# ©AYRTITN 

## User Manual



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## 1. SAFETY INSTRUCTIONS

### 1.1. IMPORTANT SAFETY WARNING

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

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

## CAUTION!

HIGH VOLTAGE. RISK OF SEVERE OR FATAL ELECTRIC SHOCK

## CAUTION!

ALWAYS DISCONNECT MAINS SUPPLY BEFORE REMOVING ANY FIXTURE COVERS

## CAUTION! <br> NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE. SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK

## CAUTION! <br> NEVER TOUCH THE DEVICE DURING OPERATION! COVERS MAY BE HOT

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

- If the device has been exposed to temperature changes due to environmental conditions, do not power on immediately. The resulting condensation could damage the device. Leave the device powered off until it has reached room temperature.
- Ensure the sealing rubber covers of oower CON and XLR connectors are fitted properly when the device is not in use, to avoid water ingress.
- This device falls under protection-class I. Therefore, it is essential that the device be earthed.
- If either lenses or display are damaged (damage may include cracks or gashes in the material) they must be replaced.
- Electrical connections, such as replacing the power plug, must be performed by a qualified person.
- Make sure that the available voltage is not higher than that which is stated at the end of this manual.
- Make sure the power cord is never crushed or damaged by sharp edges. If this should be the case, replacement of the cable must be done by an authorized dealer.
- If the external flexible power cord of this device is damaged, it shall be exclusively
replaced by the manufacturer or their service agent or a similar qualified person in order to avoid injury.
- When the device is not in use or before performing maintenance, always disconnect the device from the mains. Only handle the power cord from the plug. Never pull the plug out of a socket by tugging the power cord.
- When powered on for the first time, some smoke or smell may occur. This is caused by coating on metal parts when heated and is normal. If you are concerned, please contact your distributor.
- Do not focus the beam onto flammable surfaces. The minimum distance between the exiting lens of the device and the illuminated surface must be greater than 3 meter.

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

### 1.2. GENERAL GUIDELINES

- This device is a lighting effect for professional use on stages, in discotheques, theatres, etc. the device was designed for indoor use.
- 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 $-10^{\circ} \mathrm{C}$ to $45^{\circ} \mathrm{C}$. Do not use the device outside of this temperature range.
- The light source of this luminaire is not replaceable; when the light source reaches its end of life the whole luminaire shall be replaced.

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~, $50 / 60 \mathrm{~Hz}$
- Power Consumption: 1470W


## LIGHT SOURCE

- LED: White LED, $8000 \pm 400 \mathrm{~K}$ Color Temperature
- Extremely long Life: >50,000H


## MOVEMENT

- Pan movement: $540^{\circ} / 630^{\circ}$ Optional ( 16 bit)
- Tilt movement: $270^{\circ}$ ( 16 bit)
- Advanced moving system: fast, stable and quite, auto x-y repositioning


## COLORS

- CMY+CTO color mixing, uniform, linear and speed can be adjustable
- 1 Color wheel: 6 dichroic filters + open, indexable, rainbow effect


## GOBOS

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


## FEATURES

- 3 Control channel modes: 46/44/70 channels
- 2 Operation modes: DMX-512, Master / Slave mode
- Strobe effect with 1-25 flashes per second and pulse effect
- Rotating prism: 5-Facet Prism and Linear Prism, 16 prism Macros
- Animation wheel: can make special dynamic flame or water effect
- Focus: Motorized focus
- Stepless frost: $0 \% \sim 100 \%$ linear change frost
- Stepless iris: $5 \% \sim 100 \%$ linear change iris, pulse iris effect
- Dimmer: $0 \% \sim 100 \%$ full range dimming


## DISPLAY

- Advanced and convenient full -color LCD, with rechargeable battery(optional)
- Can be changed $180^{\circ}$ reverse to fit for different installation position


## SOFTWARE

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

## OTHER SPEC

Input signal isolation: guarantees stable signal transmission without interference

Advanced RDM function

## WEIGHT

Net weight: 46.1 kg

## DMX CHANNEL CHART



|  | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | $\begin{aligned} & 37 / 39 \\ & 41 / 43 \end{aligned}$ | $\begin{aligned} & 38 / 40 \\ & 42 / 44 \end{aligned}$ | 45 | 46 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \% | $\begin{aligned} & \text { Chase } \\ & \text { Fade } \\ & \hline \end{aligned}$ | Rota. Gobo 1 | Gobo Rotation 1 | Rota. Gobo 2 | $\begin{gathered} \text { Gobo } \\ \text { Rotation 2 } \end{gathered}$ | $\begin{gathered} \text { Animation } \\ \text { Wheel 1 } \end{gathered}$ | Animation wheel 2 | Rotating <br> Animation | Iris | Prism 1 | Prism Rotation 1 | Prism 2 | Prism Rotation2 | Frost 1 | Frost 2 | $\begin{array}{\|l\|l\|} \hline \text { Blade } 1 \mathrm{~A} \mid \\ 2 \mathrm{~A} / 3 \mathrm{~A} / 4 \mathrm{~A} \\ \hline \end{array}$ | $\begin{gathered} \text { Blade } 18 / 28 \\ 138 / 48 \\ \text { Rotation } \end{gathered}$ | All Blade Rotation | $\begin{aligned} & \text { Auto } \\ & \text { programs } \\ & \hline \end{aligned}$ |
|  |  | $\begin{aligned} & \text { (0) } \\ & 10 \text { ? } \\ & 102 \\ & 10 \text { ? } \\ & 101 \\ & 102 \end{aligned}$ | (9) | $\begin{aligned} & \text { (0) } \\ & 202 \\ & 102 \\ & 102 \\ & i 02 \end{aligned}$ | Stop |  | 4 <br> (4) | Backwards rotation from slow to fast | Pulse copering slow to fast <br> Pulse closing fast to sow | 5-Facet Prism | $\begin{aligned} & \otimes \\ & \otimes \end{aligned}$ | Linear Prism |  | $\bigcirc$ | $\bigcirc$ | Close |  | (®) |  |
| 50\%- | Fade Chase | $\begin{aligned} & \text { Q? } \\ & \text { Qol } \\ & \text { Gobo } \\ & \text { Shake } \end{aligned}$ |  | $\begin{aligned} & \mathrm{Ol} \\ & \text { Gobo } \\ & \text { Shake } \end{aligned}$ |  | (4.4) | (4) | Forwards |  |  | $\otimes$ |  | 园 |  |  |  | (0) | 0 0 0 |  |
|  |  | 0 0 0 0 0 0 0 0 0 |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  | $\substack{\text { rotation } \\ \text { from } \\ \text { fast to slow }}$ Index |  | Open | Prism indexing | Open | Prism indexing | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ Open |  |  | Theatre fan control mode Studio fan control mode Stage fan control mode Auto fan control mode Display Invert On Display Invert Off Display On Display Off Unused |

