AYRTON

Manuel d'utilisation

Karif LT

KEEP THIS MANUAL FOR FUTURE NEEDS CE

CONTENTS

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 oowerCON 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 eitherlenses or displayare 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.Ifthis 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 2 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 isthe 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
- AC100-240V~，50/60Hz
- Max Power Consumption：550W

LIGHT SOURCE
- LED：290W White LED
- Extremely long Life：>50,000H

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

COLORS
- CMY color mixing
- 1 Color wheel：13 dichroic filters + open，indexable，rainbow effect, Progressive CTO

GOBOS
- Rotating gobo wheel：9 interchangeable，rotating，and indexable，gobo+open
- "Slot in & out" gobo wheel system
- Static gobo wheel：39 + open

FEATURES
- 4 Control channel modes：30/34/40/46 channels
- 2 Operation modes：DMX-512，Wireless DMX LumenRadio™
- Strobe effect with 1-25 flashes per second and pulse effect
- 4 Rotating Prisms：2x6 facet linear Prisms, 1x8 + 1x16 facet circular Prisms
- Animation wheel
- Zoom 2,8° - 47°
- 2 frost filters: Light frost + heavy frost
- Dimmer：0%~100% full range dimming
- Wireless CRMX TiMo™ RDM receiver from LumenRadio™

DISPLAY
- Full color LCD with optional batterie
- Flip 180° reverse to fit for different installation position

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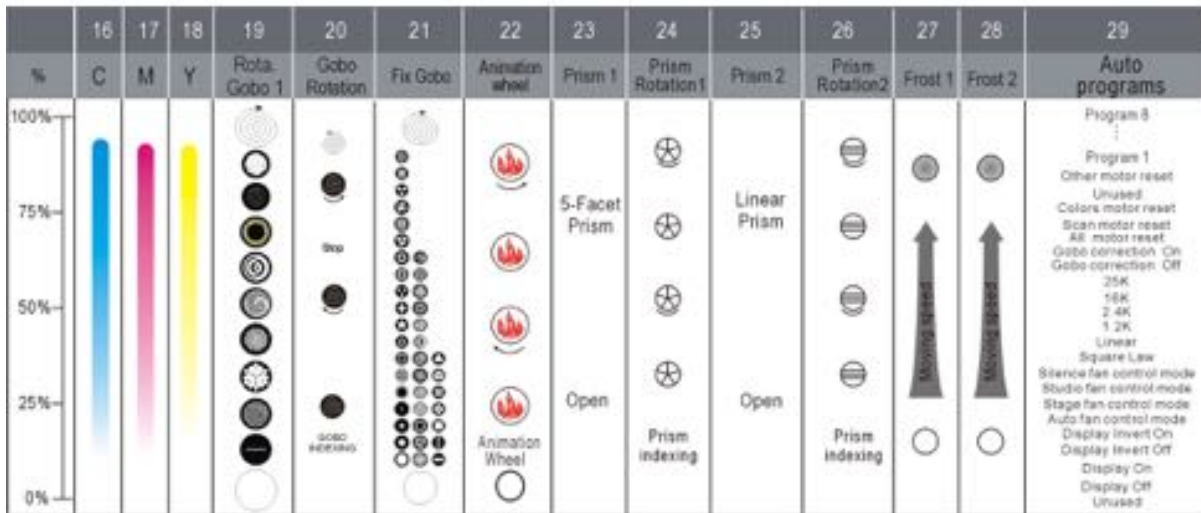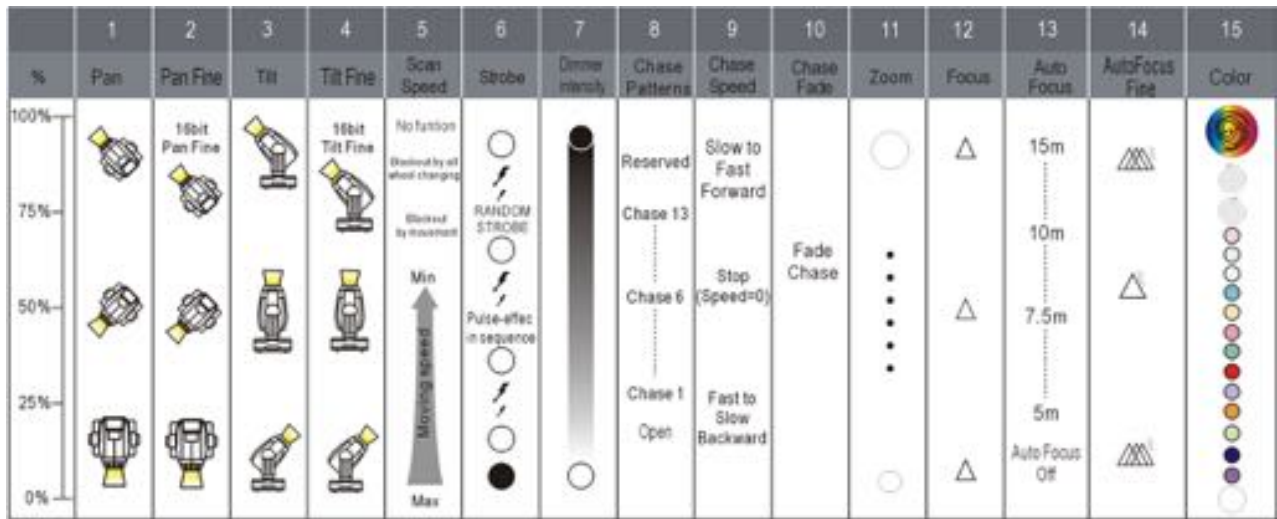Upgrades：fast and convenient through DMX cable with DMX-512 controller

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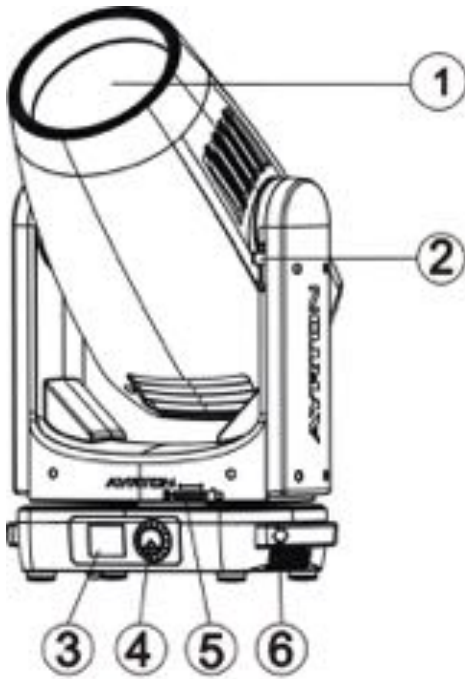Advanced RDM function

WEIGHT
Net weight: 24 kg

DMX CHANNELCHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
%	Pan	Pan Fine	Tilt	Tilt Fine	Scan Speed	Strobe	Dimmer intensity	Chase Patterns	Chase Speed	Chase Fade	Zoom	Focus	Auto Focus	AutoFocus Fine	Color

