Set to Slave Auto Program	PAN Slave 1, Slave 2, Slave 3 Master/Alone	DMX Value Disp. Set to Slave Auto Program	
	Reset Default	ON/OFF		Restore factory set.	
		Address	DMX address:001-XXX	DMX address setting	
	Reset User	Mode	Stand Mode Basic Mode Extend Mode User Mode A User Mode B User Mode C	User's mode to change channel numbers	
		Fans Speed	Auto Stage Silence Super Silence	Fans Speed select	
		Constant Fans	ON/OFF	Constant Fans	
Info	Time Info.	Current Time Ttl Life Hrs Last Run Hrs LED Hours Timer PIN Clr Last Run		XXXX(Hours) XXXX(Hours) XXXX(Hours) XXXX(Hours) Password=XXX ON/OFF	
	Temp. Info	XXX°C/°F	Temp. Info		
	Fan Info.	xxxx RPM		Fan information	

	Software Ver	V1.0		Software version			
	Network	IP,Mask,Mac	Network				
	Error Info.	Error Record 1 :		Error Info.			
	Home	All Pan&Tiltr ZOOM		Reset All Reset Pan&Tilt ZOOM			
<u>.</u>	Test Channel	PAN					
Test	Manual Ctrl.	PAN =XXX :	PAN =XXX :				
	Calibration	-Password- PAN :	Password "050" Calbrate and adjust the effects to standard/right position				
	Select Prog.	Prog. Part 1 = Progra Prog. Part 2 = Progra Prog. Part 3 = Progra	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			
Pre	Edit Scenes	Edit Scene 001 ~ Edit Scene 250	Pan,Tilt, Fade Time Secne Time Input By Outside	Save and automatically return manual scenes edit			
	Scenes Input	XX~XX		Scenes Input			

# 9.1. Address

#### 9.1.1. Address

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

- 1. Double click the Jog Wheel to access main menu.
- 2. The display will show "ADDRESS".
- 3. Double click the Jog Wheel then display "Address".
- 4. Turn the Jog Wheel clockwise then display "DMX Address: xxx"、"Decimal Universe: xxxxx"、"Net: xx"、"Sub-Net: x"、"Universe: x".
- 5. Long press 2 seconds the Jog Wheel to back to last menu "Address", then back to main menu by long press again.

# 9.2. Mode

# 9.2.1. User Mode

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

- 1. Double click the Jog Wheel to access main menu, turn the Jog Wheel clockwise to display "USERS MODE".
- 2. Double click the Jog Wheel to edit.
- 3. Turn the Jog Wheel clockwise to display "User mode", Double click the Jog Wheel to edit.
- 4. When in "Extend Mode", turn the Jog Wheel to select "Basic mode", "Stand Mode",

- "Extend Mode", "User Mode A", "User Mode B" and "User Mode C".
- 5. Long press 2 seconds the Jog Wheel to back to last menu "User Mode", then back to main menu by long press again.

# 9.2.2. Edit User Mode

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

- 1. Double click the Jog Wheel to access "USERS MODE" menu, turn the Jog Wheel until display "Edit User".
- 2. Double click the Jog Wheel to access "Edit User" menu.
- 3. Set up "Max Channel=xxx" and select channel value.
- 4. Set up "Mode B" and "Mode C" by the same way.
- 5. Long press 2 seconds the Jog Wheel to back to last menu "Edit User", then back to main menu by long press again.

# 9.3. Options

# 9.3.1. Status

# **No DMX Status**

With this function, you can choose the unit behavior in case no signal is detected between close, hold, and Auto.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Status".
- 4. Double click the Jog Wheel to access "Status" menu, The display will show "No DMX Status".
- 5. Double click the Jog Wheel to access "No DMX Status", The display will show "Hold", Turn the Jog Wheel to select "Close", "Auto".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Status", then back to main menu by long press again.

# Pan Reverse

With this function you can reverse the Pan-movement.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Status".
- 4. Double click the Jog Wheel to access "Status" menu, The display will show "Pan Reverse".
- 5. Double click the Jog Wheel to access "Pan Reverse", The display will show "OFF", Turn the Jog Wheel to select "NO".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Status", then back to main menu by long press again.

# Tilt Reverse

With this function you can reverse the Tilt-movement.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Status".
- 4. Double click the Jog Wheel to access "Status" menu, The display will show "Tilt Reverse".
- 5. Double click the Jog Wheel to access "Tilt Reverse", The display will show "OFF", Turn the Jog Wheel to select "NO".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Status", then back to main menu by long press again.