## 3. FIXTURE OVERVIEW



1) LED Assembly
2) Tilt Lock
3) Display
4) Rotary knob
5) Pan Lock
6) Handle

7) DMX Out
8) DMX In
9) Power In
10) RJ45 Out
11) RJ45 In

## 4. DIMENSIONAL DRAWINGS

4.1. Fixture Dimension


### 4.2. Gobo Filter Dimension

## Black \& White Gobo:


$\Phi 1.1 \mathrm{~mm}$


## Color Gobo:


$\Phi 2.2 \mathrm{~mm}$
Thickness

Double Layer Cassette:

4.3. Color Filter Dimension


### 4.4. Animation Filter Dimension

## Black \& White Animation:



Color Animation:


## 5. INSTALLATION INSTRUCTIONS

5.1. Rigging the device

| CAUTION! |
| :--- | :--- |
|  |

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

- Fix the clamp to the bracket by tightening the M12 nut and bolt to the bracket through the $\Phi 13$ hole in the middle of the bracket.
- Insert the quick-lock fasteners of the first Omega holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise.
- Install the second Omega holder.
- Pull the safety cable through the holes on the bottom of the base and over the trussing system or another suitable rigging point. Insert the end into the carabiner and tighten the safety screw.

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

### 5.3. RIGGING DRAWINGS



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


## 皿家 Important:

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

## 6. DMX-512 CONTROL CONNECTION

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



## 7. DMX-512 CONNECTION WITH DMX TERMINATOR

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


3 Pin Or 5 Pin


## 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 tó listen" to the digital control information sent out from the DMX controller. The allocation of this starting address is achieved by setting the correct address number on the display located on the base of the device.

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

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

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

In the case of the LED moving head, in 46 channel mode, you should set the starting address of the first unit to 1 , the second unit to $47(46+1)$, the third unit to $93(46+47)$, and so on.

## 9. OPERTING INSTRUCTIONS OF THE INTERNAL DMX WIRELESS SYSTEM

### 9.1 Equipments:

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

### 9.2 Message from the LED indicator:

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

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

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

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

OFF: (De-activate WDMX)

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

## REST: (reset WDMX memory)

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

### 9.4 Setup the wireless system:

1) Connect the transmitter with the DMX controller.
2) To make the fixture installed with wireless receiver $\log$ in to the transmitter.
a) Initially, the indicator on the receiver fixture should be in Solid red.
b) Press and hold the configuration button on transmitter for less than 3 seconds the red/green LEDs on the transmitter and the receiver fixture will flash rapidly for about $5 \sim 10$ 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 ( T 1 ) ;
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 T 1 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 T 2 less then less than 3 second, the fixtures will connect with the T 2 .

## 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 Rotary knob features: you can set the starting address, run the pre-programmed program or reset the device.

The main menu is accessed by long pressing the rotary knob until the display starts flashing. Browse through the menu by turning rotary knob clockwise or counterclockwise.

Double clicking in order to select the desired menu or long pressing to exit menu, double click the Rotary knob 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 rotary knob for seconds and the Display will turn on by using the unit's battery.

PS: No response when quick press the rotary knob.
CAUTION!
THE BATTERY MUST BE A LI-ION RECHARGEABLE BATTERY, THE SPECIFICATION IS AS FOLLOWING:

## $+\quad-$ <br> Li-ion Rechargeable Battery ICR 14500 3.7V

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 .

