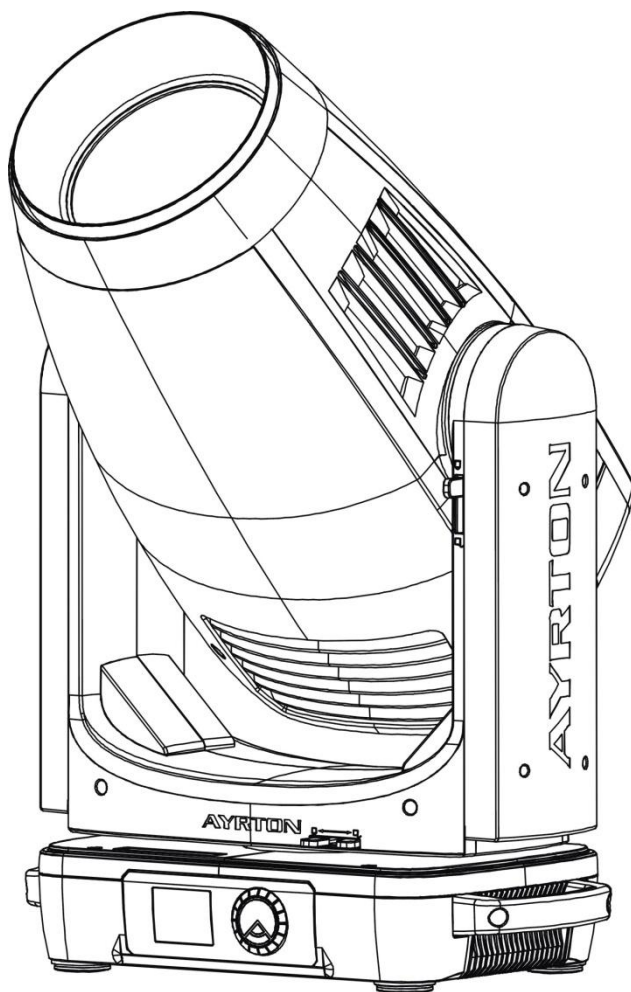




Manuel d'utilisation



huracán^x

KEEP THIS MANUAL FOR FUTURE NEEDS **CE**

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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! NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE. SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK
--	---

	CAUTION! NEVER TOUCH THE DEVICE DURING OPERATION! COVERS MAY BE HOT
---	---

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

For safety reasons, please be aware that all modifications to the device are forbidden.

If this device is operated in any way different to the ones described in this manual, the product may suffer damage and the warranty becomes void. Furthermore, any other operation may lead to short-circuits, burns, electric shocks etc.

2. FEATURES

POWER SUPPLY

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

LIGHT SOURCE

- LED: White LED, 8000± 400K Color Temperature
- Extremely long Life: >50,000H

MOVEMENT

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

COLORS

- CMY+CTO color mixing, uniform, linear and speed can be adjustable
- 1 Color wheel: 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%~100% linear change frost
- Stepless iris: 5%~100% linear change iris, pulse iris effect
- Dimmer: 0%~100% full range dimming

DISPLAY

- Advanced and convenient full –color LCD, with rechargeable battery(optional)
- Can be changed 180° reverse to fit for different installation position

SOFTWARE

8 pre-installed programs available upon selection

Upgrades: fast and convenient through DMX cable with DMX-512 controller

Reset DMX address, remote lamp control, reset can all be done by the DMX controller

Running time of fixture on display for reference

OTHER SPEC

Input signal isolation: guarantees stable signal transmission without interference