# Pan Degree

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

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Status".
- 4. Double click the Jog Wheel to access "Status" menu, The display will show "Pan Degree".
- 5. Double click the Jog Wheel to access "Pan Degree", The display will show "540", Turn the Jog Wheel to select "630".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Status", then back to main menu by long press again.

#### 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 click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Status".
- 4. Double click the Jog Wheel to access "Status" menu, The display will show "Feedback".
- 5. Double click the Jog Wheel to access "Feedback", The display will show "ON", Turn the Jog Wheel to select "OFF".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Status", then back to main menu by long press again.

# **Init PAN**

This function allows you to deactivate the Pan movement

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Status".
- 4. Double click the Jog Wheel to access "Status" menu, The display will show "Init PAN".
- 5. Double click the Jog Wheel to access "Init PAN", The display will show "ON", Turn the Jog Wheel to select "OFF".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Status", then back to main menu by long press again.

#### Init TILT

This function allows you to deactivate the Tilt movement

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Status".
- 4. Double click the Jog Wheel to access "Status" menu, The display will show "Init TILT".
- 5. Double click the Jog Wheel to access "Init TILT", The display will show "ON", Turn the Jog Wheel to select "OFF".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Status", then back to main menu by long press again.

# Pan/Tilt Spd

With this function, you can select Pan & Tilt speed from "Fast", "Medium", "Slow.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Status".

- 4. Double click the Jog Wheel to access "Status" menu, The display will show "Pan/Tilt Spd".
- 5. Double click the Jog Wheel to access "Pan/Tilt Spd", The display will show "Fast", Turn the Jog Wheel to select "Medium", "Fast", "Slow".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Status", then back to main menu by long press again.

# **Hibernation: Standby mode**

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

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Status".
- 4. Double click the Jog Wheel to access "Status" menu, The display will show "Hibernation".
- 5. Double click the Jog Wheel to access "Hibernation", The display will show "OFF", Turn the Jog Wheel to select "01M", "02M"... "99M".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Status", then back to main menu by long press again.

# **DMX Output**

With this function, you can select DMX Output.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Status".
- 4. Double click the Jog Wheel to access "Status" menu, The display will show "DMX Output".
- 5. Double click the Jog Wheel to access "DMX Output", The display will show "OFF", Turn the Jog Wheel to select "ON".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Status", then back to main menu by long press again.

# 9.3.2. Service PIN

# **Password**

The Password for this function is "050".

#### **RDM UID**

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Service PIN".
- 4. Double click the Jog Wheel to access "Service PIN" menu, The display will show "RDM UID".
- 5. Double click the Jog Wheel to access "RDM UID", The display will show "Xxxxxx".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Service PIN", then back to main menu by long press again.

# Set IP

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Service PIN".

- 4. Double click the Jog Wheel to access "Service PIN" menu, The display will show "Set IP".
- 5. Double click the Jog Wheel to access "Set IP", The display will show "XXX.XXX.XXX.XXX".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Service PIN", then back to main menu by long press again.

#### Set Mask

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Service PIN".
- 4. Double click the Jog Wheel to access "Service PIN" menu, The display will show "Set Mask".
- 5. Double click the Jog Wheel to access "Set Mask", The display will show "XXX.XXX.XXX.XXX".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Service PIN", then back to main menu by long press again.

# **DHCP**

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Service PIN".
- 4. Double click the Jog Wheel to access "Service PIN" menu, The display will show "DHCP".
- 5. Double click the Jog Wheel to access "DHCP", The display will show "ON", Turn the Jog Wheel to select "OFF".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Service PIN", then back to main menu by long press again.

#### **Cross Load SW**

This function allows you to upload the current SW version to other units using a DMX connection. Do not disconnect the units before the process is done

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Service PIN".
- 4. Double click the Jog Wheel to access "Service PIN" menu, The display will show "Cross Load SW".
- 5. Double click the Jog Wheel to access "Cross Load SW", The display will show "OFF", Turn the Jog Wheel to select "ON".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Service PIN", then back to main menu by long press again.

# **USB** Update

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Service PIN".
- 4. Double click the Jog Wheel to access "Service PIN" menu, The display will show "USB Update".
- 5. Double click the Jog Wheel to access "USB Update", The display will show "OFF",

- Turn the Jog Wheel to select "ON".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Service PIN", then back to main menu by long press again.

# **CIr LED Timer**

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Service PIN".
- 4. Double click the Jog Wheel to access "Service PIN" menu, The display will show "Clr LED Timer".
- 5. Double click the Jog Wheel to access "Clr LED Timer", The display will show "OFF", Turn the Jog Wheel to select "ON".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Service PIN", then back to main menu by long press again.