Default settings shaded

| Address | Address | DMX address:001-XXX |  | DMX address setting |
| :---: | :---: | :---: | :---: | :---: |
| $\frac{0}{0}$ | User Mode | Stand Mode <br> Basic Mode <br> Extend Mode <br> User Mode A <br> User Mode B <br> User Mode C |  | User's mode to change channel numbers |
|  | Edit User ModeA | Max channel PAN : |  | Preset User modes A,B,C |
| $\frac{0}{0}$ | Status | No DMX Mode <br> Pan Reverse <br> Tilt Reverse <br> Pan Degree <br> Feedback <br> Init PAN <br> Init TILT <br> Pan/Tilt Spd <br> Zoom/Focus Spd <br> Hibernation <br> Art-Net to DMX | Close/Hold/Auto ON/OFF <br> ON/OFF <br> 630/540 <br> ON/OFF <br> ON/OFF <br> ON/OFF <br> Speed 1~4 <br> Speed 1~ 3 <br> OFF, 01M~99M <br> ON/OFF | Auto run if no DMX <br> Pan Reverse movement <br> Tilt Reverse movement <br> Pan Degree Select <br> Movement Feedback <br> Init PAN <br> Init TILT <br> Movement Speed <br> Zoom/Focus Spd <br> Stand by Mode <br> Art-Net to DMX |
|  | Service PIN | Service PIN <br> Set Ip <br> Cross Load SW <br> Clr LED Time | Password=XXX <br> xxx.xxx.xxx.xxx <br> ON/OFF <br> ON/OFF | Service Password" $=050$ " <br> Set Ip <br> Cross Load SW <br> Clr LED Time |
|  | Fans Control | Auto <br> Stage <br> Studio <br> Silence <br> Theatre |  | Fans Speed select |
|  | Disp.Setting | Shutoff Time <br> Flip Display <br> Key Lock <br> DispFlash | $\begin{aligned} & \text { 02~60m 05m } \\ & \text { ON/OFF } \\ & \text { ON/OFF } \\ & \text { ON/OFF } \end{aligned}$ | Display shutoff time <br> Reverse 180 degree <br> Key Lock <br> DispFlash |
|  | Signal Select | DMX <br> WDMX <br> Art—Net <br> sACN |  | DMX <br> WDMX <br> Art-Net <br> sACN |
|  | Temp. C/F | Celsius <br> Fahrenheit |  | Temperature between ${ }^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{F}$$\quad$ switch |
|  | Initial Pos. | PAN = XXX |  | Initial effect position |
|  | Wireless DMX | Activate WDMX <br> Act\&Data Out <br> Rest WDMX |  | Activate WDMX Act\&Data Out Rest WDMX |


|  | Dim Curve | Square Law Linear |  | Dim Curve |
| :---: | :---: | :---: | :---: | :---: |
|  | Refresh Select | $\begin{aligned} & 1.2 \mathrm{~K} \\ & 2.4 \mathrm{~K} \\ & 16 \mathrm{~K} \\ & 25 \mathrm{~K} \end{aligned}$ |  | Refresh Select |
|  | Gobo Correction | ON/OFF |  | Gobo Correction |
|  | Reset P/T Fade | ON/OFF |  | Reset P/T Fade |
|  | Trigger | DMX Value Disp. <br> Set To Slave <br> Auto Program | PAN...... <br> Slave1,Slave2,Slave3 <br> Master / Alone | DMX Value Disp. <br> Set To Slave <br> Auto Program |
|  | ResetDefault | ON/OFF |  | Restore factory set. |
|  | Time Info. | Current Time Ttl Life Hrs Last Run Hrs LED Hours Timer PIN Clr Last Run |  | XXXX(Hours) <br> XXXX(Hours) <br> XXXX(Hours) <br> XXXX(Hours) <br> Password=XXX <br> ON/OFF |
|  | Temp. Info | XXX ${ }^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{F}$ |  |  |
|  | Fan Info. | xxxxRPM |  | Fan information |
|  | Software Ver | V1.0...... |  | Software version |
|  | Network | IP,Mask,Mac |  | Network |
|  | Home | All <br> Pan\&Tilt <br> Color <br> Gobo <br> Other |  | Reset All <br> Reset Pan\&Tilt <br> Reset Color <br> Reset Gobo <br> Reset Others |
|  | Test Channel | PAN ...... |  | Test function |
| $\stackrel{\sim}{\mathscr{\sim}}$ | Manual Ctrl. | $\text { PAN }=X X X$ |  | Fine adjustment of the lamp |
|  | Calibration | -Password- <br> PAN |  | Password "050" <br> Calbrate and adjust the effects to standard/right position |
|  | Gobo Replace | Gobo Wheel 1 Gobo Wheel 2 |  | Gobo Replace |
|  | Select Prog. | Prog. Part $1=$ Prog <br> Prog. Part $2=$ Prog <br> Prog. Part $3=$ Prog | $\begin{array}{ll} \mathrm{m} 1 \sim 10 & \text { Program } 1 \\ \mathrm{~m} 1 \sim 10 & \text { Program } 2 \\ \mathrm{~m} 1 \sim 10 & \text { Program } 3 \end{array}$ | Select programs to be run |
| $\begin{aligned} & \ddot{U} \\ & 0.0 \\ & 0 \end{aligned}$ | Edit Prog. | Program 1 <br> Program 10 | Program Test <br> Step 01=SCxxx <br> Step 64=SCxxx | Testing program <br> Program in loop <br> Save and exit |
|  | Edit Scenes | Edit Scene 001 <br> ~ Edit Scene 250 | Pan,Tilt,...... <br> --Fade Time-- <br> --Secne Time-- <br> Input By Outside | Save and automatically return manual scenes edit |
|  | Scenes Input | XX $\sim$ 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 rotary knob to access main menu.
2. The display will show" ADDRESS" .
3. Double click then display" Set DMX Address" .
4. Turn the rotary knob clockwise then display" A001~AXXX" .
5. Long press the rotary knob to back to last button press - " Set DMX Address", then back to main menu by long press again.

### 10.2.Mode

### 10.2.1. User Mode

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

1. Double clicking rotary knob to access main menu, turn the rotary knob clockwise to display" USERS MODE" .
2. Double click to edit.
3. Turn the rotary knob clockwise to display" User mode", Double click to edit.
4. When in" Extend Mode", turn the rotary knob to select" Basic mode"," Stand Mode", " User Mode A"," User Mode B" and" User Mode C" .
5. Long press the rotary knob to back to last button press -" User Mode", then back to main menu by long press again.

### 10.2.2. Edit User Mode

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

1. Double clicking rotary knob to access" USERS MODE" menu, turn the rotary knob until display" Edit User" .
2. Double click 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 the rotary knob to back to last button press - " Edit User", then back to main menu by long press again.

### 10.3.Options

### 10.3.1. Status

## No DMX Status

With this function, when the drive is not DMX signal, it runs automatism, close, hold and music, the default is hold.