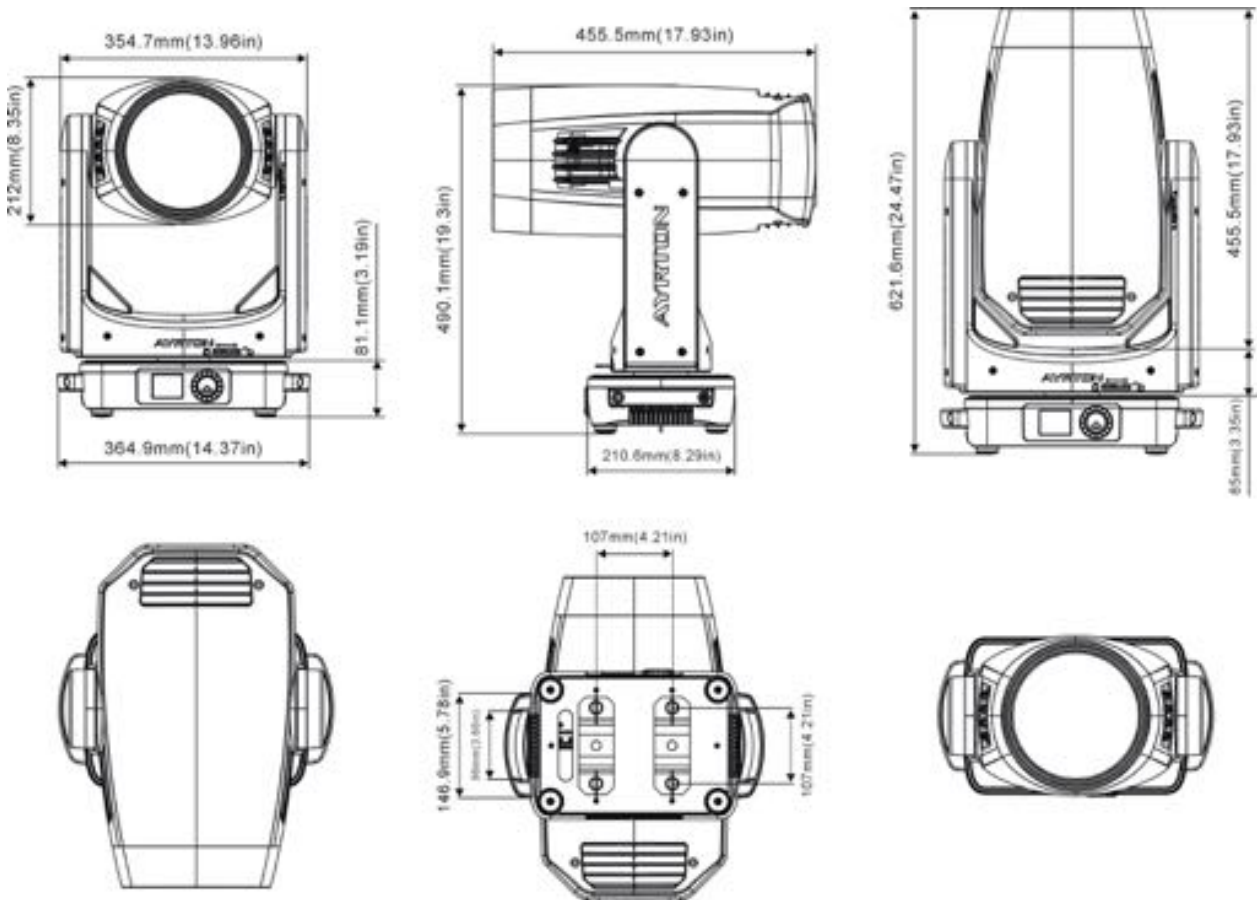|	16	17	18	19	20	21	22	23	24	25	26	27	28	29
%	C	M	Y	Rota. Gobo 1	Gobo Rotation	Fix Gobo	Animation wheel	Prism 1	Prism Rotation1	Prism 2	Prism Rotation2	Frost 1	Frost 2	Auto programs

3. FIXTURE OVERVIEW

1) LED Assembly

2) Tilt Lock

3) Display

4) Jog wheel

5) Pan Lock

6) Handle

7) DMX Out

8) DMX In

9) Power Out

10) Power In

4. DIMENSIONAL DRAWINGS

4.1. Fixture Dimension

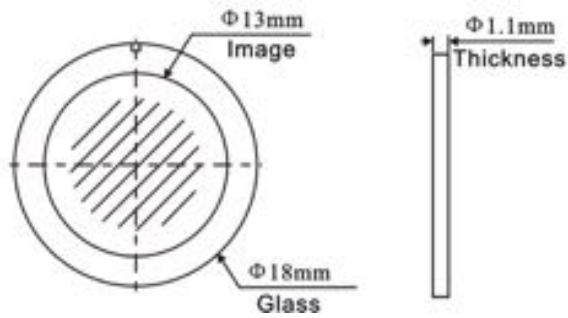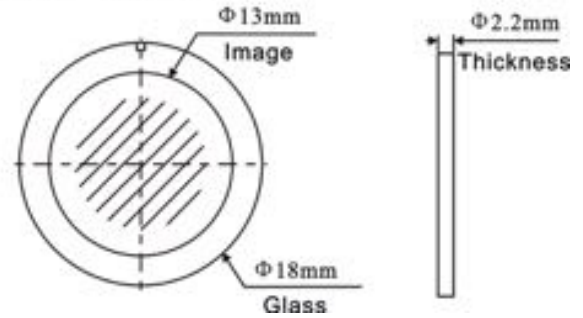## 4.2. Gobo Filter Dimension

Rotating Gobo:
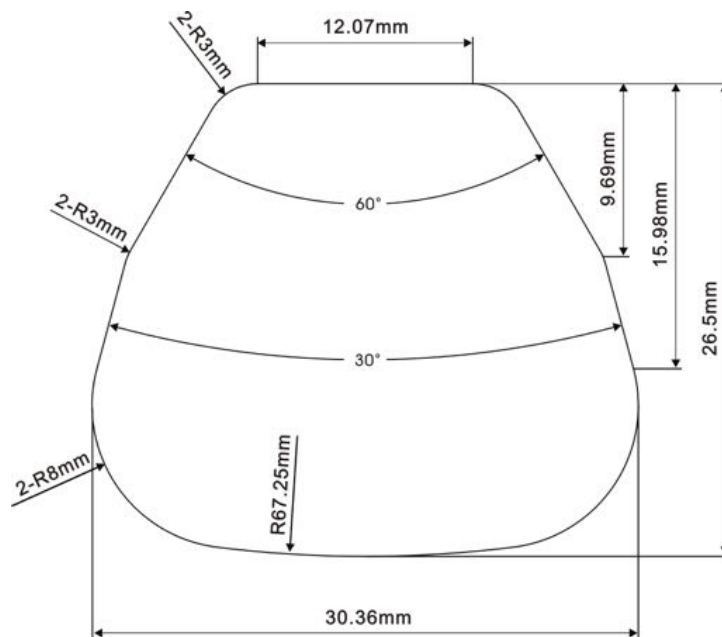Black & White Gobo:

Color Gobo:
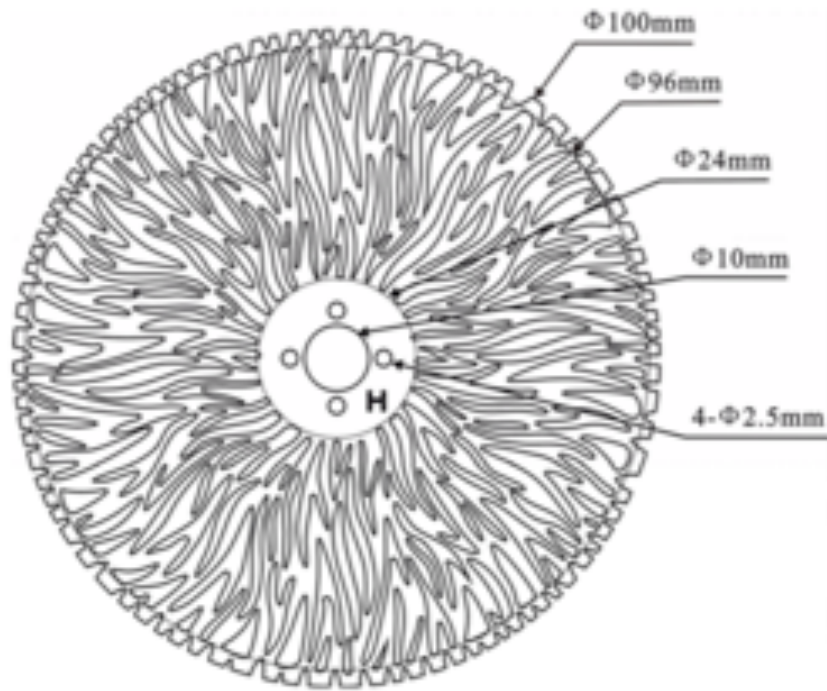
Φ13mm Image

Φ18mm Glass

Φ1.1mm Thickness

Φ13mm Image

Φ18mm Glass

Φ2.2mm Thickness

4.3. Color Filter Dimension

2-R3mm

12.07mm

2-R3mm

60°

2-R8mm

30°

R67.25mm

9.69mm

15.98mm

26.5mm

30.36mm

Animation filter dimensions

Φ100mm
Φ96mm
Φ24mm
Φ10mm
4-Φ2.5mm

5. INSTALLATION INSTRUCTIONS

5.1. Rigging the device

<table>
<tr><td>⚠</td><td>CAUTION!
PLEASE CONSIDER THE RESPECTIVE NATIONAL NORMS DURINGINSTALLATION. THE INSTALLATION MUST ONLY BE CARRIED OUT BY A QUALIFIED PERSON.</td></tr>
</table>