# **CIr Error Info**

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Service PIN".
- 4. Double click the Jog Wheel to access "Service PIN" menu, The display will show "Clr Error Info".
- 5. Double click the Jog Wheel to access "Clr Error Info", The display will show "OFF", Turn the Jog Wheel to select "ON".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Service PIN", then back to main menu by long press again.

#### **Set LED BIN**

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Service PIN".
- 4. Double click the Jog Wheel to access "Service PIN" menu, The display will show "Set LED BIN".
- 5. Double click the Jog Wheel to access "Set LED BIN", The display will show "C14", "
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Service PIN", then back to main menu by long press again.

# 9.3.3. Fans Control

# Fans Speed

With this function, you can set the fans speed. Settings are Auto, Stage, Silence, and Super Silence.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Fans Control".
- 4. Double click the Jog Wheel to access "Fans Control" menu, The display will show "Fans Speed".
- 5. Double click the Jog Wheel to access "Fans Speed", The display will show "Auto", Turn the Jog Wheel to select "Stage", "Silence", "Super Silence".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Fans Control", then back

to main menu by long press again.

# **Constant Fans**

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Fans Control".
- 4. Double click the Jog Wheel to access "Fans Control" menu, The display will show "Constant Fans".
- 5. Double click the Jog Wheel to access "Constant Fans", The display will show "OFF", Turn the Jog Wheel to select "ON".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Fans Control", then back to main menu by long press again.

# 9.3.4. Disp. Setting

# **Shut off Time**

With this function, you can select the delay before the LCD display turns off. Choose between 2 to 60 minutes. The default is 5 minutes.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Display Setting".
- 4. Double click the Jog Wheel to access "Display Setting" menu, The display will show "Shut off Time".
- 5. Double click the Jog Wheel to access "Shut off Time", The display will show "05m", Turn the Jog Wheel to select "02~60m".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Display Setting", then back to main menu by long press again.

# Flip Display

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

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Display Setting".
- 4. Double click the Jog Wheel to access "Display Setting" menu, The display will show "Flip Display".
- 5. Double click the Jog Wheel to access "Flip Display", The display will show "OFF", Turn the Jog Wheel to select "ON".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Display Setting", then back to main menu by long press again.

# **Key Lock**

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

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Display Setting".
- 4. Double click the Jog Wheel to access "Display Setting" menu, The display will show "Key Lock".
- 5. Double click the Jog Wheel to access "Key Lock", The display will show "OFF", Turn

- the Jog Wheel to select "ON".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Display Setting", then back to main menu by long press again.

# **DispFlash**

With this function activated, display will flash if no signal is detected.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Display Setting".
- 4. Double click the Jog Wheel to access "Display Setting" menu, The display will show "DispFlash".
- 5. Double click the Jog Wheel to access "DispFlash", The display will show "OFF", Turn the Jog Wheel to select "ON".
- 6. Long press 2 seconds the Jog Wheel to back to last menu "Display Setting", then back to main menu by long press again.

# 9.3.5. Signal Select

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Signal Select".
- 4. Double click the Jog Wheel to access "Signal Select", The display will show "DMX", Turn the Jog Wheel to select "DMX", "Art-Net", "sACN".
- 5. Long press 2 seconds the Jog Wheel to back to last menu "Signal Select", then back to main menu by long press again.

# 9.3.6. Temperature C/F

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

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Temperature C/ F".
- 4. Double click the Jog Wheel to access "Temperature C/ F", The display will show "Fahrenheit", Turn the Jog Wheel to select "Celsius".
- 5. Long press 2 seconds the Jog Wheel to back to last menu –"Temperature C/ F", then back to main menu by long press again.

# 9.3.7. Initial Pos.

With this function you can display initial effect position.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Initial Pos.".
- 4. Double click the Jog Wheel to access "Initial Pos.", The display will show "PAN=XXX".
- 5. Long press 2 seconds the Jog Wheel to back to last menu "Initial Pos.", then back to main menu by long press again.

# 9.3.8. Refresh Select

With this function you can select the PWM rate.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".

- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Refresh Select".
- 4. Double click the Jog Wheel to access "Refresh Select", The display will show "1.2K", Turn the Jog Wheel to select "2.4K", "16K", "25K".
- 5. Long press 2 seconds the Jog Wheel to back to last menu –"Refresh Select", then back to main menu by long press again.