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

## Pan Reverse

With this function you can reverse the Pan-movement.

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

## Tilt Reverse

With this function you can reverse the Tilt-movement.

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select "Status" .
4. Double click to access" Status" menu, The display will show" Tilt Reverse" .
5. Double click to access" Tilt Reverse", The display will show " OFF", Turn the rotary knob to select" NO" .
6. Long press the rotary knob to back to last button press -" 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 clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Status" .
4. Double click to access" Status" menu, The display will show" Pan Degree" .
5. Double click to access" Pan Degree", The display will show " 540 ", Turn the rotary knob to select" 630 " .
6. Long press the rotary knob to back to last button press -" Status", then back to main menu by long press again.

## Feedback

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Status" .
4. Double click to access" Status" menu, The display will show" Feedback" .
5. Double click to access" Feedback", The display will show " ON", Turn the rotary knob to select" OFF" .
6. Long press the rotary knob to back to last button press -" Status", then back to main menu by long press again.

## Init PAN

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

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

## Init TILT

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

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

## Pan/Tilt Spd

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Status" .
4. Double click to access" Status" menu, The display will show" Pan/Tilt Spd" .
5. Double click to access" Pan/Tilt Spd", The display will show " Speed 1", Turn the rotary knob to select" Speed 1", " Speed 2", " Speed 3"," Speed 4" .
6. Long press the rotary knob to back to last button press -" Status", then back to main menu by long press again.

## Zoom/Focus Spd

With this function, you can select zoom/focus mode from 1 to 3 .

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Status" .
4. Double click to access" Status" menu, The display will show" Zoom/Focus Spd" .
5. Double click to access̋ Zoom/Focus Spd", The display will show " Speed 1", Turn the rotary knob to select" Speed 1"," Speed 2", " Speed 3" .
6. Long press the rotary knob to back to last button press -" Status", then back to main menu by long press again.

## Hibernation: Standby mode

The device and step motors will be power off if the fixture stay without DMX signal for 15 mins (Factory default). And the fixture will be reset before working once it receive DMX signal again.

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

## Art-Net to DMX

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Status" .
4. Double click to access" Status" menu, The display will show" Art-Net to DMX" .
5. Double click to access" Art-Net to DMX", The display will show " OFF", Turn the rotary knob to select" ON" .
6. Long press the rotary knob to back to last button press -" Status", then back to main menu by long press again.

### 10.3.2. Service PIN

## Password

The Password for this function is" 050 " .

## Set IP

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

## Cross Load SW

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

## Clr LED Timer

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

### 10.3.3. Fans Control

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Fans Control" .
4. Double click to access" Fans Control" menu, The display will show" Head Control" .
5. Double click to access "Head Control", The display will show" Auto", Turn the rotary knob to select" Stage" , " Studio" , " Silence" , " Theatre" .
6. Long press the rotary knob to back to last button press -" Fans Control", then back to main menu by long press again.

### 10.3.4. Disp. Setting

## Shut off Time

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Display Setting" .
4. Double click to access̈ Display Setting" menu, The display will show" Shut off Time".
5. Double click to access̊ Shut off Time", The display will show " 05 m ", Turn the rotary knob to select" $02 \sim 60 \mathrm{~m}$ " .
6. Long press the rotary knob to back to last button press " Display Setting", then back to main menu by long press again.

## Flip Display

With this function you can rotate the display by $180^{\circ}$.

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Display Setting" .
4. Double click to accesś" Display Setting" menu, The display will show" Flip Display" .
5. Double click to access" Flip Display", The display will show "OFF", Turn the rotary knob to select" ON" .
6. Long press the rotary knob to back to last button press " 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 3seconds if you do not need this function.

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Display Setting" .
4. Double click to access" Display Setting" menu, The display will show" Key Lock" .
5. Double click to access "Key Lock", The display will show " OFF", Turn the rotary knob to select" ON" .
6. Long press the rotary knob to back to last button press " Display Setting", then back to main menu by long press again.

## DispFlash

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

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

### 10.3.5. Signal Select

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

### 10.3.6. Temperature C/F

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

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

### 10.3.7. Initial Pos.

With this function you can display initial effect position.

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

### 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 rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Wireless DMX" .
4. Double click to access" Wireless DMX", The display will show " Activate WDMX", Turn the rotary knob to select" Act\&Data Out" , "Rest WDMX" .
5. Long press the rotary knob to back to last button press -" Wireless DMX", then back to main menu by long press again.

### 10.3.9. Dim Curve

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Dim Curve" .
4. Double click to access" Dim Curve", The display will show " Square Law", Turn the rotary knob to select" Linear" .
5. Long press the rotary knob to back to last button press -" Dim Curve", then back to main menu by long press again.

### 10.3.10. Refresh Select

With this function you can select the refresh.

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Refresh Select" .
4. Double click to acces" Refresh Select", The display will show" 1.2 K ", Turn the rotary knob to select" 2.4 K " , " 16 K ", " 25 K " .
5. Long press the rotary knob to back to last button press -" Refresh Select", then back to main menu by long press again.

### 10.3.11. Gobo Correction

With this function you can select the CTB.

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Gobo Correction" .
4. Double click to access" Gobo Correction", The display will show " ON", Turn the rotary knob to select" OFF" .
5. Long press the rotary knob to back to last button press -" Gobo Correction", then back to main menu by long press again.

### 10.3.12. Reset P/T Fade

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Reset P/T Fade" .
4. Double click to acces"s Reset P/T Fade", The display will show" OFF", Turn the rotary knob to select" ON" .
5. Long press the rotary knob to back to last button press " Reset P/T Fade", then back to main menu by long press again.