- 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

(1)Omega–holders
(2)Clamp
(3)Safety–rope
(4)Quick–lock fastener
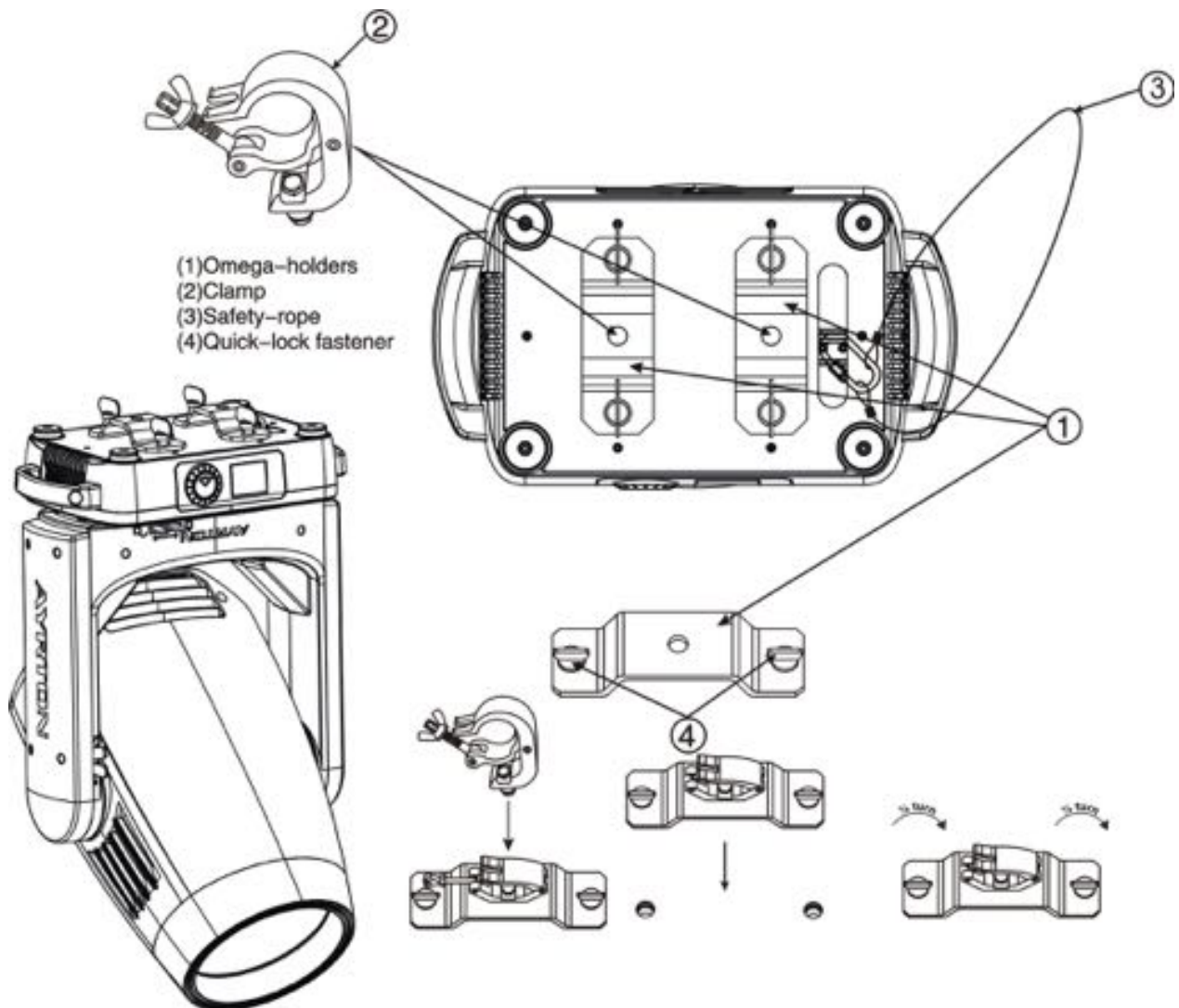
- Fix the clamp to the bracket by tightening the M12 nut and boltto the bracket through the Φ13 hole in the middle of the bracket.
- Insert the quick-lock fasteners of the first Omega holder into the respective holes on the bottom of the device.Tighten the quick-lock fasteners fully clockwise.
- Install the second Omega holder.
- Pull the safety cable through the holes on the bottom of the base and over the trussing system or another suitable rigging point. Insert the end into the carabiner and tighten the safety screw.

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

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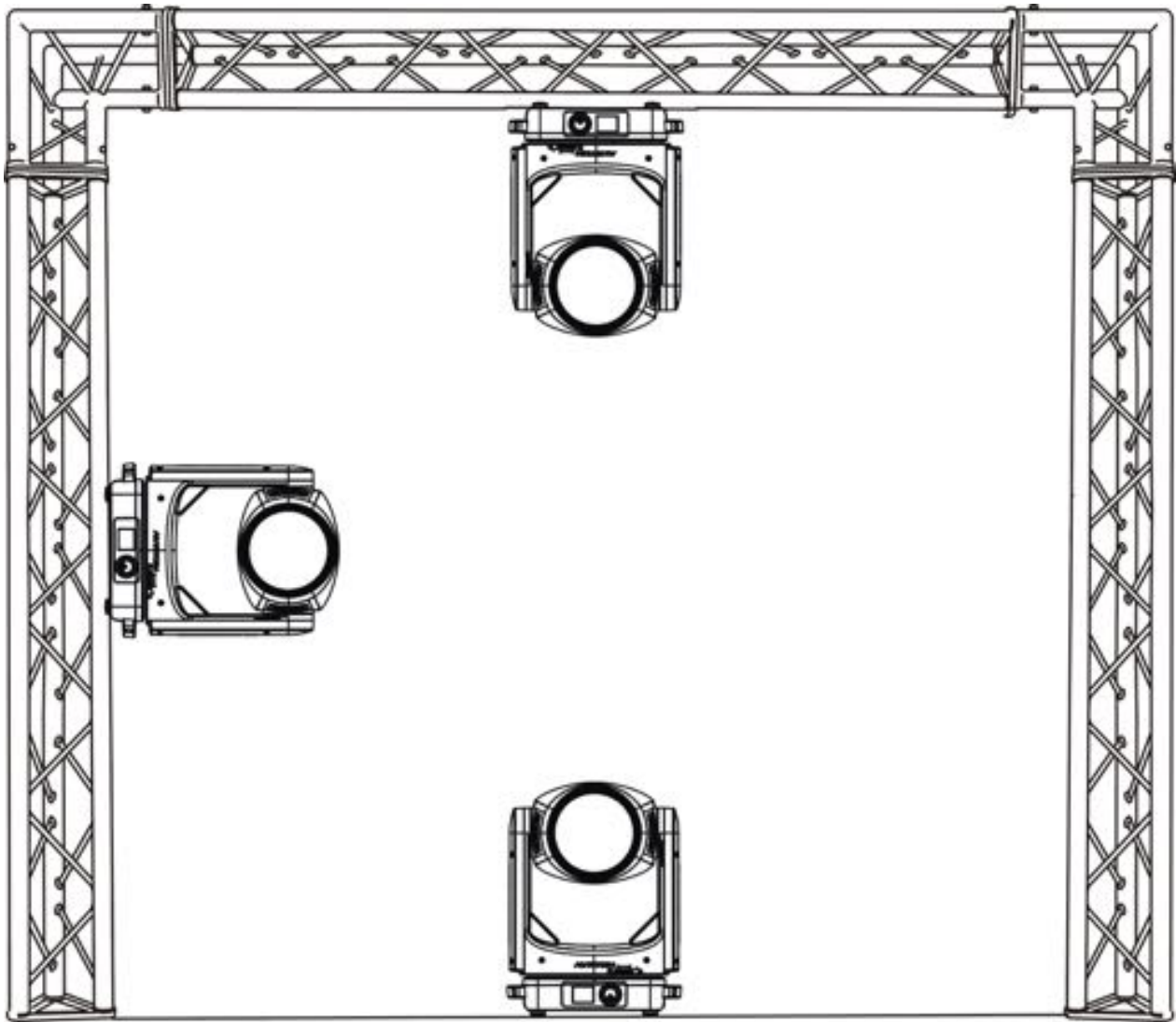
- Be sure this fixture is kept at least 0.1m away from any flammable materials (decoration etc.).
- Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

Important：

Overhead rigging requires extensive experience，including (but not limited to) calculatingworking 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 therigging 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 femaleXLR output of your controller and the female side of the XLR cable to the male XLR input of the device.You can connect multipledevices together in a serial fashion.The cable needed should be two core，screened cable with XLR input and output connectors.Please refer to the diagram below.