# 9.3.9. 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 click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Trigger".
- 4. Double click the Jog Wheel to access "Trigger" menu, The display will show "DMX Value Disp".
- 5. Double click the Jog Wheel to access "DMX Value Disp", The display will show "PAN=......".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Trigger", then back to main menu by long press again.

# **Set to Slave**

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Trigger".
- 4. Double click the Jog Wheel to access "Trigger" menu, The display will show "Set to Slave".
- 5. Double click the Jog Wheel to access "Set to Slave", The display will show "Slave 1", "Slave 2", "Slave 3".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Trigger", then back to main menu by long press again.

# **Auto Program**

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

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Trigger".
- 4. Double click the Jog Wheel to access "Trigger" menu, The display will show "Auto Program".
- 5. Double click the Jog Wheel to access "Auto Program", The display will show "Master", "Alone".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Trigger", then back to main menu by long press again.

# 9.3.10. Reset Default

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

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Reset Default".
- 4. Double click the Jog Wheel to access "Reset Default" menu, The display will show "OFF", Turn the Jog Wheel to select "ON".
- 5. Long press 2 seconds the Jog Wheel to back to last menu –"Reset Default", then back to main menu by long press again.

# 9.3.11. Reset User

# Allows you to set default User settings

# Address

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Reset User".
- 4. Double click the Jog Wheel to access "Reset User" menu, The display will show "Address".
- 5. Double click the Jog Wheel to access "Address", The display will show "001~XXX".
- 6. Long press 2 seconds the Jog Wheel to exit, and come back to last menu –"Reset User", then back to main menu by pressing the Jog Wheel 2 seconds again.

# Mode

- 1. Double click Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Reset User".
- 4. Double click the Jog Wheel to access "Reset User" menu, The display will show "Mode".
- 5. Double click the Jog Wheel to access "Mode", The display will show "Extend Mode". turn the Jog Wheel to select "Basic mode", "Stand Mode", "User Mode A", "User Mode B" and "User Mode C".
- 6. Long press 2 seconds the Jog Wheel to exit, and come back to last menu –"Reset User", then back to main menu by pressing the Jog Wheel 2 seconds again.

# Fans Speed

- 1. Double click Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Reset User".
- 4. Double click the Jog Wheel to access "Reset User" menu, The display will show "Fans Speed".
- 5. Double click the Jog Wheel to access "Fans Speed", The display will show "Auto". turn the Jog Wheel to select "Stage", "Silence", "Super Silence".
- 6. Long press 2 seconds the Jog Wheel to exit, and come back to last menu –"Reset User", then back to main menu by pressing the Jog Wheel 2 seconds again.

# **Constant Fans**

- 1. Double click Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Options".
- 3. Double click the Jog Wheel to access "Options", turn the Jog Wheel to select "Reset User".
- 4. Double click the Jog Wheel to access "Reset User" menu, The display will show "Constant Fans".
- 5. Double click the Jog Wheel to access "Constant Fans", The display will show "OFF". turn the Jog Wheel to select "ON".
- 6. Long press 2 seconds the Jog Wheel to exit, and come back to last menu –"Reset User", then back to main menu by pressing the Jog Wheel 2 seconds again.

# 9.4. Info

#### 9.4.1. Time Info.

# **Current Time**

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

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Info".
- 3. Double click the Jog Wheel to access "Info", turn the Jog Wheel to select "Time Info.".
- 4. Double click the Jog Wheel to access "Time Info.", The display will show "Current Time".
- 5. Double click the Jog Wheel to access "Current Time", The display will show "XXXX (Hours)".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Time Info", then back to main menu by long press again.

# Ttl Life Hrs

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

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Info".
- 3. Double click the Jog Wheel to access "Info", turn the Jog Wheel to select "Time Info.".
- 4. Double click the Jog Wheel to access "Time Info.", The display will show "Ttl Life Hrs".
- 5. Double click the Jog Wheel to access "Ttl Life Hrs", The display will show "XXXX (Hours)".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Time Info", then back to main menu by long press again.

#### **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 click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Info".
- 3. Double click the Jog Wheel to access "Info", turn the Jog Wheel to select "Time Info.".
- 4. Double click the Jog Wheel to access "Time Info.", The display will show "Last Run Hrs".
- 5. Double click the Jog Wheel to access "Last Run Hrs", The display will show "XXXX (Hours)".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Time Info", then back to main menu by long press again.