### 10.3.13. Trigger

## DMX Value Disp.

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Trigger" .
4. Double click to access" Trigger" menu, The display will show " DMX Value Disp" .
5. Double click to access" DMX Value Disp", The display will show " PAN= $\qquad$ ." .
6. Long press the rotary knob to back to last button press -" Trigger", then back to main menu by long press again.

## Set To Slave

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Options" .
3. Double click to access" Options", turn the rotary knob to select " Trigger" .
4. Double click to access" Trigger" menu, The display will show " Set To Slave" .
5. Double click to access" Set To Slave", The display will show " Slave1"," Slave2", " Slave3" .
6. Long press the rotary knob to back to last button press -" 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 under̈ Edit scenes". With this function, you can run the individual scenes either automatically, i. e. with the adjusted Step-Time.

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

### 10.3.14. Reset Default

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

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

### 10.4. Info

### 10.4.1. Time Info.

## Current Time

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Info" .
3. Double click to access" Info", turn the rotary knob to select " Time Info." .
4. Double click to access" Time Info.", The display will show " Current Time" .
5. Double click to access" Current Time", The display will show " XXXX (Hours)" .
6. Long press the rotary knob to back to last button press " 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 clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Info" .
3. Double click to access" Info", turn the rotary knob to select " Time Info." .
4. Double click to access" Time Info.", The display will show " Ttl Life Hrs" .
5. Double click to access" Ttl Life Hrs", The display will show " XXXX (Hours)" .
6. Long press the rotary knob to back to last button press " 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 clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Info" .
3. Double click to access" Info", turn the rotary knob to select " Time Info."
4. Double click to access" Time Info.", The display will show " Last Run Hrs" .
5. Double click to access" Last Run Hrs", The display will show " XXXX (Hours)" .
6. Long press the rotary knob to back to last button press " Time Info", then back to main menu by long press again.

## LED Hours

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Info" .
3. Double click to access" Info", turn the rotary knob to select " Time Info." .
4. Double click to access" Time Info.", The display will show " LED Hours" .
5. Double click to access" LED Hours", The display will show " XXXX (Hours)" .
6. Long press the rotary knob to back to last button press " Time Info", then back to main menu by long press again.

## Timer PIN

With this function, you can display the timer password.

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

## Clr Last Run

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Info" .
3. Double click to access" Info", turn the rotary knob to select " Time Info." .
4. Double click to access" Time Info.", The display will show " Clear Last Run" .
5. Double click to acces"̈ Clear Last Run", The display will show " OFF", turn the rotary knob to select" ON" .
6. Long press the rotary knob to back to last button press " Time Info", then back to main menu by long press again.

### 10.4.2. Temp. Info

## Head Temp.

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Info"
3. Double click to access" Info", turn the rotary knob to select " Temp Info" .
4. Double click to access" Temp Info", The display will show " Head Temp." .
5. Double click to access" Head Temp.", The display will show " $\mathrm{XXX}{ }^{\circ} \mathrm{C} /{ }^{\circ} \mathrm{F}$ " .
6. Long press the rotary knob to back to last button press " Temp Info", then back to main menu by long press again.

### 10.4.3. Fan Info.

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Info" .
3. Double click to access" Info", turn the rotary knob to select " Fan Info." .
4. Double click to access" Fan Info.", The display will show " xxxxRPM" .
5. Long press the rotary knob to back to last button press -" Fan Info.", then back to main menu by long press again.

### 10.4.4. Software Ver

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

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

### 10.4.5. Network

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

### 10.5. Test

10.5.1. Home

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display "Test" .
3. Double click to access" Test", turn the rotary knob to select " Home" .
4. Double click to access" Home", The display will show" All" , Turn the rotary knob to select" All"," Pan\&Tilt"," Color"," Gobo"," Other" .
5. Long press the rotary knob to back to last button press " Test", then back to main menu by long press again.

### 10.5.2. Test Channel

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

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Test" .
3. Double click to access" Test", turn the rotary knob to select "Test Channel" .
4. Double click to access" Test Channel", The display will show" Pan", Turn the rotary knob to select other channel.
5. Long press the rotary knob to back to last button press " Test", then back to main menu by long press again.

### 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 rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Test" .
3. Double click to access" Test", turn the rotary knob to select " Manual control" .
4. Double click to access" Manual control", The display will show" PAN=XXX" .
5. Long press the rotary knob to back to last button press " Test", then back to main menu by long press again.

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

### 10.5.5. Gobo Replace

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Test" .
3. Double click to access" Test", turn the rotary knob to select " Gobo Replace" .
4. Double click to acces" Gobo Replace", The display will show Gobo Wheel 1"," Gobo Wheel 2" .
5. Long press the rotary knob to back to last button press " Test", then back to main menu by long press again.

### 10.6. Preset

1. Double clicking rotary knob to access main menu.
2. Turn the rotary knob clockwise then display" Preset" .
3. Double click to access" Preset", turn the rotary knob to select " Select prog."," Edit prog.", " Edit Scenes", " Scenes Input" .
4. Long press the rotary knob to back to last button press -" Preset" .