Advanced RDM function

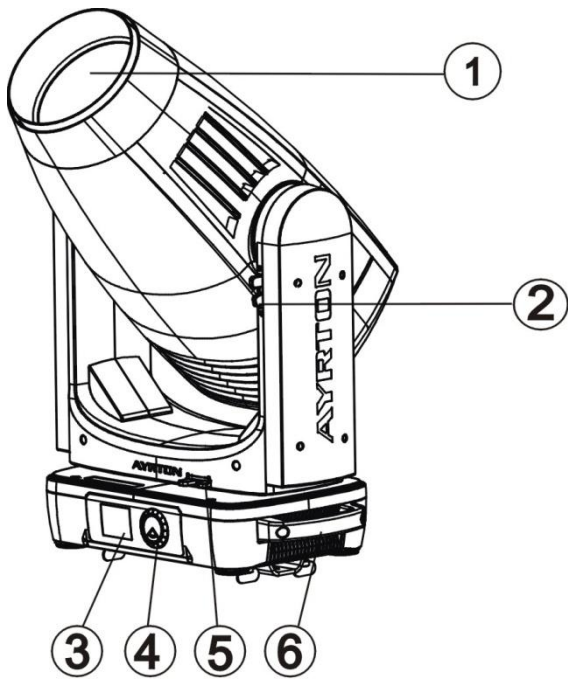
WEIGHT

Net weight: 46.1 kg

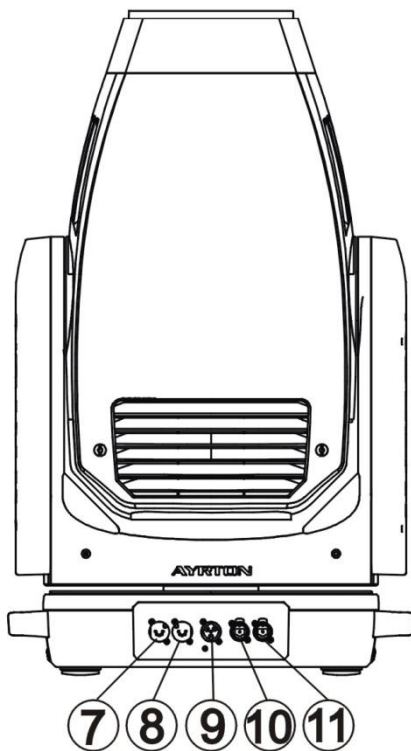
DMX CHANNEL CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
%	Pan	Pan Fine	Tilt	Tilt Fine	Speed Pan /Tilt movement	Strobe	Dimmer intensity	Zoom	Focus	Auto Focus	AutoFocus Fine	Color	C	M	Y	CTO	CTB	CTP	Color Presets	Chase Patterns	Chase Speed
100%		16bit Pan Fine		16bit Tilt Fine	No function					15m										Reserved	Slow to Fast Forward
75%					Blackout by all wheel changing					10m										Chase 13	
50%					Blackout by movement					7.5m									See Appendix	Chase 6	Stop (Speed=0)
25%					Min					5m										Chase 1	Fast to Slow Backward
0%					Max					Auto Focus Off										Open	
	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37/39 41/43	38/40 42/44	45	46		
%	Chase Fade	Rota. Gobo 1	Gobo Rotation 1	Rota. Gobo 2	Gobo Rotation 2	Animation wheel 1	Animation wheel 2	Rotating Animation	Iris	Prism 1	Prism Rotation1	Prism 2	Prism Rotation2	Frost 1	Frost 2	Blade 1A/ 2A/3A/4A	Blade 1B/2B/ 3B/4B Rotation	All Blade Rotation	Auto programs		
100%																			Unused		
75%																			Other motor reset		
50%																			Reset P/T Fade On		
25%																			Reset P/T Fade Off		
0%																			Unused		

3. FIXTURE OVERVIEW



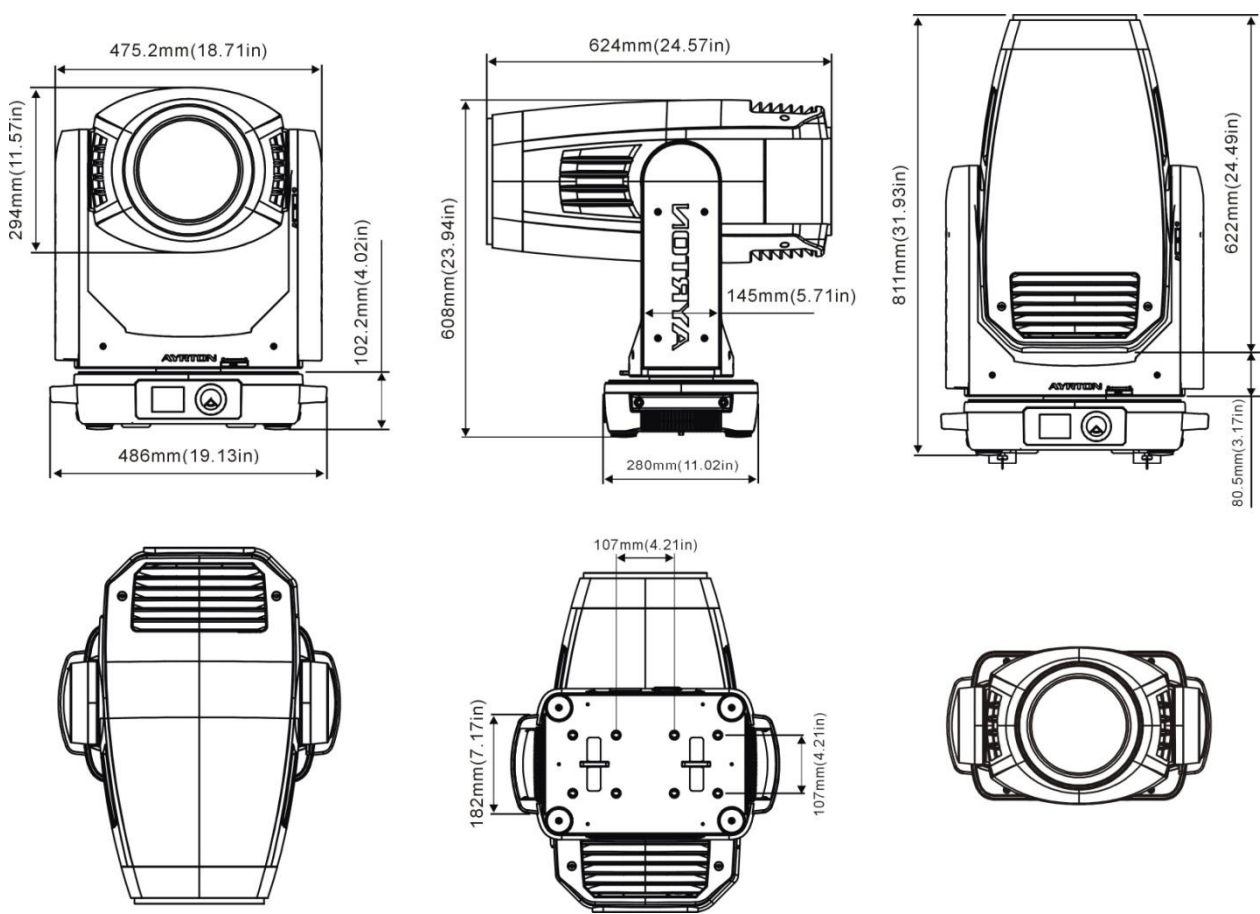
- 1) LED Assembly
- 2) Tilt Lock
- 3) Display
- 4) Rotary knob
- 5) Pan Lock
- 6) Handle