# **LED Hours**

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Info".
- 3. Double click the Jog Wheel to access "Info", turn the Jog Wheel to select "Time Info.".
- 4. Double click the Jog Wheel to access "Time Info.", The display will show "LED Hours".
- 5. Double click the Jog Wheel to access "Last Run Hrs", The display will show "XXXX (Hours)".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Time Info", then back to main menu by long press again.

# **Timer PIN**

With this function, you can display the timer password.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Info".
- 3. Double click the Jog Wheel to access "Info", turn the Jog Wheel to select "Time Info.".
- 4. Double click the Jog Wheel to access "Time Info.", The display will show "Timer PIN".
- 5. Double click the Jog Wheel to access "Timer PIN", The display will show "Password=038".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Time Info", then back to main menu by long press again.

# **CIr Last Run**

With this function, you can clear last run time of the fixture. The display shows "ON" or "OFF".

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Info".
- 3. Double click the Jog Wheel to access "Info", turn the Jog Wheel to select "Time Info.".
- 4. Double click the Jog Wheel to access "Time Info.", The display will show "Clear Last Run".
- 5. Double click the Jog Wheel to access "Clear Last Run", The display will show "OFF", turn the Jog Wheel to select "ON".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Time Info", then back to main menu by long press again.

# 9.4.2. Temp.Info

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

- 1. Double click the Jog Wheel to access main menu.
- Turn the Jog Wheel clockwise then display "Info".
- 3. Double click the Jog Wheel to access "Info", turn the Jog Wheel to select "Temp Info".
- 4. Double click the Jog Wheel to access "Temp Info", The display will show "Head Temp.".
- 5. Double click the Jog Wheel to access "Head Temp.", The display will show "AAA: xxx °C/ °F".
- 6. Long press 2 seconds the Jog Wheel to back to last menu –"Temp Info", then back to main menu by long press again.

# 9.4.3. Fan Info.

With this function, you can display the fans speed of the unit.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Info".
- 3. Double click the Jog Wheel to access "Info", turn the Jog Wheel to select "Fan Info.".
- 4. Double click the Jog Wheel to access "Fan Info.", The display will show "AAA Fan xxxx RPM".
- 5. Long press 2 seconds the Jog Wheel to back to last menu –"Fan Info.", then back to main menu by long press again.

# 9.4.4. Software Ver

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

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Info".
- 3. Double click the Jog Wheel to access "Info", turn the Jog Wheel to select "Software Ver".
- 4. Double click the Jog Wheel to access "Software Ver", The display will show "V1.0.....".
- 5. Long press 2 seconds the Jog Wheel to back to last menu "Software Ver", then back to main menu by long press again.

# 9.4.5. **Network**

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Info".
- 3. Double click the Jog Wheel to access "Info", turn the Jog Wheel to select "Network".
- 4. Double click the Jog Wheel to access "Network", The display will show "IP", Turn the Jog Wheel to select "Mask", "Mac".
- 5. Long press 2 seconds the Jog Wheel to back to last menu –"Network", then back to main menu by long press again.

# 9.4.6. Error Info.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Info".
- 3. Double click the Jog Wheel to access "Info", turn the Jog Wheel to select "Error Info.".
- 4. Double click the Jog Wheel to access "Error Info.", The display will show "Error Record 1", ".....".
- 5. Long press 2 seconds the Jog Wheel to back to last menu –"Network", then back to main menu by long press again.

# 9.5. Test

#### 9.5.1. Home

With this function you can reset the device via the buttons. You can select the different reset functions using the buttons.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Test".
- 3. Double click the Jog Wheel to access "Test", turn the Jog Wheel to select "Home".
- 4. Double click the Jog Wheel to access "Home", The display will show "All", Turn the Jog Wheel to select "All", "Pan&Tilt", "ZOOM".
- 5. Long press 2 seconds the Jog Wheel to back to last menu –"Test", then back to main menu by long press again.

# 9.5.2. Test Channel

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

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Test".
- 3. Double click the Jog Wheel to access "Test", turn the Jog Wheel to select "Test Channel".
- 4. Double click the Jog Wheel to access "Test Channel", The display will show "PAN", Turn the Jog Wheel to select other channel.
- 5. Long press 2 seconds the Jog Wheel to back to last menu –"Test", then back to main menu by long press again.

# 9.5.3. Manual Control

Allows you to manually control each feature of the unit.

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Test".
- 3. Double click the Jog Wheel to access "Test", turn the Jog Wheel to select "Manual control".
- 4. Double click the Jog Wheel to access "Manual control", The display will show "PAN=XXX".
- 5. Long press 2 seconds the Jog Wheel to back to last menu –"Test", then back to main menu by long press again.