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 | Auto Pro Part 2 | Auto Pro Part 3 | Auto Pro Part 1 | Auto Pro Part 2 | Auto Pro Part 3 | Auto Pro Part 1 | Auto Pro Part 2 | Auto Pro 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:


## 11. DMX PROTOCOL

| DMX channel's functions and their values (70DMX channels): |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Mode/Channel |  |  | Value | Function |
| St | Ba | Ex |  |  |
| 1 | 1 | 1 |  | PAN Movement 8bit : |
|  |  |  | 0-255 | Pan Movement |
| 2 |  | 2 |  | Pan Fine 16bit |
|  |  |  | 0-255 | Fine control of Pan movement |
| 3 | 2 | 3 |  | TILT Movement 8bit : |
|  |  |  | 0-255 | Tilt Movement |
| 4 |  | 4 |  | Tilt Fine 16bit |
|  |  |  | 0-255 | Fine control of Tilt movement |
| 5 | 3 | 5 |  | Speed Pan/Tilt movement: |
|  |  |  | 0-225 | max to min speed |
|  |  |  | 226-235 | blackout by movement |
|  |  |  | 236-245 | blackout by all wheel changing |


|  |  |  | 246-255 | no function |
| :---: | :---: | :---: | :---: | :---: |
| 6 | 4 | 6 |  | Shutter, strobe: |
|  |  |  | 0-10 | Shutter closed |
|  |  |  | 11-20 | No function (shutter open) |
|  |  |  | 21-117 | Strobe effect slow to fast |
|  |  |  | 118-126 | No function (shutter open) |
|  |  |  | 127-180 | Pulse-effect in sequences |
|  |  |  | 181-191 | No function (shutter open) |
|  |  |  | 192-245 | Random strobe effect slow to fast |
|  |  |  | 246-255 | No function (shutter open) |
| 7 | 5 | 7 |  | Dimmer intensity: |
|  |  |  | 0-255 | Intensity 0 to 100\% |
|  |  | 8 |  | Fine Dimmer intensity: |
|  |  |  | 0-255 | Dimmer intensity fine |
| 8 | 6 | 9 |  | Zoom: |
|  |  |  | 0-255 | Zoom adjustment from small to big |
|  |  | 10 |  | Zoom Fine: |
|  |  | 10 | 0-255 | Zoom adjustment Fine |
| 9 | 7 | 11 |  | Focus: |
|  |  |  | 0-255 | Continuous adjustment from near to far |
|  |  |  |  | Focus Fine: |
|  |  | 12 | 0-255 | Continuous adjustment Fine |
| 10 | 8 | 13 |  | Auto Focus: |
|  |  |  | 0-50 | Auto Focus Off |
|  |  |  | 51-100 | 5m |
|  |  |  | 101-150 | 7.5 m |
|  |  |  | 151-200 | 10 m |
|  |  |  | 201-255 | 15m |
| 11 | 9 | 14 |  | AutoFocus Fine: |
| 11 |  |  | 0-255 | Continuous adjustment Fine |
| 12 | 10 | 15 |  | Color Wheel: |
|  |  |  | 0-3 | Open / white |
|  |  |  | 4-7 | Color 1 |
|  |  |  | 8-11 | Color 2 |
|  |  |  | 12-15 | Color 3 |
|  |  |  | 16-19 | Color 4 |
|  |  |  | 20-23 | Color 5 |
|  |  |  | 24-27 | Color 6 |
|  |  |  | 28-127 | Color indexing |
|  |  |  | 128-189 | Backwards rainbow effect from fast to slow |
|  |  |  | 190-193 | No rotation |
|  |  |  | 194-255 | Forwards rainbow effect from slow to fast |
|  |  | 16 |  | Color Wheel Fine: |


|  |  |  | 0-255 | Color Wheel colour change to any position Fine |
| :---: | :---: | :---: | :---: | :---: |
| 13 | 11 | 17 |  | Cyan Color : |
|  |  |  | 0-255 | Cyan (0-white, 255-100\% Cyan) |
|  |  | 18 |  | Cyan Color Fine : |
|  |  | 18 | 0-255 | Cyan Fine |
| 14 | 12 | 19 |  | Magenta Color : |
|  |  |  | 0-255 | Magenta (0-white, 255-100\% magenta) |
|  |  | 20 |  | Magenta Color Fine : |
|  |  | 20 | 0-255 | Magenta Fine |
| 15 | 13 | 21 |  | Yellow Color: |
|  |  |  | 0-255 | Yellow (0-white, 255-100\% Yellow) |
|  |  | 22 |  | Yellow Color Fine : |
|  |  | 22 | 0-255 | Yellow Fine |
| 16 | 14 | 23 |  | CTO Color: |
|  |  |  | 0-255 | CTO (0-white, 255-100\% CTO) |
|  |  | 24 |  | CTO Color Fine : |
|  |  | 24 | 0-255 | CTO Fine |
| 17 | 15 | 25 |  | CTB Color : |
|  |  |  | 0-255 | CTB (0-white, 255-100\% CTB) |
|  |  | 26 |  | CTB Color Fine : |
|  |  | 26 | 0-255 | CTB Fine |
| 18 | 16 | 27 |  | CTP Color : |
|  |  |  | 0-255 | CTP (0-white, 255-100\% CTP) |
|  |  | 28 |  | CTP Color Fine: |
|  |  |  | 0-255 | CTP Fine |
| 19 | 17 | 29 |  | Color Presets: |
|  |  |  | 0-255 | See Appendix |
| 20 | 18 | 30 |  | Chase Patterns: |
|  |  |  | 0-9 | Open |
|  |  |  | 10-19 | Chase 1 |
|  |  |  | 20-29 | Chase 2 |
|  |  |  | 30-39 | Chase 3 |
|  |  |  | 40-49 | Chase 4 |
|  |  |  | 50-59 | Chase 5 |
|  |  |  | 60-69 | Chase 6 |
|  |  |  | 70-79 | Chase 7 |
|  |  |  | 80-89 | Chase 8 |
|  |  |  | 90-99 | Chase 9 |
|  |  |  | 100-109 | Chase 10 |
|  |  |  | 110-119 | Chase 11 |
|  |  |  | 120-129 | Chase 12 |
|  |  |  | 130-139 | Chase 13 |
|  |  |  | 140-255 | Reserved |