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

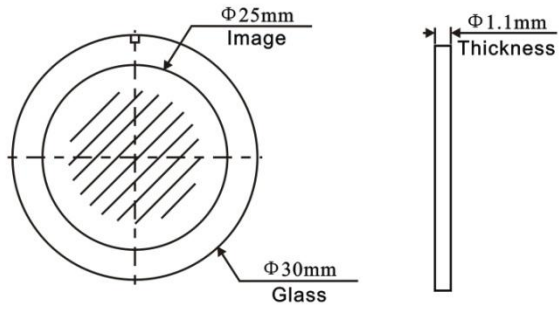
4. DIMENSIONAL DRAWINGS

4.1. Fixture Dimension

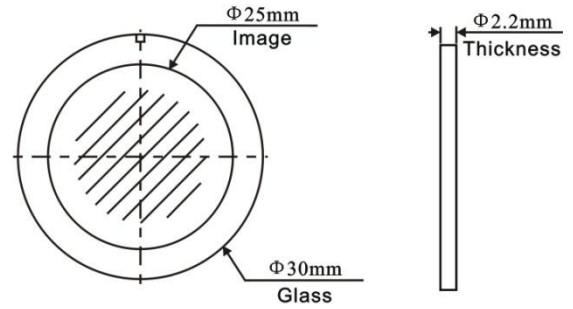


4.2. Gobo Filter Dimension

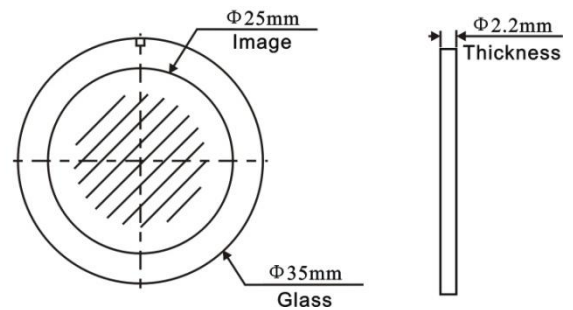
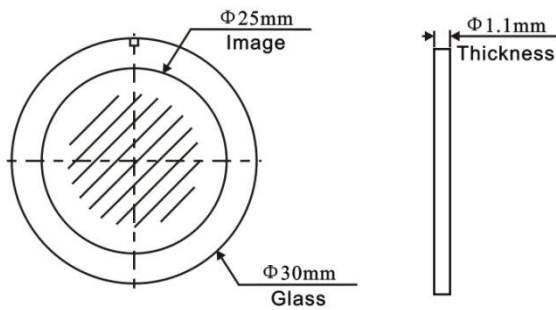
Black & White Gobo:



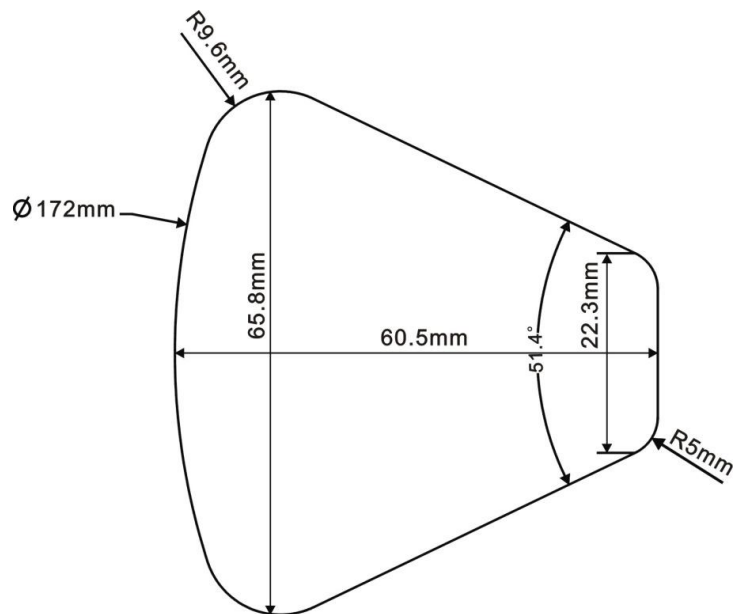
Color Gobo:



Double Layer Cassette:

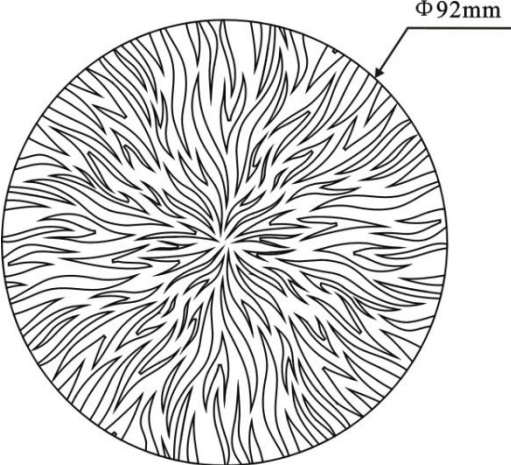


4.3. Color Filter Dimension

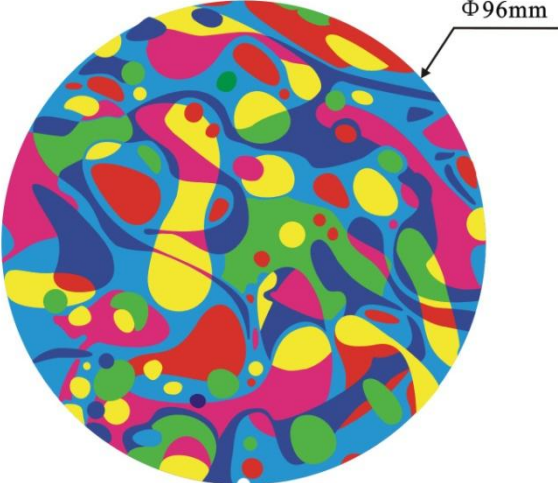


4.4. Animation Filter Dimension

Black & White Animation:



Color Animation:



5. INSTALLATION INSTRUCTIONS

5.1. Rigging the device

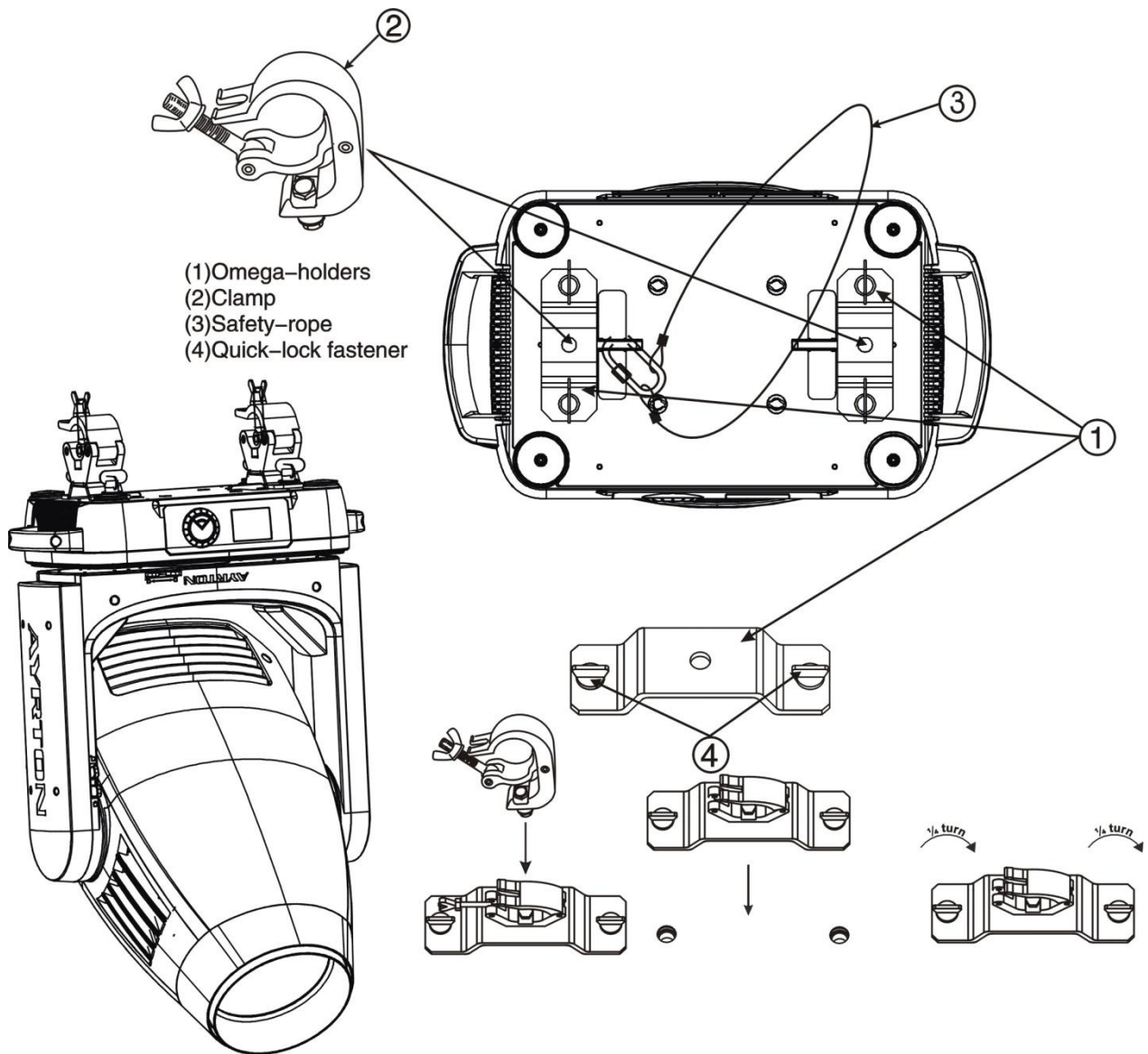


CAUTION!