# 9.5.4. 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 click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Test".
- 3. Double click the Jog Wheel to access "Test", turn the Jog Wheel to select "Calibration".
- 4. Double click the Jog Wheel to access "Calibration", The display will show "Password=050".
- 5. Long press 2 seconds the Jog Wheel to back to last menu –"Test", then back to main menu by long press again.

# 9.6. Preset

- 1. Double click the Jog Wheel to access main menu.
- 2. Turn the Jog Wheel clockwise then display "Preset".
- 3. Double click the Jog Wheel to access "Preset", turn the Jog Wheel to select "Select prog.", "Edit prog.", "Edit Scenes", "Scenes Input".
- 4. Long press 2 seconds the Jog Wheel to back to last menu "Preset", then back to main menu by long press again.

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

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

- 1. If the slave fixture chooses Run For Slave 1 from the menu of 1-3,then it will receive the part 1's automatic program from link, in the same way, when the slave fixture chooses Run For Slave 2, then it will receive the part 2's automatic program from link.
- 2. Enter the menu of 1-3 Function Mode---Set To Slave, Here to set machine operate which part of the program during the host-slave connection
- 3. Enter the menu of 1-4, 1-5 Function Mode---Set To Master
- 4. Enter the menu of 8-1 Edit Program---Auto Program Part1. The host outputs three groups driven program----Part1, Part2, Part3 (Part1 program runs the same effect as the host)
- 5. Enter the menu of 8-2 Edit Program---Edit Program. Edit the program's connection, connect the scene in order
- 6. The editor of the scene, there are as many as 250 scenario editors, and every scene can have a program connection of 10.

#### Note:

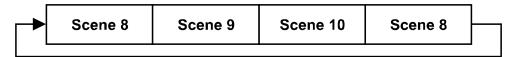
Part 2, Part 3 repeat in accordance with the Part1's repeat. For example: When Part 1 uses Program 2, Part 2 uses Program 4, Part 3 uses Program 6, Assume: Program 2 includes scene of 10, 11, 12, 13; Program 4 includes scene of 8, 9, 10; Program 6 includes scene of 12, 13, 14, 15; Then it will run as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

# Example:

# Part 1:



#### Part 2:



#### Part 3:



#### 10. NFC

When the fixture is powered on, you can use a NFC smartphone with the Ayrton NFC App to scan the NFC tag area of the fixture to read some of the information or settings inside the display menu, such as product name, software version, UID, DMX Start Address, Universe, User Mode, Options, Information, etc. You can also change some of the settings and push to write inside the fixture menu.

When the fixture is not powered on, you can still use the App to read the NFC info and write the settings into the NFC tag, the written data will be automatically synchronized into the fixture menu at next time the fixture is powered on.

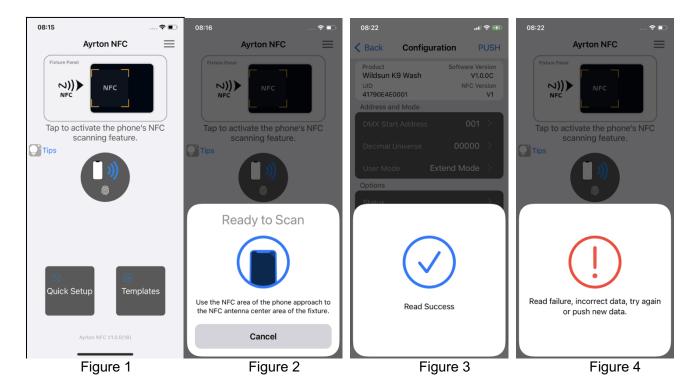
#### NOTE:

- Before using, make sure there is NFC function on your smartphone and it is activated, Download and install the Ayrton NFC App;
- The NFC tag on the fixture is right under the LCD window;
- The NFC reader area vary on different smartphones, identify the correct area on your smartphone before scanning the NFC tag on the fixture;
- When scanning, make sure the NFC reader area of your smartphone close enough to the LCD window and hold still the smartphone for 3 seconds until reading successfully.

# 10.1 How to use NFC

First install Ayrton NFC App into your mobile phone and enable NFC function of your mobile.

1) Open the Ayrton NFC App (as shown in Figure 1), tap the button to activate NFC scan (Figure 2), place the NFC scan area of your mobile phone close to the NFC tag area of the fixture, it will show the setting and configuration page after reading successfully (Figure 3). If the reading fails, it can be reread, or the device can be powered on again (Figure 4).