| Address 61 | Address 31 | Address 1 |
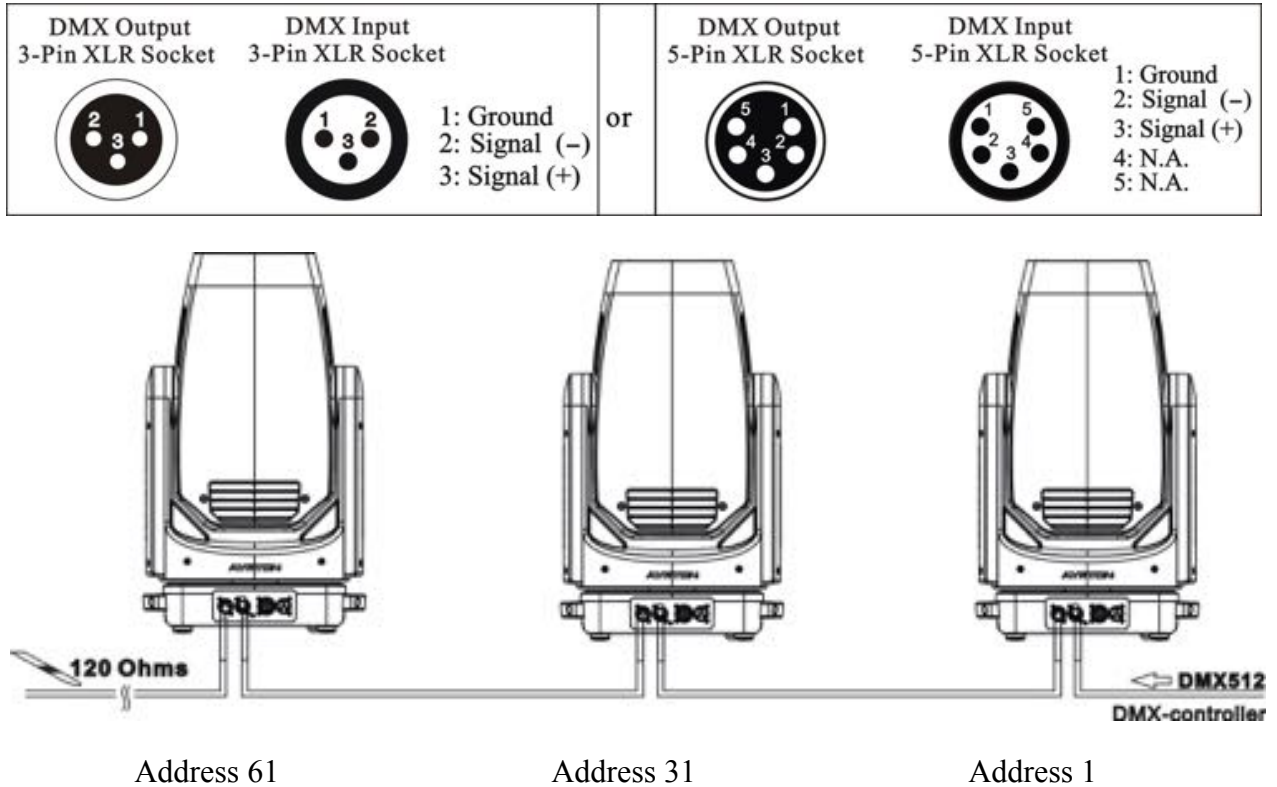
7. DMX-512 CONNECTION WITH DMX TERMINATOR

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.
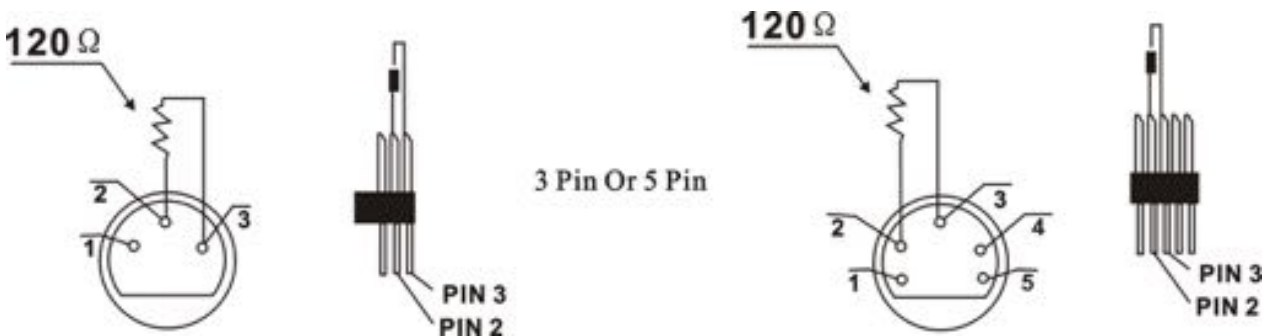
8. DEVICE DMX START ADDRESS SELECTION

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，in29channel mode，you should set the starting address of the first unit to 1，the second unit to 30(29 + 1)，the third unit to 59 (29 + 30)，and so on.

9. DISPLAY

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

The main menu is accessed by double clicking the jog wheel of jog wheel until the display starts flashing.Browse through the menu by turning jog wheel clockwise or counterclockwise.

Press theJog wheel for 2 seconds in order to select the desired menuor exit menu, double click the Jog wheel for confirm.After accessing the edit mode，the unit will automatically exit to the main menu after 15 seconds from the last button press.Clockwise is positive direction while counterclockwise is opposite direction.

When the unit is powered on，if no data signal is connectedafter 1 minute，then the display will switch off automatically.The Displaydoes not need external power to operate in case there is battery，hold down thejog wheel for seconds and the Display will turn on by usingthe unit's battery.

Default settings shaded

Address	Set Dmx Address	A001~AXXX		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	Hold 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
		Reset Mode	Fast/All Rot Gobos	Reset Speed
		Pan/Tilt Spd	Speed 1~ 4	Movement Speed
		CMY Speed	Speed 1~ 2	
		Zoom/Focus Speed	Speed 1~ 3	
		Hibernation	OFF , 01M~99M	Stand by Mode
	Service PIN	Service PIN	Password=XXX	Service Password "=050"
		Cross Load SW	ON/OFF	Cross Load SW
		Clr LED Timer	ON/OFF	Clr LED Timer
	Fans Control	Auto Stage Silence Super Silence		Fans Speed select
		Constant Fans	ON/OFF	Fans constantly running
	Disp.Setting	Shutoff Time	02~60m05m	Display shutoff time
		Flip Display	ON/OFF	Reverse 180 degree
		Key Lock	ON/OFF	Key Lock
		DispFlash	ON/OFF	DispFlash
	Signal Select	DMX WDMX		DMX WDMX
	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
	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	H:XXX℃/℉ B:XXX℃/℉		Head&Baes Temp.
	Fan Info.	xxxxRPM		Fan Information
	Software Ver	V1.0……		Software version
Test	Home	All Pan&Tilt Color Gobo Other		Reset All Reset Pan&Tilt Reset Color Reset Gobo Reset Other
	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
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 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

9.1. Address
9.1.1. Set DMX Address
With this function，you can adjust the desired DMX-address via the Display.
1. Double click to enter the menu.
2. The display will show"ADDRESS".
3. Double click to enter then display"Set DMX Address".
4. Turn the jog wheel clockwise then display"A001~AXXX". Double click to confirm
5. Long press to exit the menu.

9.2. Users Mode
9.2.1. User Mode
With this function，you can create user defined channel orders.
1. Double click to enter the menu，turn the jog wheel clockwise to display"USERS MODE".
2. Double click to enter to edit.
3. Turn the jog wheel clockwise to display"User mode".Double click to enter to edit.
4. When in"Extend Mode"，turn the jog wheel to select"Basic mode"，"Stand Mode"，"User Mode A"，"User Mode B"and"User Mode C".
5. Long press to exit the menu.

9.2.2. Edit User Mode
With this function，you can adjust the rest user defined channel order.
1. Double click to enter the"USERS MODE"menu，turn the jog wheel until display"Edit User".
2. Double click to enter"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 to exit the menu.

9.3. Options
9.3.1. Status Settings
No DMX Status
With this function，when no DMX signal is detected，the unit will keep the last DMX status or close the shutter or run an automatic sequence. The default is hold.
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display"Options".
3. Double click to enter"Options"，turn the jog wheel to select "Status".
4. Double click to enter"Status"menu，The display will show"No DMX Status".
5. Double click to enter"No DMX Status"，The display will show"Hold"，Turn the jog wheel to select"Close"or"Auto". Double click to confirm

6. Long press to exit the menu.

Pan Reverse
With this function you can reverse the Pan-movement.
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display"Options".
3. Double click to enter"Options", turn the jog wheel to select "Status".
4. Double click to enter"Status"menu, The display will show"Pan Reverse".
5. Double click to enter"Pan Reverse", The display will show "OFF", Turn the jog wheel to select"NO". Double click to confirm
6. Long press to exit the menu.

Tilt Reverse
With this function you can reverse the Tilt-movement.
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display"Options".
3. Double click to enter"Options", turn the jog wheel to select "Status".
4. Double click to enter"Status"menu, choose"Tilt Reverse".
5. Double click to enter"Tilt Reverse", The display will show "OFF", Turn the jog wheel to select"NO". Double click to confirm
6. Long press to exit the menu.

Pan Degree
With this function, you can select pan degree for 630 or 540.
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display"Options".
3. Double click to enter"Options", turn the jog wheel to select "Status".
4. Double click to enter"Status"menu, choose"Pan Degree".
5. Double click to enter"Pan Degree", The display will show "540", Turn the jog wheel to select"630". Double click to confirm
6. Long press to exit the menu.

