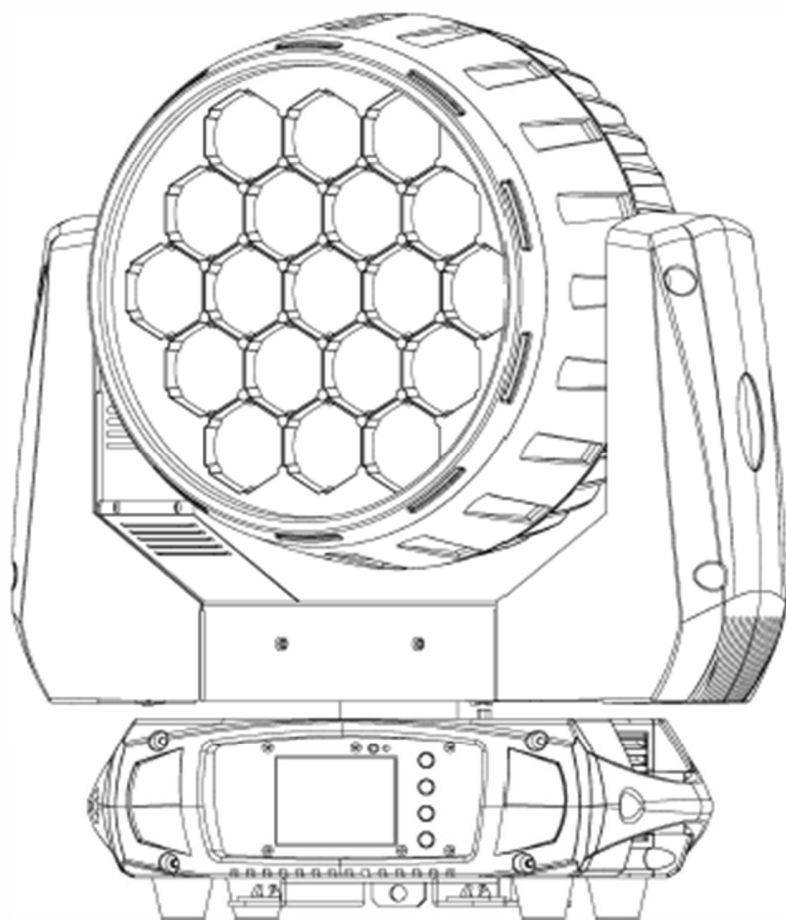# FOS Wash Q19

Version 1.0

USER MANUAL

- Be sure to read the USER MANUAL carefully before using this product.
- Be sure to keep the USER MANUAL properly for future needs.
- Use this product correctly when you can fully understand the User Manual

1.Safety instructions

Thank you for choosing our FOS ProWash 19. FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE YOU INITIAL START - UP!

> **CAUTION!**
> **Be careful with your operations.**
> **With a high voltage you can suffera dangerous electric shock when touching the wires!**

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

> **CAUTION!**
> **Keep this device away from rain and moisture!**
> **Unplug mains lead before opening the housing!**

Important:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

During the operation the housing becomes hot). Allow the fixture to cool approximately 20 minutes prior to manipulate with it.

Make sure that the available voltage is not higher than stated on the rear panel.

WARNING! This unit does not contain an ON/OFF switch. Always disconnect power input cable to completely remove power from unit when not in use or before cleaning or servicing the fixture.

Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power-cord by the plug. Never pull out the plug by tugging the power cord.

This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.

The electric connection, repairs and servicing must be carried out by a qualified employee.

Do not connect this device to a dimmer pack.

Do not switch the fixture on and off in short intervals as this would reduce the lamp's life.

During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.

Do not touch the device's housing bare hands during its operation (housing becomes hot)!

For replacement use lamps and fuses of same type and rating only.

> **CAUTION ! EYE DAMAGES !**
> **Avoid looking directly into the light source**
> **(meant especially for epileptics) !**

2.UNPACKING

The FOS ProWash 19 adopts 19*15W RGBW 4-IN-1 LED lamp which features high brightness and stability. Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation. And please check whether the following items are included inside the box:

▲ Moving Head *1

▲ Power Cable*1

▲ User Manual*1

▲ Hanging Kit *2

▲ Signal Cable *1

▲ Safety Cable*1
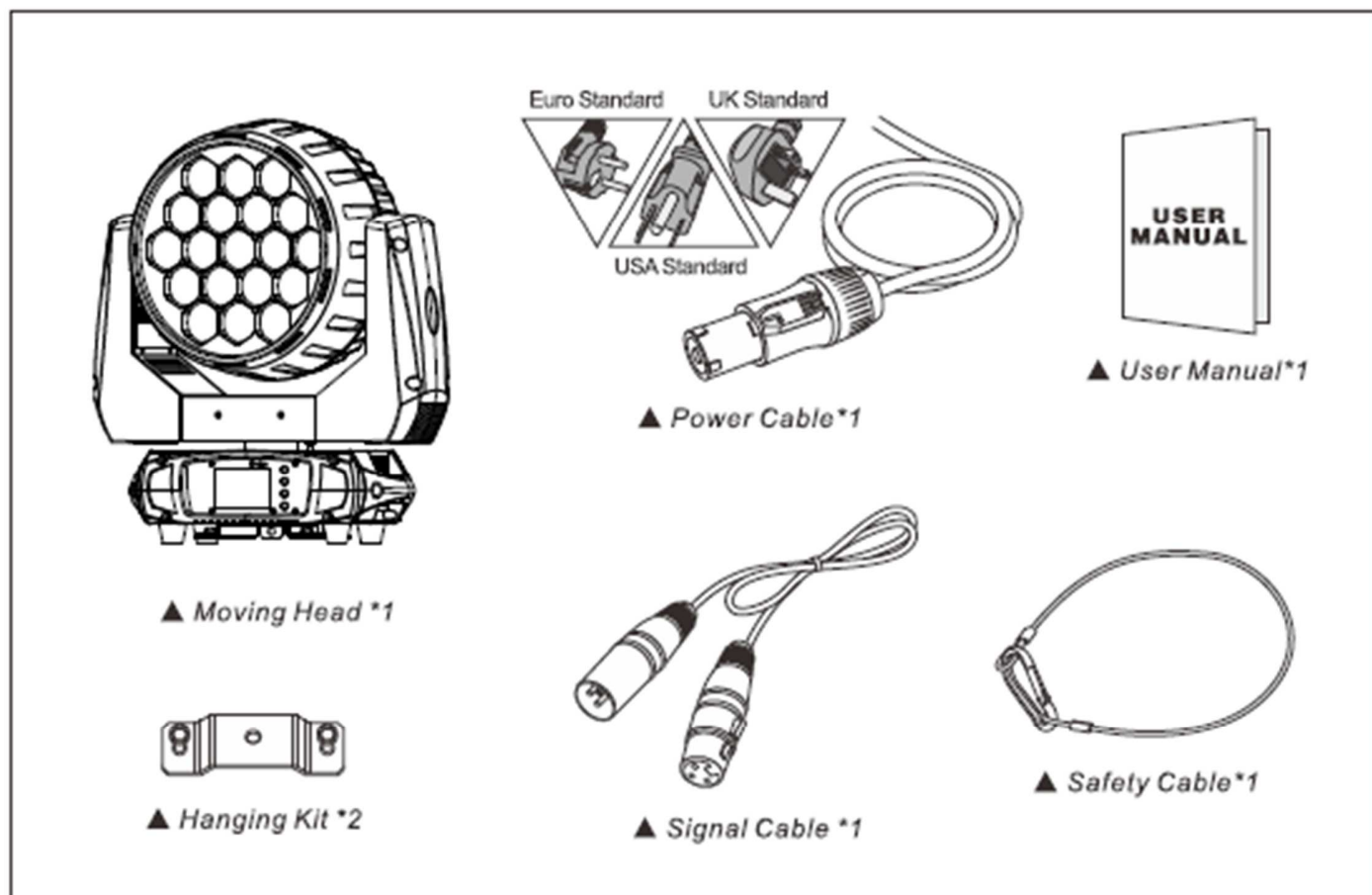
The FOS ProWash 19 is made of a new type of high temperature strength of engineering plastics and cast aluminum casing with nice outlook , The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live per formances, theater, studio, nightclubs and discos.

This manual covers the important information on installation and applications. Meanwhile, please keep this manual well for future needs.
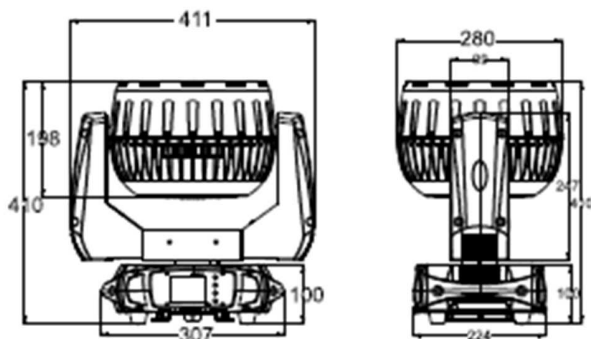
3.TECHNICAL INFORMATION

SPECIFICATIONS:

- 19*15W 4-IN-1 RGBW LEDs 50,000 hours life span
- Input Voltage: AC90-260V 50/60Hz
- Control Signal: DMX512, master-slave and sound activated or auto operation
- Control Channel: 16/22/38 DMX channel
- Power Consumption: 350W
- Dimensions:411(D)*280(W)*410(H)mm
- Packing Dimensions: 490(D)*280(W)*560(H)mm
- Net Weight:11,2kg
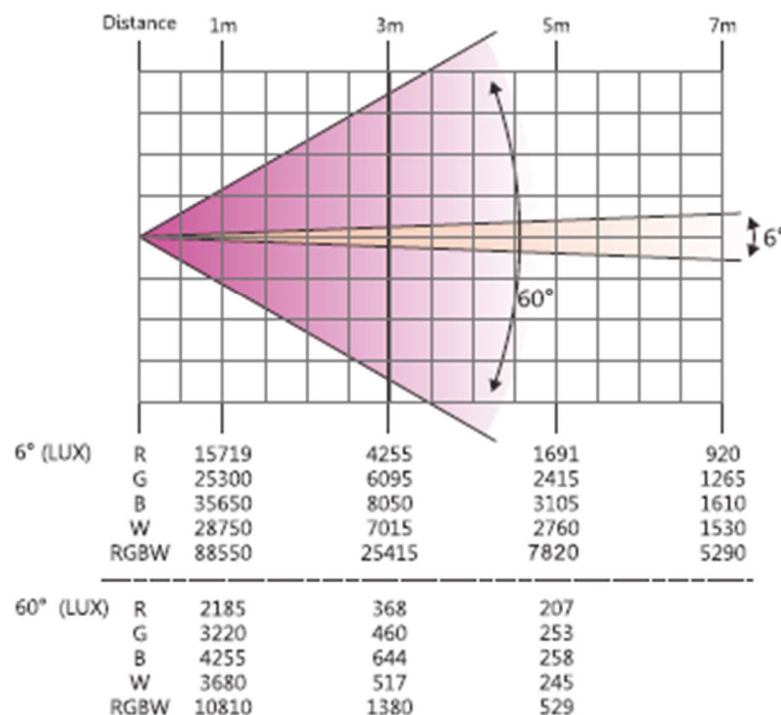- Gross Weight:13,9kg

FEATURES:

- Low power consumption
- Specific optic lens of highly efficient elements integrated with glass tube
- Four groups controlled
- Fast, smooth and quiet motorized zoom with 6° - 60° angle
- Color temperature Liner up and down in 2700K-8000K
- Even, soft edge and pure color mixing coverage
- Flicker free sources management
- 8/16 Bit smooth, fast and precise PAN/TILT movement
- 630°/540°/360°PAN optional and
- 270°/180°/90°TILT optional
- PAN/TILT reversible advantage
- PAN/TILT calibration available
- Scan position memory, auto reposition after unexpected movement
- 0-100% Smooth linear LED dimmer
- built-In default programs for easy operation
- Different Kinds of pre-programmed macro effects with variable speed
- Variable speed strobe effect with 1-25 flashes per second
- Variable pusle and random effects
- Sound control with sensitivity adjustment
- 2.4" TFT LCD display (320*240pix) with 4 control buttons
- LCD display switch-off automatically after 60 seconds
- DMX signal monitoring indicator available
- Lower noise and efficient FAN cooling system
- Efficient low noise self adjusting fan cooling system
- Constant temperature readout and management function
- Over heat protection management
- Powercon IN/ OUT with power switch and fuse
- 3-Pin DMX connectors IN/OUT
- DB rating@1M=54,18dB
- IP20 protection rating
- -35°C ~ 45°C max ambient temperature
- 2*1/4 turn fastening Omega Clamps (Adaptable vertically and horizontally)
- 1*Safety attachment point
- CE (EMC/LVD) and RoHS certified

4.PHOTOMETRICS DIAGRAM

6° (LUX)		1m	3m	5m	7m
	R	15719	4255	1691	920
	G	25300	6095	2415	1265
	B	35650	8050	3105	1610
	W	28750	7015	2760	1530
	RGBW	88550	25415	7820	5290

60° (LUX)		1m	3m	5m
	R	2185	368	207
	G	3220	460	253
	B	4255	644	258
	W	3680	517	245
	RGBW	10810	1380	529

5.OPERATION INSTRUCTIONS

- The FOS ProWash 19 is for beam&wash effect for on-site decoration purpose.
- Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.
- This light should be keep away from strong shaking during any transportation or movement.
- Don't pull up the light by only the head, or it might cause damages to the mechanical parts.
- Don't expose the fixture in overheat, moisture or environment with too much dust when installing it. And
- don't lay any power cables on the floor. Or it might cause electronic shock to the people.
- Make sure the installation place is in good safety condition before installing the fixture.
- Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.
- Make sure the lens are in good condition.It's recommended to replace the units if there are any damages or severe scratch.
- Make sure the fixture is operated by qualified personnel who knows the fixture before using.
- Keep the original packages if any second shipment is needed.
- Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.
- It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock , lamp broke, etc.