| 21 | 19 | 31 |  | Chase Speed: |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0-125 | Fast to Slow Backward |
|  |  |  | 126-130 | Stop(Speed=0) |
|  |  |  | 131-255 | Slow to Fast Forward |
| 22 | 20 | 32 |  | Chase Fade: |
| 22 | 20 | 32 | 0-255 | Fade Chase |
| 23 | 21 | 33 |  | Rotating gobos, cont. rotation 1: |
|  |  |  | 0-9 | Open |
|  |  |  | 10-19 | Rot. gobo 1 |
|  |  |  | 20-29 | Rot. gobo 2 |
|  |  |  | 30-39 | Rot. gobo 3 |
|  |  |  | 40-49 | Rot. gobo 4 |
|  |  |  | 50-59 | Rot. gobo 5 |
|  |  |  | 60-69 | Rot. gobo 6 |
|  |  |  | 70-77 | Rot. Gobo 7 |
|  |  |  | 78-93 | Gobo 1 shake slow to fast |
|  |  |  | 94-109 | Gobo 2 shake slow to fast |
|  |  |  | 110-125 | Gobo 3 shake slow to fast |
|  |  |  | 126-141 | Gobo 4 shake slow to fast |
|  |  |  | 142-157 | Gobo 5 shake slow to fast |
|  |  |  | 158-173 | Gobo 6 shake slow to fast |
|  |  |  | 174-189 | Gobo 7 shake slow to fast |
|  |  |  | 190-221 | Gobo wheel rotation backwards from fast to slow |
|  |  |  | 222-223 | No rotation |
|  |  |  | 224-255 | Gobo wheel rotation forwards from slow to fast |
| 24 | 22 | 34 |  | Rotating gobo index,rotating gobo rotation 1: |
|  |  |  | 0-127 | Gobo indexing |
|  |  |  | 128-189 | Forwards gobo rotation from fast to slow |
|  |  |  | 190-193 | No rotation |
|  |  |  | 194-255 | Backwards gobo rotation from slow to fast |
|  |  | 35 |  | Rotating gobo indexing Fine 1: |
|  |  |  | 0-255 | Fine indexing |
| 25 | 23 | 36 |  | Rotating gobos, cont. rotation 2: |
|  |  |  | 0-9 | Open |
|  |  |  | 10-19 | Rot. gobo 1 |
|  |  |  | 20-29 | Rot. gobo 2 |
|  |  |  | 30-39 | Rot. gobo 3 |
|  |  |  | 40-49 | Rot. gobo 4 |
|  |  |  | 50-59 | Rot. gobo 5 |
|  |  |  | 60-69 | Rot. gobo 6 |
|  |  |  | 70-77 | Rot. Gobo 7 |
|  |  |  | 78-93 | Gobo 1 shake slow to fast |



|  |  |  | 194-255 | Backwards prism rotation from slow to fast |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 46 |  | Rotating prism indexing Fine 1: |
|  |  |  | 0-255 | Fine indexing |
| 33 | 31 | 47 |  | Prism 2: |
|  |  |  | 0-127 | Open |
|  |  |  | 128-255 | Linear Prism |
| 34 | 32 | 48 |  | Rotating prism index, rotating prism rotation 2 |
|  |  |  | 0-127 | Prism indexing |
|  |  |  | 128-189 | Forwards prism rotation from fast to slow |
|  |  |  | 190-193 | No rotation |
|  |  |  | 194-255 | Backwards prism rotation from slow to fast |
|  |  | 49 |  | Rotating prism indexing Fine 2: |
|  |  | 49 | 0-255 | Fine indexing |
| 35 | 33 | 50 |  | Frost 1: |
|  |  |  | 0-255 | 0-100\% |
| 36 | 34 | 51 |  | Frost 2: |
|  |  |  | 0-255 | 0-100\% |
| 37 | 35 | 52 |  | Blade 1A: |
|  |  |  | 0-255 | Open to Close |
|  |  | 53 |  | Blade 1A Fine : |
|  |  |  | 0-255 | Open to Close Fine |
| 38 | 36 | 54 |  | Blade 1B : |
|  |  |  | 0-255 | Open to Close |
|  |  | 55 |  | Blade 1B Fine : |
|  |  |  | 0-255 | Open to Close Fine |
| 39 | 37 | 56 |  | Blade 2A: |
|  |  |  | 0-255 | Open to Close |
|  |  | 57 |  | Blade 2A Fine : |
|  |  | 57 | 0-255 | Open to Close Fine |
| 40 | 38 | 58 |  | Blade 2B : |
|  |  |  | 0-255 | Open to Close |
|  |  | 59 |  | Blade 2B Fine : |
|  |  |  | 0-255 | Open to Close Fine |
| 41 | 39 | 60 |  | Blade 3A: |
|  |  |  | 0-255 | Open to Close |
|  |  | 61 |  | Blade 3A Fine : |
|  |  | 61 | 0-255 | Open to Close Fine |
| 42 | 40 | 62 |  | Blade 3B : |
|  |  |  | 0-255 | Open to Close |
|  |  | 63 |  | Blade 3B Fine : |
|  |  |  | 0-255 | Open to Close Fine |
| 43 | 41 | 64 |  | Blade 4A: |
|  |  |  | 0-255 | Open to Close |
|  |  | 65 |  | Blade 4A Fine : |