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

- The applicable temperature for the lighting is between -10°C to 45°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



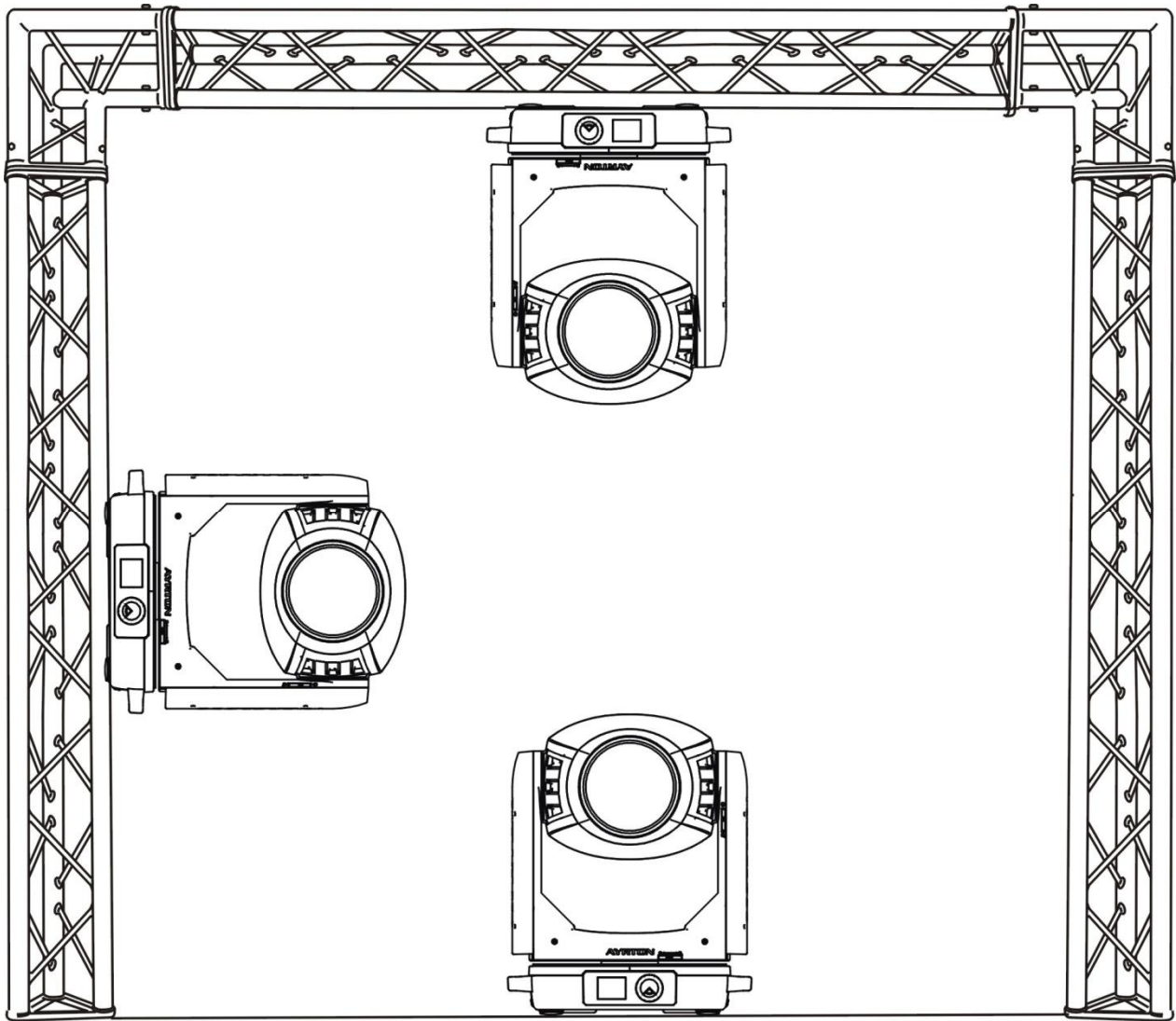
- Fix the clamp to the bracket by tightening the M12 nut and bolt to the bracket through the $\Phi 13$ hole in the middle of the bracket.
- Insert the quick-lock fasteners of the first Omega holder into the respective holes on the bottom of the device. Tighten the quick-lock fasteners fully clockwise.
- 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.