Feedback
With this function, you can switch off feedback pan movement or tilt movement.
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display"Options".
3. Double click to enter"Options", turn the jog wheel to select"Status".
4. Double click to enter"Status"menu, choose"Feedback".
5. Double click to enter"Feedback", The display will show "ON", Turn the jog wheel to select"OFF". Double click to confirm
6. Long press to exit the menu.

Init PAN
With this function, you can switch off pan movement at power on
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display"Options".
3. Double click to enter"Options", turn the jog wheel to select"Status".
4. Double click to enter"Status"menu, choose"Init PAN".

5. Double click to enter "Init PAN", The display will show "ON", Turn the jog wheel to select "OFF". Double click to confirm
6. Long press to exit the menu.

Init TILT

With this function, you can switch off Tilt movement at power on
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Options".
3. Double click to enter "Options", turn the jog wheel to select "Status".
4. Double click to enter "Status" menu, choose "Init TILT".
5. Double click to enter "Init TILT", The display will show "ON", Turn the jog wheel to select "OFF". Double click to confirm
6. Long press to exit the menu.

Reset Mode

With this function, you can choose to run a full calibration of each gobod
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Options".
3. Double click to enter "Options", turn the jog wheel to select "Status".
4. Double click to enter "Status" menu, choose "Reset Mode".
5. Double click to enter "Reset Mode", The display will show "Fast", Turn the jog wheel to select "Fast" or "All Rot Gobos". Double click to confirm
6. Long press to exit the menu.

Pan/Tilt Spd

With this function, you can select scan mode from 1 to 4.
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Options".
3. Double click to enter "Options", turn the jog wheel to select "Status".
4. Double click to enter "Status" menu, choose "Pan/Tilt Spd".
5. Double click to enter "Pan/Tilt Spd", The display will show "Speed 1", Turn the jog wheel to select "Speed 1", "Speed 2", "Speed 3", "Speed 4". Double click to confirm
6. Long press to exit the menu.

CMY Spd

With this function, you can select Cyan, Magenta and Yellow speed from 1 to 2.
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Options".
3. Double click to enter "Options", turn the jog wheel to select "Status".
4. Double click to enter "Status" menu, choose "CMY Spd".
5. Double click to enter "CMY Spd", The display will show "Speed 1", Turn the jog wheel to select "Speed 1", "Speed 2". Double click to confirm
6. Long press to exit the menu.

Zoom/Focus Spd

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

1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Options".
3. Double click to enter "Options"，turn the jog wheel to select "Status".
4. Double click to enter "Status" menu，choose "Zoom/Focus Spd".
5. Double click to enter "Zoom/Focus Spd"，The display will show "Speed 1"，Turn the jog wheel to select "Speed 1"，"Speed 2"，"Speed 3". Double click to confirm
6. Long press to exit the menu.

Hibernation：Standby mode

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

1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Options".
3. Double click to enter "Options"，turn the jog wheel to select "Status".
4. Double click to enter "Status" menu，The display will show "Hibernation".
5. Double click to enter "Hibernation"，The display will show "OFF"，Turn the jog wheel to select "01M"，"02M" ... "99M".
6. Long press to exit the menu.

9.3.2. Service PIN

Password

The Password for this function is "050".

Cross Load SW

This function allows you to update one unit from another one via DMX cable

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display "Options".
3．Double click to enter "Options"，turn the jog wheel to select "Service PIN".
4．Double click to enter "Cross Load SW" menu，The display will show "Cross Load SW".
5．Double click to enter "Cross Load SW"，The display will show "OFF"，Turn the jog wheel to select "ON". Double click to confirm
6．Long press to exit the menu.

Clr LED Timer

This function allows you to update one unit from another one

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display "Options".
3．Double click to enter "Options"，turn the jog wheel to select "Service PIN".
4．Double click to enter "Cross Load SW" menu，The display will show "Clr LED Timer".
5．Double click to enter "Clr LED Timer"，The display will show "OFF"，Turn the jog wheel to select "ON". Double click to confirm
6．Long press to exit the menu.

9.3.3. Fans Control

Fans Speed
With this function you can set the max fans speed between Auto, Stage, Silence and Super Silence mode.
1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display "Options".
3．Double click to enter "Options", turn the jog wheel to select "Fans Control".
4．Double click to enter "Fans Control" menu, The display will show "Fans Speed".
5．Double click to enter "Fans Speed", choose between "Auto", "Stage", "Silence" and "Super Silence". Double click to confirm
6．Long press to exit the menu.

Constant Fans
With this function you can choose to leave the fans running permanently, even when LED is off.
1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display "Options".
3．Double click to enter "Options", turn the jog wheel to select "Fans Control".
4．Double click to enter "Fans Control" menu, choose "Constant Fans".
5．Double click to enter "Fans Speed", choose between "ON" or "OFF. Double click to confirm
6．Long press to exit the menu.

9.3.4. Display Setting
Shut off Time
With this function you can shut off the LCD display after 2 to 60minutes.The default is 5 minutes.
1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display "Options".
3．Double click to enter "Options", turn the jog wheel to select "Display Setting".
4．Double click to enter "Display Setting" menu, The display will show "Shut off Time".
5．Double click to enter "Shut off Time", The display will show "05m", Turn the jog wheel to select "02~60m". Double click to confirm
6．Long press to exit the menu.

Flip Display
With this function you can flip the display by 180°.
1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display "Options".
3．Double click to enter "Options", turn the jog wheel to select "Display Setting".
4．Double click to enter "Display Setting" menu, The display will show "Flip Display".
5．Double click to enter "Flip Display", The display will show "OFF", Turn the jog wheel to select "ON". Double click to confirm
6．Long press to exit the menu.

Key Lock

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

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Options".
3．Double click to enter"Options"，turn the jog wheel to select "Display Setting".
4．Double click to enter"Display Setting"menu，The display will show"Key Lock".
5．Double click to enter"Key Lock"，The display will show "OFF"，Turn the jog wheel to select"ON". Double click to confirm
6．Long press to exit the menu.

DispFlash

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

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Options".
3．Double click to enter"Options"，turn the jog wheel to select"Display Setting".
4．Double click to enter"Display Setting"menu，The display will show"DispFlash".
5．Double click to enter"DispFlash"，The display will show "OFF"，Turn the jog wheel to select"ON". Double click to confirm
6．Long press to exit the menu.

9.3.5. Signal Select

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Options".
3．Double click to enter"Options"，turn the jog wheel to select "Signal Select".
4．Double click to enter"Signal Select"，The display will show "DMX"，Turn the jog wheel to select"DMX"or "WDMX". Double click to confirm
5．Long press to exit the menu.

9.3.6. Temperature C/F

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

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Options".
3．Double click to enter"Options"，turn the jog wheel to select "Temperature C/F".
4．Double click to enter"Temperature C/F"，The display will show "Celsius"，Turn the jog wheel to select"Fahrenheit". Double click to confirm
5．Long press to exit the menu.

9.3.7. Initial Pos.

With this function you can display initial effect position.

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Options".
3．Double click to enter"Options"，turn the jog wheel to select"Initial Pos.".
4．Double click to enter"Initial Pos."，The display will show"PAN=XXX".
5．Long press to exit the menu.

9.3.8. 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 click to enter the menu.
2. Turn the jog wheel clockwise then display"Options".
3. Double click to enter"Options"，turn the jog wheel to select"Wireless DMX".
4. Double click to enter"Wireless DMX"，The display will show "Activate WDMX"，Turn the jog wheel to select"Act&Data Out"，"Rest WDMX".
5. Double click to confirm
6. Long press to exit the menu.

9.3.9. Dim Curve

1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display"Options".
3. Double click to enter"Options"，turn the jog wheel to select"Dim Curve".
4. Double click to enter"Dim Curve"，The display will show "Square Law"，Turn the jog wheel to select"Linear". Double click to confirm
5. Long press to exit the menu.

9.3.10. Refresh Select

1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display"Options".
3. Double click to enter"Options"，turn the jog wheel to select"Refresh Select".
4. Double click to enter"Refresh Select"，choose betwwen "1.2K"， "2.4K"，"16K" and"25K". Double click to confirm
5. Long press to exit the menu.

9.3.11. Gobo Correction (color temperature correction)

1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display"Options".
3. Double click to enter"Options"，turn the jog wheel to select"Gobo Correction".
4. Double click to enter"Gobo Correction"，The display will show "ON"，Turn the jog wheel to select"OFF". Double click to confirm
5. Long press to exit the menu.

9.3.12. Trigger

DMX Value Disp.

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

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Options".
3．Double click to enter"Options"，turn the jog wheel to select"Trigger".
4．Double click to enter"Trigger"menu，The display will show"DMX Value Disp".
5．Double click to enter"DMX Value Disp"，The display will show"PAN=……..".
6．Long press to exit the menu.