2) Change the device parameters such DMX address or User Mode or others (Figure 5,6):

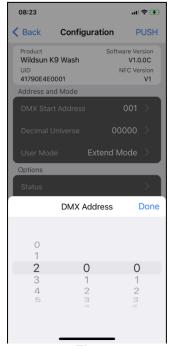






Figure 6

3) Tap 'PUSH' on the upper right corner (Figure 7,8) and place the NFC scan area of your mobile phone close to the NFC tag area of the fixture to write into the NFC tag (Figure 9).



Figure 7

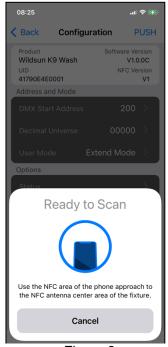


Figure 8

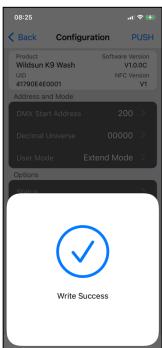
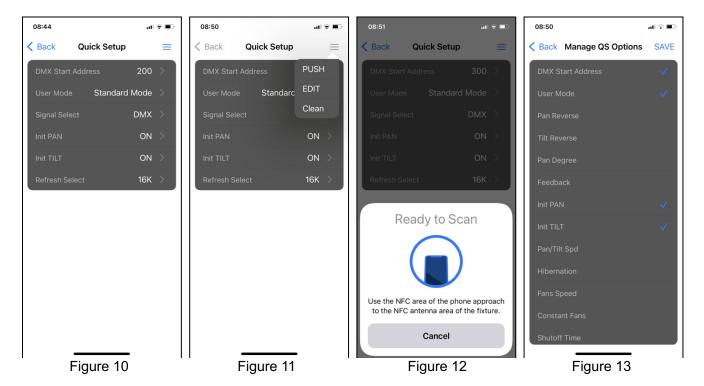


Figure 9

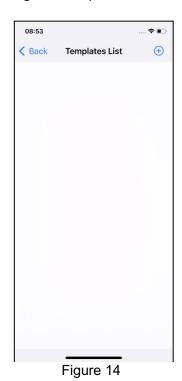
# 4) Quick Setup menu:

In the home page, tap the "Quick Setup" button to show the quick setup parameters (Figure 10) and tap the upper right corner button to view the guick setting options (Figure 11): "PUSH" to write the NFC settings (Figure 12), "EDIT" to add or delete the setting menus into the "Quick Setup" list (Figure 13).



# Templates menu

Create a fixture parameter template and set it to the corresponding fixture model Tap to enter the Templates list page (Figure 14), tap the upper right corner to add a new template for your fixture model (Figure 15), change the Template name and parameter settings and tap "ADD" to add into the Template list, as shown in Figure 16





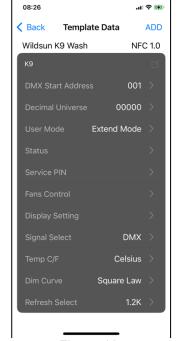


Figure 16

Pressing the desired template to activate the options (Figure 17,18), tap "PUSH" to write into the NFC tag of the fixture, as shown in Figure 19.







Figure 18

# 11. DMX PROTOCOL

Mode/Channel Value		Value	Function
St	Ex		
1	_		PAN Movement 8bit :
	1	0-255	Pan Movement
0	0		Pan Fine 16bit
2	2	0-255	Fine control of Pan movement
2	2		TILT Movement 8bit :
3	3	0-255	Tilt Movement
4	4		Tilt Fine 16bit
4	4	0-255	Fine control of Tilt movement
			Speed Pan/Tilt movement:
5	5	0-225	max to min speed
5	5	226-235	blackout by movement
		236-255	no function
			White LED -all arrays :
		0-255	White ( 0-Black , 255-100% White)
			White LED Fine -all arrays :
		0-255	Fine control for white adjustment
	15		White LED -array 1 :
	15	0-255	White1 ( 0-Black , 255-100% White )
	16		White LED Fine-array 1:
	10	0-255	Fine control for white1 adjustment
	17		White LED -array 2 :
	17	0-255	White2( 0-Black , 255-100% White )
	18		White LED Fine -array 2 :
	10	0-255	Fine control for white2 adjustment
	19		White LED -array 3:
	10	0-255	White( 0-Black , 255-100% White )
	20		White LED Fine -array 3 :
	20	0-255	Fine control for white3 adjustment
	21		White LED -array 4 :
	<b>4</b> 1	0-255	White ( 0-Black , 255-100% White)
	22		White LED Fine-array 4:
		0-255	Fine control for white4 adjustment
	23		White LED -array 5 :
	20	0-255	White ( 0-Black , 255-100% White )
	24		White LED Fine -array 5 :