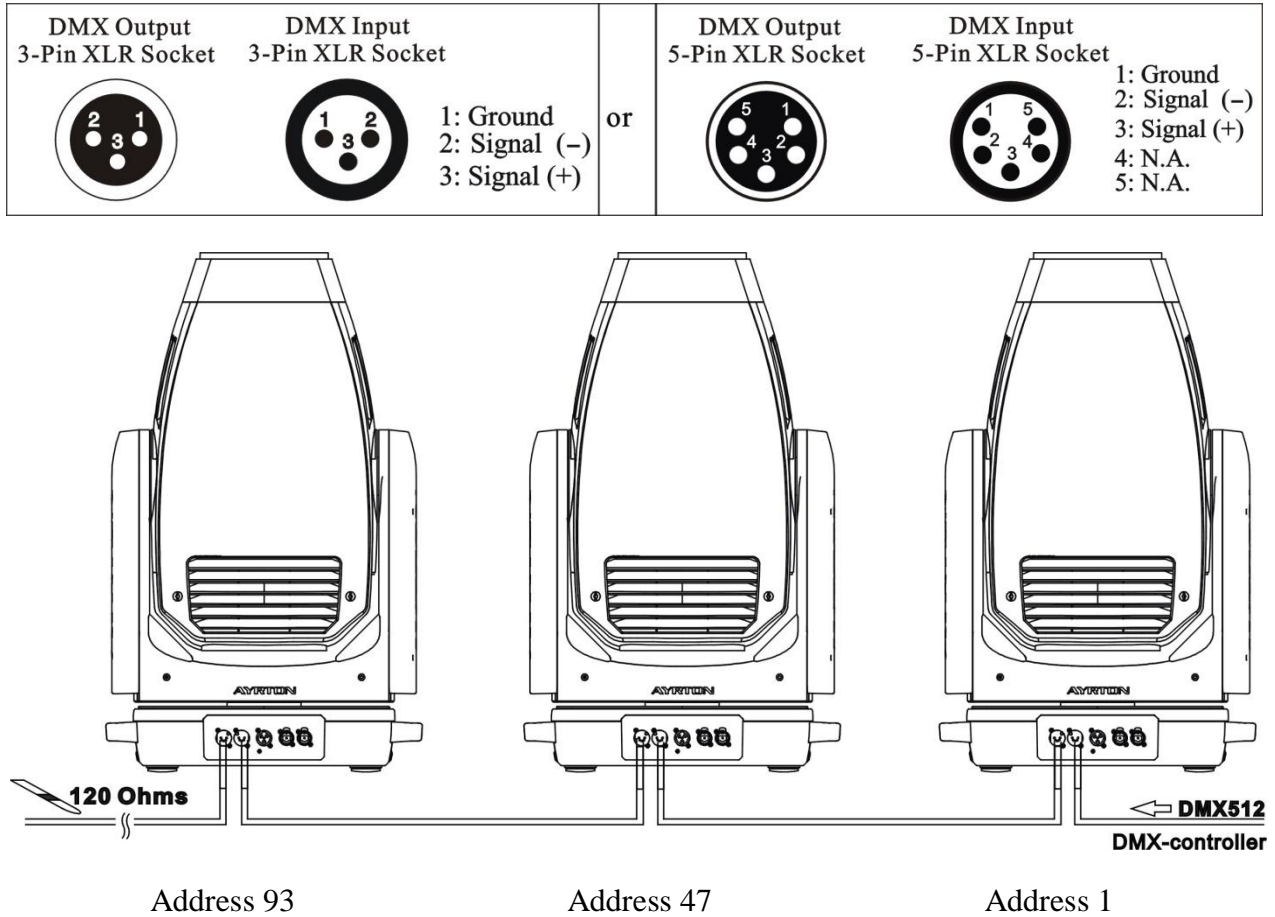


Important:

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.

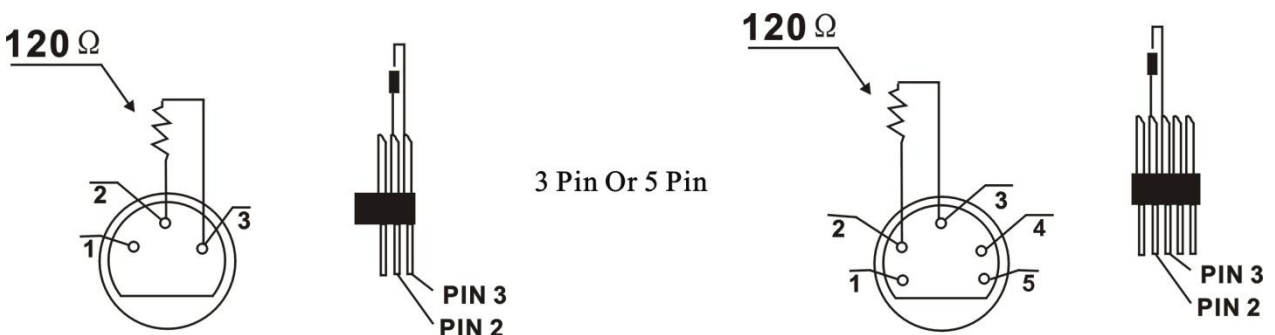
6. DMX-512 CONTROL CONNECTION

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 Ω resistor connected between pins 2 and 3, which is then plugged into the output (female) XLR socket of the last fixture in the chain. Please see illustrations below.



8. DEVICE DMX START ADDRESS SELECTION

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

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

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

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

In the case of the LED moving head, in 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. OPERATING INSTRUCTIONS OF THE INTERNAL DMX WIRELESS SYSTEM

9.1 Equipments:

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

9.2 Message from the LED indicator:

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

9.3 WDMX in the menu of the fixture:

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

ON: (Activate WDMX)

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

2) When the fixture is power off, and the WDMX is in ON status, if the fixture is connected to DMX controller. After the fixture is power on, it can be controlled only by the DMX controller which connected. The fixture can log in the wireless transmitter, and receive only radio signal from transmitter, but not DMX from the transmitter.

OFF: (De-activate WDMX)

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

REST: (reset WDMX memory)

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

9.4 Setup the wireless system:

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

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

Case 1: Remove a receiver:

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

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

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

PS:

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

10. DISPLAY


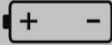
The Display offers Rotary knob features : you can set the starting address , run the pre-programmed program or reset the device.