Set To Slave

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

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Options".
3．Double click to enter"Options"，turn the jog wheel to select"Trigger".
4．Double click to enter"Trigger"menu，The display will show"Set To Slave".
5．Double click to enter"Set To Slave"，The display will show "Slave1"，"Slave2"，"Slave3".
6．Long press to exit the menu.

Auto Program

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

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Options".
3．Double click to enter"Options"，turn the jog wheel to select"Trigger".
4．Double click to enter"Trigger"menu，The display will show"Auto Program".
5．Double click to enter"Auto Program"，The display will show "Master"，"Alone".
6．Long press to exit the menu.

9.3.13. Reset Default

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

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Options".
3．Double click to enter"Options"，turn the jog wheel to select"Reset Default".
4．Double click to enter"Reset Default"menu，The display will show "OFF"，Turn the jog wheel to select"ON". Double click to confirm
5．Long press to exit the menu.

9.4. Info
9.4.1. Time information
Current Time

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

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Info".
3．Double click to enter"Info"，turn the jog wheel to select"Time Info.".
4．Double click to enter"Time Info."，The display will show"Current Time".
5．Double click to enter"Current Time"，The display will show "XXXX (Hours)".
6．Long press to exit the menu.

TtlLifeHrs

With this function，you can display the running time of the device.The display shows "XXXX"， "XXXX" stands for the number of hours.
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Info".
3. Double click to enter "Info"，turn the jog wheel to select "Time Info.".
4. Double click to enter "Time Info."，The display will show "TtlLifeHrs".
5. Double click to enter "TtlLifeHrs"，The display will show "XXXX (Hours)".
6. Long press to exit the menu.

Last Run Hrs

With this function，you can display last the running time of the device.The display shows "XXXX"， "XXXX" stands for the number of hours.
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Info".
3. Double click to enter "Info"，turn the jog wheel to select "Time Info.".
4. Double click to enter "Time Info."，The display will show "Last Run Hrs".
5. Double click to enter "Last Run Hrs"，The display will show "XXXX (Hours)".
6. Long press to exit the menu.

LED Hours
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Info".
3. Double click to enter "Info"，turn the jog wheel to select "Time Info.".
4. Double click to enter "Time Info."，The display will show "LED Hours".
5. Double click to enter "LED Hours"，The display will show "XXXX (Hours)".
6. Long press to exit the menu.

Timer PIN

With this function，you can enterthe timer password.
1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display "Info".
3．Double click to enter "Info"，turn the jog wheel to select "Time Info.".
4．Double click to enter "Time Info."，The display will show "Timer PIN".
5．Double click to enter "Timer PIN"，The display will show "Password=038".
6．Long press to exit the menu.

Clr Last Run

With this function，you can clear last run time of the fixture.The display shows "ON" or "OFF"，Press "Enter" to confirm.
1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Info".
3. Double click to enter "Info"，turn the jog wheel to select "Time Info.".
4. Double click to enter "Time Info."，The display will show "Clear Last Run".
5. Double click to enter "Clear Last Run"，The display will show "OFF"，turn the jog wheel to select "ON".
6. Long press to exit the menu.

9.4.2. Temp.Info

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

1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Info".
3. Double click to enter "Info", turn the jog wheel to select "Temp Info".
4. Double click to enter "Temp Info", The display will show "Head Temp.".
5. Double click to enter "Head Temp.", The display will show "H:XXX℃/℉ B:XXX℃ /℉".
6. Long press to exit the menu.

9.4.3. Fan Info.

1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Info".
3. Double click to enter "Info", turn the jog wheel to select "Fan Info.".
4. Double click to enter "Fan Info.", The display will show "xxxxRPM".
5. Long press to exit the menu.

9.4.4. Software Ver

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

1. Double click to enter the menu.
2. Turn the jog wheel clockwise then display "Info".
3. Double click to enter "Info", turn the jog wheel to select "Software Ver".
4. Double click to enter "Software Ver", The display will show "Verx.x.x".
5. Long press to exit the menu.

9.5. Test
9.5.1. Home

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

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display "Test".
3．Double click to enter "Test", turn the jog wheel to select "Home".
4．Double click to enter"Home", The display will show"All", Turn the jog wheel to select "All", "Pan&Tilt", "Color", "Gobo", "Other".
5．Long press to exit the menu.

9.5.2. Test Channel

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

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display "Test".
3．Double click to enter "Test", turn the jog wheel to select "Test Channel".
4．Double click to enter"Test Channel", The display will show"Pan", Turn the jog wheel to select other channel.
5．Long press to exit the menu.

9.5.3. 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 click to enter the menu.
2．Turn the jog wheel clockwise then display"Test".
3．Double click to enter"Test"，turn the jog wheel to select"Manual control".
4．Double click to enter"Manual control"，The display will show"PAN=XXX".
5．Long press to exit the menu.

9.5.4. Calibration

With this function，you can calibrate and adjust the effect wheels to their correct positions.The password of calibrate values is 050.
1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Test".
3．Double click to enter"Test"，turn the jog wheel to select"Calibration".
4．Double click to enter"Calibration"，The display will show"Password=050".
5．Long press to exit the menu.

9.5.5. Gobo Replace

This function will move the gobo wheel to the right position to remove the selected gobo to swap.
1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Test".
3．Double click to enter"Test"，turn the jog wheel to select"Gobo Replace".
4．Double click to enter"Gobo Replace"，select the gobo to remove. Double click to confirm.
5．Long press to exit the menu.

9.6. Preset

1．Double click to enter the menu.
2．Turn the jog wheel clockwise then display"Preset".
3．Double click to enter"Preset"，turn the jog wheel to select "Select prog.","Edit prog.", "Edit Scenes"，"Scenes Input".
4．Long press to exit the menu.

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

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
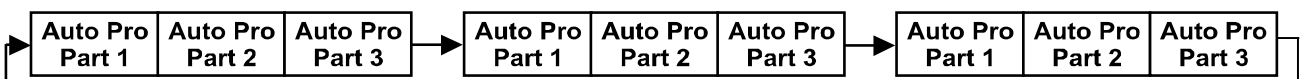
1．If the slave fixture chooses Run For Slave 1 from the menu of 1-3,then it will receive the part 1's automatic program from link，in the same way，when the slave fixture chooses Run For Slave 2，then it will receive the part 2's automatic program from link.
2．Enter the menu of 1-3 Function Mode---Set To 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，Part3 repeat in accordance with the Part1's repeat.For example：When Part 1 uses Program 2，Part 2 uses Program 4，Part 3 uses Program 6，Assume：Program 2 includes scene of 10，11，12，13；Program4 includes scene of 8，9，10；Program 6 includes scene of12，13，14，15；Then it will run as below.

Example：

Part 1:

Scene 10	Scene 11	Scene 12	Scene 13

Part 2:

Scene 8	Scene 9	Scene 10	Scene 8

Part 3:

Scene 12	Scene 13	Scene 14	Scene 15

10. DMX PROTOCOL
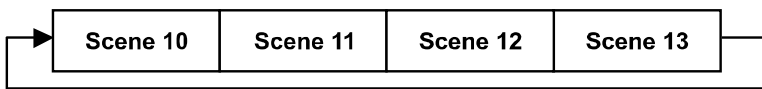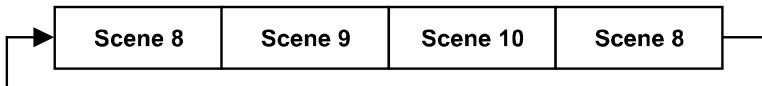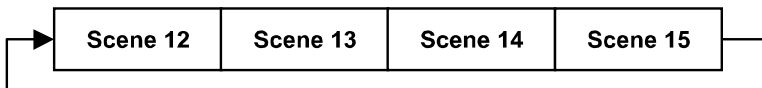
Mode/Channel		Value	Function
Std	Ex		
DMX channel´s functions and their values (46/34 DMX channels): 4x1 Prisms			
1	1		**PAN Movement 8bit :**
		0-255	Pan Movement
2	2		**Pan Fine 16bit**
		0-255	Fine control of Pan movement
3	3		**TILT Movement 8bit :**
		0-255	Tilt Movement
4	4		**Tilt Fine 16bit**
		0-255	Fine control of Tilt movement
5	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	6		**Pan Motor continuous rotation:**
		0-63	Stop rotation by spinout
		64-127	Stop rotation by shortcut
		128-189	Forwards Pan rotation from fast to slow
		190-193	No rotation
		194-255	Backwards Pan rotation from slow to fast
7	7		**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)
8	8		**Dimmer intensity:**
		0-255	Intensity 0 to 100%
	9		**Fine Dimmer intensity:**
		0-255	Dimmer intensity fine
9	10		**Not Used:**
10	11		**Not Used:**
11	12		**Not Used:**
12	13		**Zoom :**
		0-255	Zoom adjustment from small to big
	14		**Zoom Fine:**
		0-255	Zoom adjustment Fine