		0-255	Fine control for white5 adjustment		
	0.5		White LED -array 6:		
	25	0-255	White ( 0-Black , 255-100% White )		
	26		White LED Fine -array 6:		
	26	0-255	Fine control for white6 adjustment		
	27		White LED -array 7 :		
	27	0-255	White ( 0-Black , 255-100% White )		
	20		White LED Fine-array 7 :		
	28	0-255	Fine control for white7 adjustment		
	20		White LED -array 8:		
	29	0-255	White ( 0-Black , 255-100% White)		
	20		White LED Fine-array 8 :		
	30	0-255	Fine control for white8 adjustment		
			Shutter, strobe:		
		0-10	Shutter closed		
		11-20	No function (shutter open)		
		21-117	Strobe effect slow to fast		
6	6	118-126	No function (shutter open)		
		127-180	Pulse-effect in sequences		
		181-191	No function (shutter open)		
		192-245	Random strobe effect slow to fast		
		246-255	No function (shutter open)		
7	7		<u>Dimmer intensity:</u>		
,		0-255	Intensity 0 to 100%		
8	8		<u>Dimmer Fine intensity:</u>		
0		0-255	Fine control for dimmer adjustment		
			Chase Patterns:		
		0-15	Led turn off		
		16-31	Chase 1		
		32-47	Chase 2		
		48-63	Chase 3		
		64-79	Chase 4		
9	9	80-95	Chase 5		
		96-111	Chase 6		
		112-127	Chase 7		
		128-143	Chase 8		
		144-159	Chase 9		
		160-175	Chase 10		
		176-191	Chase 11		

		192-207	Chase 12
		208-223	Chase 13
		224-239	Chase 14
		240-255	Chase 15
			Chase Speed:
10	40	0-125	Fast to Slow Backward
10	10	126-130	Stop(Speed=0)
		131-255	Slow to Fast Forward
11	11		Chase Fade:
11	11	0-255	Fade Chase
10	10		Zoom:
12	12	0-255	Zoom adjustment
13	13		Zoom Fine :
13	13	0-255	Fine control for Zoom adjustment
			Reset, internal programs:
		0-4	unused
		5-9	Display Off
		10-14	Display On
		15-19	Display Invert Off
		20-24	Display Invert On
		25-26	Auto fan control mode
		27-28	Stage fan control mode
		29-30	Silence fan control mode
		31-32	Super Silence fan control mode
		33-34	Constant Fans Off
14	14	35-36	Constant Fans On
14	14	37-44	Reserved
		45-49	Square Law
		50-54	Linear
		55-57	1.2K
		58-60	2.4K
		61-63	16K
		64-69	25K
		70-79	Reserved
		80-84	All motor reset
		85-87	P/T motor reset
		88-90	Zoom motor reset
		91-255	Reserved

# 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 12 at the same time, you may see the error message, "Err channel is Pan movement", "Err channel is Tilt movement", "Err channel is Shutter", flash twice and then the device will generate a second reset. If the error messages persist after performing a reset more than twice, the channels which have errors may not work properly however, all other functions can work as usual. Please contact your dealer or manufacturer for service. Self repair is not allowed.

# **PAN-** movement Er

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

# TILT- movement Er

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

# Zoom wheel Er

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

# 13. CLEANING AND MAINTENANCE

The following points have to be considered during inspection:

- 1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- 2) There must not be any deformations to the housing, lenses, rigging and installation points (ceiling, suspension, trussing).
- 3) Motorized parts must not show any signs of wear and must move smoothly without issue.
- 4) The power supply cables must not show any damage, material fatigue or sediment.

Further instructions depending on the installation location and usage have to be adhered to by a qualified installer and any safety concerns have to be removed.



# **CAUTION!**

DISCONNECT FROM MAINS BEFORE STARTING MAINTENANCE OPERATION.

In order to ensure the device remains in good condition and does not fail prematurely, we suggest regular maintenance.

1) Clean the inside and outside lens each week to avoid loss of output due to accumulation of dust/ dirt on the lens.

- 2) Clean the fans each week to ensure maximum airflow and efficient thermal cooling. This will ensure the light source is operated in the best possible condition.
- 3) A detailed electrical check by an approved electrician every quarter to make sure that the circuit contacts are in good condition. This will prevent poor circuit contacts and the resultant overheating.

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

Please refer to the instructions under "Installation instructions".

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