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:	
	 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
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 :	Max channel PAN :		Preset User modes A,B,C :
Options	Status	No DMX Mode	Close/Hold/Auto	Auto run if no DMX
		Pan Reverse	ON/OFF	Pan Reverse movement
		Tilt Reverse	ON/OFF	Tilt Reverse movement
		Pan Degree	630/540	Pan Degree Select
		Feedback	ON/OFF	Movement Feedback
		Init PAN	ON/OFF	Init PAN
		Init TILT	ON/OFF	Init TILT
		Pan/Tilt Spd	Speed 1~ 4	Movement Speed
	Zoom/Focus Spd	Speed 1~ 3	Zoom/Focus Spd	
	Hibernation	OFF , 01M~99M	Stand by Mode	
	Art-Net to DMX	ON/OFF	Art-Net to DMX	
	Service PIN	Service PIN	Password=XXX	Service Password'=050'
	Set Ip	Set Ip	xxx.xxx.xxx.xxx	Set Ip
	Cross Load SW	Cross Load SW	ON/OFF	Cross Load SW
	Clr LED Time	Clr LED Time	ON/OFF	Clr LED Time
	Fans Control	Auto Stage Studio Silence Theatre		Fans Speed select
	Disp.Setting	Shutoff Time	02~60m 05m	Display shutoff time
		Flip Display	ON/OFF	Reverse 180 degree
		Key Lock	ON/OFF	Key Lock
		DispFlash	ON/OFF	DispFlash
	Signal Select	DMX WDMX Art—Net sACN		DMX WDMX Art-Net sACN
	Temp. C/F	Celsius Fahrenheit		Temperature switch between °C/°F
	Initial Pos.	PAN =XXX		Initial effect position
	Wireless DMX	Activate WDMX Act&Data Out Rest WDMX		Activate WDMX Act&Data Out Rest WDMX

	Dim Curve	Square Law Linear		Dim Curve
	Refresh Select	1.2K 2.4K 16K 25K		Refresh Select
	Gobo Correction	ON/OFF		Gobo Correction
	Reset P/T Fade	ON/OFF		Reset P/T Fade
	Trigger	DMX Value Disp. Set To Slave Auto Program	PAN..... Slave1,Slave2,Slave3 Master / Alone	DMX Value Disp. Set To Slave Auto Program
	ResetDefault	ON/OFF		Restore factory set.
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		
	Fan Info.	xxxxRPM		Fan information
	Software Ver	V1.0.....		Software version
	Network	IP,Mask,Mac		Network
Test	Home	All Pan&Tilt Color Gobo Other		Reset All Reset Pan&Tilt Reset Color Reset Gobo Reset Others
	Test Channel	PAN		Test function
	Manual Ctrl.	PAN =XXX :		Fine adjustment of the lamp
	Calibration	-Password- PAN :		Password "050" Calbrate and adjust the effects to standard/right position
	Gobo Replace	Gobo Wheel 1 Gobo Wheel 2		Gobo Replace
Preset	Select Prog.	Prog. Part 1 = Program 1 ~ 10 Program 1 Prog. Part 2 = Program 1 ~ 10 Program 2 Prog. Part 3 = Program 1 ~ 10 Program 3		Select programs to be run
	Edit Prog.	Program 1 : Program 10	Program Test Step 01=SCxxx Step 64=SCxxx	Testing program Program in loop Save and exit
	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

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 access " 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 access " 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 access " 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 access " 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 access“ 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 access“ Display Setting” menu, The display will show“ Shut off Time” .
5. Double click to access“ Shut off Time”, The display will show “ 05m”, Turn the rotary knob to select“ 02~60m” .
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°.

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“ 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° 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 access " 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 access“ Refresh Select”, The display will show “ 1.2K”, Turn the rotary knob to select“ 2.4K” , “ 16K” , “ 25K” .
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 access " 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=....." .
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 under " **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 access " 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 " XXX °C/ °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 access " 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.



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)

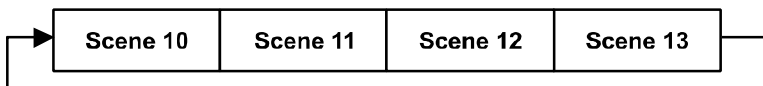
5. Enter the menu of 8-2 Edit Program---Edit Program. Edit the program's connection, connect the scene in order
6. The editor of the scene, there are as many as 250 scenario editors, and every scene can have a program connection of 10.

Note:

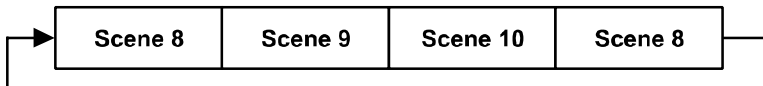
Part 2, Part 3 repeat in accordance with the Part1's repeat. For example: When Part 1 uses Program 2, Part 2 uses Program 4, Part 3 uses Program 6, Assume: Program 2 includes scene of 10, 11, 12, 13; Program 4 includes scene of 8, 9, 10; Program 6 includes scene of 12, 13, 14, 15; Then it will run as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

Example:

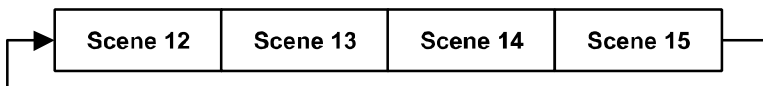
Part 1:



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		<u>Shutter, strobe:</u>
			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		<u>Dimmer intensity:</u>
			0-255	Intensity 0 to 100%
		8		<u>Fine Dimmer intensity:</u>
			0-255	Dimmer intensity fine
8	6	9		<u>Zoom :</u>
			0-255	Zoom adjustment from small to big
		10		<u>Zoom Fine:</u>
			0-255	Zoom adjustment Fine
9	7	11		<u>Focus :</u>
			0-255	Continuous adjustment from near to far
		12		<u>Focus Fine:</u>
			0-255	Continuous adjustment Fine
10	8	13		<u>Auto Focus :</u>
			0-50	Auto Focus Off
			51-100	5m
			101-150	7.5m
			151-200	10m
			201-255	15m
11	9	14		<u>AutoFocus Fine:</u>
			0-255	Continuous adjustment Fine
12	10	15		<u>Color Wheel:</u>
			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		<u>Color Wheel Fine:</u>