13	15		**Focus :**
		0-255	Continuous adjustment from near to far
	16		**Focus Fine:**
		0-255	Continuous adjustment Fine
14	17		**Auto Focus :**
		0-50	Auto Focus Off
		51-100	5m
		101-150	7.5m
		151-200	10m
		201-255	15m
15	18		**AutoFocus Fine:**
		0-255	Continuous adjustment Fine
16	19		**Color Wheel :**
		0-63	CTO (0-white, 255-100% CTO)
		64	Color 1
		65	Color 2
		66	Color 3
		67	Color 4
		68	Color 5
		69	Color 6
		70	Color 7
		71	Color 8
		72	Color 9
		73	Color 10
		74	Color 11
		75	Color 12
		76	Color 13
		77	Color 14
		78-127	Color indexing
		128-189	Forwards rainbow effect from fast to slow
		190-193	No rotation
		194-255	Backwards rainbow effect from slow to fast
	20		**Color Wheel Fine:**
		0-255	Color Wheel colour change to any position Fine
17	21		**Cyan Color :**
		0-255	Cyan (0-white, 255-100% Cyan)
	22		**Cyan Color Fine :**
		0-255	Cyan Fine
18	23		**Magenta Color :**
		0-255	Magenta (0-white, 255-100% magenta)
	24		**Magenta Color Fine :**
		0-255	Magenta Fine
19	25		**Yellow Color :**

		0-255	Yellow (0-white, 255-100% Yellow)
	26		**Yellow Color Fine :**
		0-255	Yellow Fine
20	27		**Rotating gobos, cont. rotation :**
		0-9	Open
		10-18	Rot. gobo 1
		19-27	Rot. gobo 2
		28-36	Rot. gobo 3
		37-45	Rot. gobo 4
		46-54	Rot. gobo 5
		55-63	Rot. gobo 6
		64-72	Rot. gobo 7
		73-81	Rot. gobo 8
		82-90	Rot. gobo 9
		91-101	Gobo 1 shake slow to fast
		102-112	Gobo 2 shake slow to fast
		113-123	Gobo 3 shake slow to fast
		124-134	Gobo 4 shake slow to fast
		135-145	Gobo 5 shake slow to fast
		146-156	Gobo 6 shake slow to fast
		157-167	Gobo 7 shake slow to fast
		168-178	Gobo 8 shake slow to fast
		179-189	Gobo 9 shake slow to fast
		190-221	Gobo wheel rotation forwards from fast to slow
		222-223	No rotation
		224-255	Gobo wheel rotation f backwards from slow to fast
21	28		**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
	29		**Rotating gobo indexing Fine :**
		0-255	Fine indexing
22	30		**Fixed Gobo:**
		0-31	Open
		32	Gobo 1
		33	Gobo 2
		34	Gobo 3
		35	Gobo 4
		36	Gobo 5
		37	Gobo 6
		38	Gobo 7
		39	Gobo 8

40	Gobo 9
41	Gobo 10
42	Gobo 11
43	Gobo 12
44	Gobo 13
45	Gobo 14
46	Gobo 15
47	Gobo 16
48	Gobo 17
49	Gobo 18
50	Gobo 19
51	Open
52	Gobo 1
53	Gobo 2
54	Gobo 3
55	Gobo 4
56	Gobo 5
57	Gobo 6
58	Gobo 7
59	Gobo 8
60	Gobo 9
61	Gobo 10
62	Gobo 11
63	Gobo 12
64	Gobo 13
65	Open
66	Gobo 1
67	Gobo 2
68	Gobo 3
69	Gobo 4
70	Gobo 5
71	Gobo 6
72	Gobo 7
73-75	Gobo 1 shake slow to fast
76-78	Gobo 2 shake slow to fast
79-81	Gobo 3 shake slow to fast
82-84	Gobo 4 shake slow to fast
85-87	Gobo 5 shake slow to fast
88-90	Gobo 6 shake slow to fast
91-93	Gobo 7 shake slow to fast
94-96	Gobo 8 shake slow to fast
97-99	Gobo 9 shake slow to fast
100-102	Gobo 10 shake slow to fast
103-105	Gobo 11 shake slow to fast
106-108	Gobo 12 shake slow to fast
109-111	Gobo 13 shake slow to fast

		112-114	Gobo 14 shake slow to fast
		115-117	Gobo 15 shake slow to fast
		118-120	Gobo 16 shake slow to fast
		121-123	Gobo 17 shake slow to fast
		124-126	Gobo 18 shake slow to fast
		127-129	Gobo 19 shake slow to fast
		130-132	Gobo 20 shake slow to fast
		133-135	Gobo 21 shake slow to fast
		136-138	Gobo 22 shake slow to fast
		139-141	Gobo 23 shake slow to fast
		142-144	Gobo 24 shake slow to fast
		145-147	Gobo 25 shake slow to fast
		148-150	Gobo 26 shake slow to fast
		151-153	Gobo 27 shake slow to fast
		154-156	Gobo 28 shake slow to fast
		157-159	Gobo 29 shake slow to fast
		160-162	Gobo 30 shake slow to fast
		163-165	Gobo 31 shake slow to fast
		166-168	Gobo 32 shake slow to fast
		169-171	Gobo 33 shake slow to fast
		172-174	Gobo 34 shake slow to fast
		175-177	Gobo 35 shake slow to fast
		178-180	Gobo 36 shake slow to fast
		181-183	Gobo 37 shake slow to fast
		184-186	Gobo 38 shake slow to fast
		187-189	Gobo 39 shake slow to fast
		190-221	Clock-wise scroll from fast to slow
		222-223	Reserved
		224-255	Counter clock-wise scroll from slow to fast
23	31		**Animation wheel:**
		0-7	open
		8-127	Forwards rotation from fast to slow
		128-135	No rotation
		136-255	Backwards rotation from slow to fast
24	32		**Prism 1:**
		0-127	Open
		128-255	Prism 1
25	33		**Rotating prism index, rotating prism rotation 1**
		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
	34		**Rotating prism indexing Fine 1:**
		0-255	Fine indexing
26	35		**Prism 2:**

		0-127	Open
		128-255	Prism 2
27	36		**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
	37		**Rotating prism indexing Fine 2:**
		0-255	Fine indexing
28	38		**Prism 3:**
		0-127	Open
		128-255	Prism 3
29	39		**Rotating prism index, rotating prism rotation 3**
		0-127	Prism indexing
		128-189	Forwards prism rotation from fast to slow
		190-193	No rotation
		194-255	Backwards prism rotation from slow to fast
	40		**Rotating prism indexing Fine 3:**
		0-255	Fine indexing
30	41		**Prism 4:**
		0-127	Open
		128-255	Prism 4
31	42		**Rotating prism index, rotating prism rotation 4**
		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
	43		**Rotating prism indexing Fine 4:**
		0-255	Fine indexing
32	44		**Frost 1:**
		0-255	0-100%
33	45		**Frost 2:**
		0-255	0-100%
34	46		**Control, reset, internal programs:**
		0-4	unused
		5-9	Display Off
		10-14	Display On
		15-19	Display Invert Off
		20-24	Display Invert On
		25-26	Auto fan control mode
		27-28	Stage fan control mode
		29-30	Silence fan control mode
		31-32	Super Silence fan control mode
		33-34	Constant Fans OFF
		35-36	Constant Fans ON

	37-44	Not Used	
	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	Not Used	
	95	Reset Pan/Tilt Fade OFF	
	96	Reset Pan/Tilt Fade ON	
	97-99	Other Motor reset	
	100-102	Frost Progressive OFF	
	103-105	Frost Progressive ON	
	106-255	Not Used	

DMX chart with 2x2 prisms

DMX channel´s functions and their values (40/30 DMX channels): 2x2 Prisms			
Mode/Channel		Value	Function
Std Low	**Ex Low**		
1	1		**PAN Movement 8bit :**
		0-255	Pan Movement
2	2		**Pan Fine 16bit**
		0-255	Fine control of Pan movement
3	3		**TILT Movement 8bit :**
		0-255	Tilt Movement
4	4		**Tilt Fine 16bit**
		0-255	Fine control of Tilt movement
5	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	6		**Pan Motor continuous rotation:**
		0-63	Stop rotation by spinout