|  |  |  | 0-255 | Open to Close Fine |
| :---: | :---: | :---: | :---: | :---: |
| 44 | 42 | 66 |  | Blade 4B : |
|  |  |  | 0-255 | Open to Close |
|  |  | 67 |  | Blade 4B Fine : |
|  |  |  | 0-255 | Open to Close Fine |
| 45 | 43 | 68 |  | All Blade Rotation : |
|  |  |  | 0-255 | All Blade Rotation |
|  |  | 69 |  | All Blade Rotation Fine : |
|  |  | 69 | 0-255 | All Blade Rotation Fine |
| 46 | 44 | 70 |  | 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 |
|  |  |  | 25-29 | Auto fan control mode |
|  |  |  | 30-34 | Stage fan control mode |
|  |  |  | 35-39 | Studio fan control mode |
|  |  |  | 40-41 | Silence fan control mode |
|  |  |  | 42-44 | Theatre fan control mode |
|  |  |  | 45-49 | Square Law |
|  |  |  | 50-54 | Linear |
|  |  |  | 55-57 | 1.2K |
|  |  |  | 58-60 | 2.4 K |
|  |  |  | 61-63 | 16K |
|  |  |  | 64-69 | 25K |
|  |  |  | 70-74 | Gobo correction Off |
|  |  |  | 75-79 | Gobo correction On |
|  |  |  | 80-84 | All motor reset |
|  |  |  | 85-87 | Scan motor reset |
|  |  |  | 88-90 | Colors motor reset |
|  |  |  | 91-93 | Gobo motor reset |
|  |  |  | 94 | unused |
|  |  |  | 95 | Reset P/T Fade Off |
|  |  |  | 96 | Reset P/T Fade On |
|  |  |  | 97-99 | Other motor reset |
|  |  |  | 100-255 | unused |

Appendix

| name <br> $(=$ DMX value $)$ | color name |
| :---: | :--- |
| EC003 | LAVENDER TINT |
| EC004 | MEDIUM BASTARD AMBER |
| EC007 | PALE YELLOW |
| EC008 | DARK SALMON |
| EC009 | PALE AMBER GOLD |


| EC010 | MEDIUM YELLOW |
| :--- | :--- |
| EC013 | STRAW TINT |
| EC015 | DEEP STRAW |
| EC017 | SURPRISE PEACH |
| EC020 | MEDIUM AMBER |
| EC021 | GOLD AMBER |
| EC022 | DARK AMBER |
| EC024 | SCARLET |
| EC025 | SUNSET RED |
| EC026 | BRIGHT RED |
| EC029 | PALSA RED |
| EC035 | LIGHT PINK |
| EC036 | MEDIUM PINK |
| EC046 | DARK MAGENTA |
| EC048 | DARK PURPLE |
| EC052 | LIGHT LAVENDER |
| EC053 | PALE LAVENDER |
| EC058 | LAVENDER |
| EC063 | PALE BLUE |
| EC068 | SKY BLUE |
| EC071 | TOKIO BLUE |
| EC075 | EVENING BLUE |
| EC079 | JUST BLUE |
| EC085 | DEEPER BLUE |
| EC088 | LIME GREEN |
| EC089 | MOSS GREEN |
| EC090 | DARKYELLOW GREEN |
| EC100 | SPRING YELLOW |
| EC101 | YELLOW |
| EC102 | LIGHT AMBER |
| EC103 | STRAW |
| EC104 | DEEP AMBER |
| EC105 | ORANGE |
| EC106 | PRIMAY RED |
| EC107 | LIGHT ROSE |
| EC108 | ENGLISH ROSE |
| EC109 | LIGHT SALMON |
| EC110 | MIDDLE ROSE |
| EC111 | DARK PINK |
| EC113 | MAGENTA |
| EC116 | MEDIUM BLUE GREEN |
| EC118 | LIGHT BLUE |
| EC119 | DARK BLUE |
| EC120 | DEEP BLUE |
| EC126 | DARK GREEN |
|  | MAUVE |
|  | SMOKIGHT PINK |
|  |  |


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

## 12. ERROR MESSAGES

When you turn on the device, it will first perform a reset. The display may show" Err channel is XX " should there be problems with one or more functions." XX " stands for channel 1, 2, 3, 4, 5, 6 etc whose sensor has encountered a problem. For example, when the display shows" Err channel is Pan movement", it means there is an error on channel 1. If there are errors on channel 1, channel 3, channel 6 at the same time, you may see the error message, " Err channel is Pan movement"," Err channel is Tilt movement"" Err channel is Shutter", flash twice, and then the device will generate a second reset. If the error messages persist after performing a reset more than twice, the channels which have errors may not work properly however, all other functions can work as usual. Please contact your dealer or manufacturer for service. Self repair is not allowed.

## PAN- movement Er

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

## TILT- movement Er

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

## Zoom wheel Er

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

## Focus 1 wheel Er

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

## Focus 2 wheel Er

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

## Color wheel Er

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

## Cyan Color wheel Er

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

## Magenta Color wheel Er

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

## Yellow Color wheel Er

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

## CTO wheel Er

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

## Rot_Gobo1 wheel Er

(Rot_Gobo1 wheel - error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Rot_Gobo1-movement is not located in the default position after the reset.

## Rot_Gobo2 wheel Er

(Rot_Gobo2 wheel - error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Rot_Gobo2 - movement is not located in the default position after the reset.

## Animation 1 wheel Er

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

## Animation 2 wheel Er

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

## Iris wheel Er

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

## Prism_3 wheel Er

(Prism_3 wheel- error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Prism_3-movement is not located in the default position after the reset.

## Prism_5 wheel Er

(Prism_5 wheel- error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the stepper motor is defective (or its driving IC on the main PCB). The Prism_5-movement is not located in the default position after the reset.

## Frost 1 wheel Er

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

## Blade 1 wheel Er

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

## Blade 1_Rot wheel Er

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

## Blade 2 wheel Er

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

## Blade 2_Rot wheel Er

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

## Blade 3 wheel Er

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

## Blade 3_Rot wheel Er

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

## Blade 4 wheel Er

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

## Blade 4_Rot wheel Er

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

## All_Blade _Rot wheel Er

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

## Frost 2 wheel Er

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

## Animation_Rot 1 wheel Er

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

## Animation_Rot 2 wheel Er

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

## 13. CLEANING AND MAINTENANCE

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