			0-255	Color Wheel colour change to any position Fine
13	11	17		<u>Cyan Color :</u>
			0-255	Cyan (0-white, 255-100% Cyan)
		18		<u>Cyan Color Fine :</u>
			0-255	Cyan Fine
14	12	19		<u>Magenta Color :</u>
			0-255	Magenta (0-white, 255-100% magenta)
		20		<u>Magenta Color Fine :</u>
			0-255	Magenta Fine
15	13	21		<u>Yellow Color :</u>
			0-255	Yellow (0-white, 255-100% Yellow)
		22		<u>Yellow Color Fine :</u>
			0-255	Yellow Fine
16	14	23		<u>CTO Color :</u>
			0-255	CTO (0-white, 255-100% CTO)
		24		<u>CTO Color Fine :</u>
			0-255	CTO Fine
17	15	25		<u>CTB Color :</u>
			0-255	CTB (0-white, 255-100% CTB)
		26		<u>CTB Color Fine :</u>
			0-255	CTB Fine
18	16	27		<u>CTP Color :</u>
			0-255	CTP (0-white, 255-100% CTP)
		28		<u>CTP Color Fine :</u>
			0-255	CTP Fine
19	17	29		<u>Color Presets:</u>
			0-255	See Appendix
20	18	30		<u>Chase Patterns:</u>
			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		<u>Chase Speed:</u>
			0-125	Fast to Slow Backward
			126-130	Stop(Speed=0)
			131-255	Slow to Fast Forward
22	20	32		<u>Chase Fade:</u>
			0-255	Fade Chase
23	21	33		<u>Rotating gobos, cont. rotation 1:</u>
			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		<u>Rotating gobo index,rotating gobo rotation 1:</u>
			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		<u>Rotating gobo indexing Fine 1:</u>
			0-255	Fine indexing
25	23	36		<u>Rotating gobos, cont. rotation 2:</u>
			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
				<u>Rotating gobo index,rotating gobo rotation 2:</u>
26	24	37	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
		38		<u>Rotating gobo indexing Fine 2:</u>
			0-255	Fine indexing
				<u>Animation wheel 1:</u>
27	25	39	0-7	No rotation
			8-127	Forwards rotation from fast to slow
			128-135	No rotation
			136-255	Backwards rotation from slow to fast
				<u>Animation wheel 2:</u>
28	26	40	0-255	Animation indexing
				<u>Rotating Animation wheel 2:</u>
29	27	41	0-7	No rotation
			8-127	Forwards rotation from fast to slow
			128-135	No rotation
			136-255	Backwards rotation from slow to fast
				<u>Iris:</u>
30	28	42	0-191	Max. diameter to Min.diameter
			192-223	Pulse closing fast to slow
			224-255	Pulse opening slow to fast
		43		<u>Iris Fine:</u>
			0-255	Iris Fine
				<u>Prism 1:</u>
31	29	44	0-127	Open
			128-255	5-Facet Prism
				<u>Rotating prism index, rotating prism rotation 1</u>
32	30	45	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
		46		<u>Rotating prism indexing Fine 1:</u>
			0-255	Fine indexing
33	31	47		<u>Prism 2:</u>
			0-127	Open
			128-255	Linear Prism
34	32	48		<u>Rotating prism index, rotating prism rotation 2</u>
			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		<u>Rotating prism indexing Fine 2:</u>
			0-255	Fine indexing
35	33	50		<u>Frost 1:</u>
			0-255	0-100%
36	34	51		<u>Frost 2:</u>
			0-255	0-100%
37	35	52		<u>Blade 1A :</u>
			0-255	Open to Close
		53		<u>Blade 1A Fine :</u>
			0-255	Open to Close Fine
38	36	54		<u>Blade 1B :</u>
			0-255	Open to Close
		55		<u>Blade 1B Fine :</u>
			0-255	Open to Close Fine
39	37	56		<u>Blade 2A :</u>
			0-255	Open to Close
		57		<u>Blade 2A Fine :</u>
			0-255	Open to Close Fine
40	38	58		<u>Blade 2B :</u>
			0-255	Open to Close
		59		<u>Blade 2B Fine :</u>
			0-255	Open to Close Fine
41	39	60		<u>Blade 3A :</u>
			0-255	Open to Close
		61		<u>Blade 3A Fine :</u>
			0-255	Open to Close Fine
42	40	62		<u>Blade 3B :</u>
			0-255	Open to Close
		63		<u>Blade 3B Fine :</u>
			0-255	Open to Close Fine
43	41	64		<u>Blade 4A :</u>
			0-255	Open to Close
		65		<u>Blade 4A Fine :</u>

			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 _____ :
			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	2.4K
			61-63	16K
			64-69	25K
			70-74	Gobo correction Off
			75-79	Gobo correction On
			80-84	All motor reset
			85-87	Scan motor reset
			88-90	Colors motor reset
			91-93	Gobo motor reset
			94	unused
			95	Reset P/T Fade Off
			96	Reset P/T Fade On
97-99	Other motor reset			
100-255	unused			

Appendix

name (=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
EC124	DARK GREEN
EC126	MAUVE
EC127	SMOKEY PINK
EC128	BRIGHT PINK

EC132	MEDIUM BLUE
EC134	GOLDEN AMBER
EC136	PALE LAVENDER
EC137	SPECIAL LAVENDER
EC138	PALE GREEN
EC139	PRIMARY GREEN
EC140	SUMMER BLUE
EC141	BRIGHT BLUE
EC142	PALE VIOLET
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