		64-127	Stop rotation by shortcut
		128-189	Forwards Pan rotation from fast to slow
		190-193	No rotation
		194-255	Backwards Pan rotation from slow to fast
7	7		**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)
8	8		**Dimmer intensity:**
		0-255	Intensity 0 to 100%
	9		**Fine Dimmer intensity:**
		0-255	Dimmer intensity fine
9	10		**Not Used:**
10	11		**Not Used:**
11	12		**Not Used:**
12	13		**Zoom :**
		0-255	Zoom adjustment from small to big
	14		**Zoom Fine:**
		0-255	Zoom adjustment Fine
13	15		**Focus :**
		0-255	Continuous adjustment from near to far
	16		**Focus Fine:**
		0-255	Continuous adjustment Fine
14	17		**Auto Focus :**
		0-50	Auto Focus Off
		51-100	5m
		101-150	7.5m
		151-200	10m
		201-255	15m
15	18		**AutoFocus Fine:**
		0-255	Continuous adjustment Fine
16	19		**Color Wheel :**
		0-63	CTO (0-white, 255-100% CTO)
		64	Color 1
		65	Color 2
		66	Color 3
		67	Color 4
		68	Color 5

		69	Color 6
		70	Color 7
		71	Color 8
		72	Color 9
		73	Color 10
		74	Color 11
		75	Color 12
		76	Color 13
		77	Color 14
		78-127	Color indexing
		128-189	Forwards rainbow effect from fast to slow
		190-193	No rotation
		194-255	Backwards rainbow effect from slow to fast
	20		**Color Wheel Fine:**
		0-255	Color Wheel colour change to any position Fine
17	21		**Cyan Color :**
		0-255	Cyan (0-white, 255-100% Cyan)
	22		**Cyan Color Fine :**
		0-255	Cyan Fine
18	23		**Magenta Color :**
		0-255	Magenta (0-white, 255-100% magenta)
	24		**Magenta Color Fine :**
		0-255	Magenta Fine
19	25		**Yellow Color :**
		0-255	Yellow (0-white, 255-100% Yellow)
	26		**Yellow Color Fine :**
		0-255	Yellow Fine
20	27		**Rotating gobos, cont. rotation :**
		0-9	Open
		10-18	Rot. gobo 1
		19-27	Rot. gobo 2
		28-36	Rot. gobo 3
		37-45	Rot. gobo 4
		46-54	Rot. gobo 5
		55-63	Rot. gobo 6
		64-72	Rot. gobo 7
		73-81	Rot. gobo 8
		82-90	Rot. gobo 9
		91-101	Gobo 1 shake slow to fast
		102-112	Gobo 2 shake slow to fast
		113-123	Gobo 3 shake slow to fast
		124-134	Gobo 4 shake slow to fast
		135-145	Gobo 5 shake slow to fast

		146-156	Gobo 6 shake slow to fast
		157-167	Gobo 7 shake slow to fast
		168-178	Gobo 8 shake slow to fast
		179-189	Gobo 9 shake slow to fast
		190-221	Gobo wheel rotation forwards from fast to slow
		222-223	No rotation
		224-255	Gobo wheel rotation f backwards from slow to fast
21	28		**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
	29		**Rotating gobo indexing Fine :**
		0-255	Fine indexing
22	30		**Fixed Gobo:**
		0-31	Open
		32	Gobo 1
		33	Gobo 2
		34	Gobo 3
		35	Gobo 4
		36	Gobo 5
		37	Gobo 6
		38	Gobo 7
		39	Gobo 8
		40	Gobo 9
		41	Gobo 10
		42	Gobo 11
		43	Gobo 12
		44	Gobo 13
		45	Gobo 14
		46	Gobo 15
		47	Gobo 16
		48	Gobo 17
		49	Gobo 18
		50	Gobo 19
		51	Open
		52	Gobo 1
		53	Gobo 2
		54	Gobo 3
		55	Gobo 4
		56	Gobo 5
		57	Gobo 6
		58	Gobo 7
		59	Gobo 8

60	Gobo 9
61	Gobo 10
62	Gobo 11
63	Gobo 12
64	Gobo 13
65	Open
66	Gobo 1
67	Gobo 2
68	Gobo 3
69	Gobo 4
70	Gobo 5
71	Gobo 6
72	Gobo 7
73-75	Gobo 1 shake slow to fast
76-78	Gobo 2 shake slow to fast
79-81	Gobo 3 shake slow to fast
82-84	Gobo 4 shake slow to fast
85-87	Gobo 5 shake slow to fast
88-90	Gobo 6 shake slow to fast
91-93	Gobo 7 shake slow to fast
94-96	Gobo 8 shake slow to fast
97-99	Gobo 9 shake slow to fast
100-102	Gobo 10 shake slow to fast
103-105	Gobo 11 shake slow to fast
106-108	Gobo 12 shake slow to fast
109-111	Gobo 13 shake slow to fast
112-114	Gobo 14 shake slow to fast
115-117	Gobo 15 shake slow to fast
118-120	Gobo 16 shake slow to fast
121-123	Gobo 17 shake slow to fast
124-126	Gobo 18 shake slow to fast
127-129	Gobo 19 shake slow to fast
130-132	Gobo 20 shake slow to fast
133-135	Gobo 21 shake slow to fast
136-138	Gobo 22 shake slow to fast
139-141	Gobo 23 shake slow to fast
142-144	Gobo 24 shake slow to fast
145-147	Gobo 25 shake slow to fast
148-150	Gobo 26 shake slow to fast
151-153	Gobo 27 shake slow to fast
154-156	Gobo 28 shake slow to fast
157-159	Gobo 29 shake slow to fast
160-162	Gobo 30 shake slow to fast
163-165	Gobo 31 shake slow to fast
166-168	Gobo 32 shake slow to fast
169-171	Gobo 33 shake slow to fast

		172-174	Gobo 34 shake slow to fast
		175-177	Gobo 35 shake slow to fast
		178-180	Gobo 36 shake slow to fast
		181-183	Gobo 37 shake slow to fast
		184-186	Gobo 38 shake slow to fast
		187-189	Gobo 39 shake slow to fast
		190-221	Clock-wise scroll from fast to slow
		222-223	Reserved
		224-255	Counter clock-wise scroll from slow to fast
23	31		**Animation wheel:**
		0-7	open
		8-127	Forwards rotation from fast to slow
		128-135	No rotation
		136-255	Backwards rotation from slow to fast
24	32		**Prism 1 or Prism 2:**
		0-63	Open
		64-127	Prism 1
		128-255	Prism 2
25	33		**Rotating prism index, rotating prism rotation 1 or 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
	34		**Rotating prism indexing Fine 1 or 2:**
		0-255	Fine indexing
26	35		**Prism 3 or Prism 4:**
		0-63	Open
		64-127	Prism 3
		128-255	Prism 4
27	36		**Rotating prism index, rotating prism rotation 3 or 4**
		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
	37		**Rotating prism indexing Fine 3 or 4:**
		0-255	Fine indexing
28	38		**Frost 1:**
		0-255	0-100%
29	39		**Frost 2:**
		0-255	0-100%
30	40		**Control, reset, internal programs:**
		0-4	Not Used
		5-9	Display Off
		10-14	Display On
		15-19	Display Invert Off

			20-24	Display Invert On
			25-26	Auto fan control mode
			27-28	Stage fan control mode
			29-30	Silence fan control mode
			31-32	Super Silence fan control mode
			33-34	Constant Fans OFF
			35-36	Constant Fans ON
			37-44	Not Used
			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	Not Used
			95	Reset Pan/Tilt Fade OFF
			96	Reset Pan/Tilt Fade ON
			97-99	Other Motor reset
			100-102	Frost Progressive OFF
			103-105	Frost Progressive ON
			106-255	Not Used

11. ERROR MESSAGES

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

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

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

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

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

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

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

Magenta Color wheelEr

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

Yellow Color wheel Er

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

Rot_Gobo1 wheel Er

(Rot_Gobo1wheel - error) This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet missing) or the steppermotor is defective (or its driving IC on the main PCB).The Rot_Gobo1 - movement is not located in the default position after the reset.

Fix_Gobo wheel Er

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

Animation wheel Er

(Animationwheel - 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 steppermotor is defective (or its driving IC on the main PCB).The Animation - movement is not located in the default position after the reset.

Iris wheel Er

(Iriswheel - 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 steppermotor is defective (or its driving IC on the main PCB).The Iris - movement is not located in the default position after the reset.

Prism 1 wheelEr

(Prism 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 steppermotor is defective (or its driving IC on the main PCB).The Prism 1 - movement is not located in the default position after the reset.

Prism 2 wheelEr

(Prism 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 steppermotor is defective (or its driving IC on the main PCB).The Prism 2 - movement is not located in the default position after the reset.

Frost 1wheelEr

(Frost 1wheel - 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 steppermotor is defective (or its driving IC on the main PCB).TheFrost 1 - movement is not located in the default

position after the reset.

Frost 2wheelEr

(Frost 2wheel - 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 steppermotor is defective (or its driving IC on the main PCB).The Frost 2 - movement is not located in the default position after the reset.

12. 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 everyquarter 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.