6.INSTALLATIONS

Cautions:

For added protection mount the fixtures in areas outside walking paths, seating areas, or in areas were the fixture might be reached by unauthorized personnel.

Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight.

Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or servicing the fixture,

from a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5 f t) 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,

Mounting points:

Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Clamp Mounting:

FOS ProWash 19 provides a unique mounting bracket assembly that integrates the bottom of the base, and the safety cable rigging point in one unit (see the illustration below). When mounting this fixture to truss be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the "Hanging Kit". As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using on of the safety cable rigging point integrated in the base assembly .

Satety Clamp

Hanging Kit

1/4 Turn   1/4 Turn

Safety Cable

INSTALLATION DIAGRAM
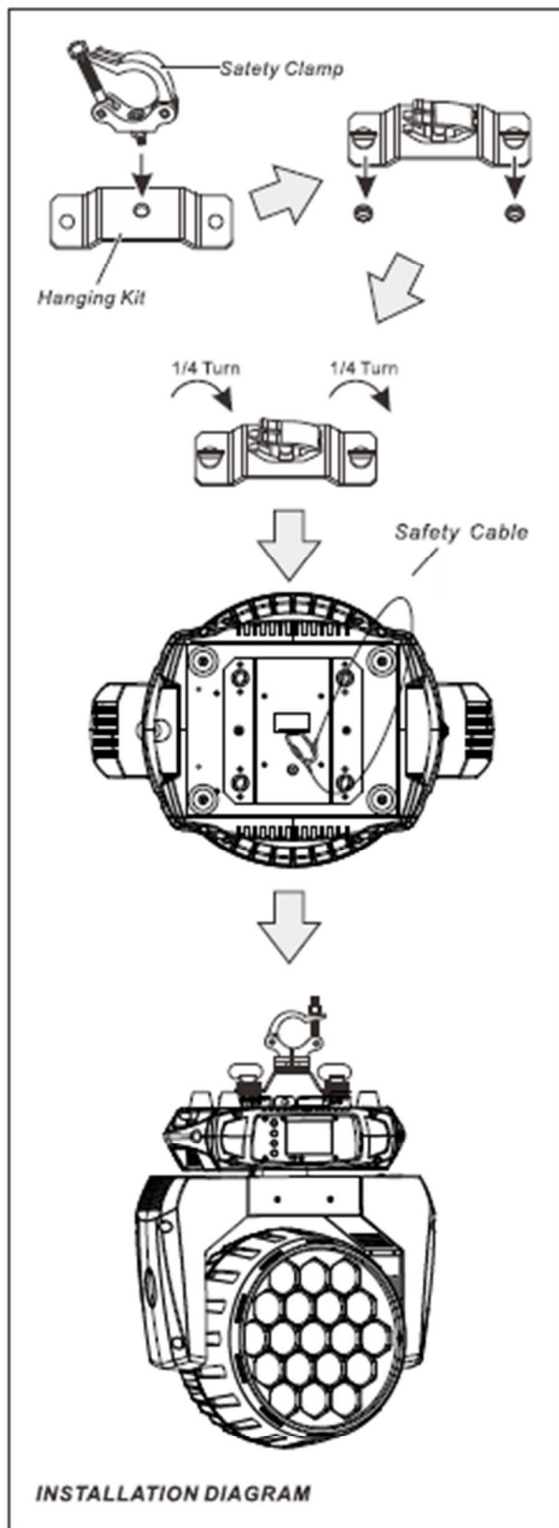
7.CONTROL CONNECTION
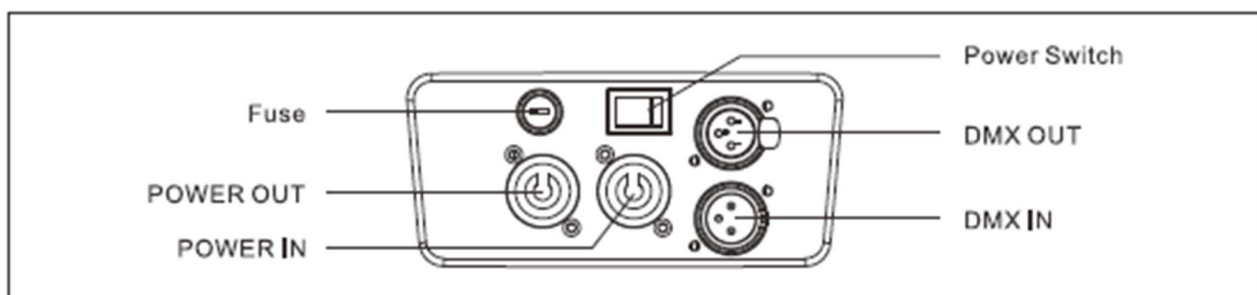
Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below. DMX-512 connection with DMX terminator.

For installations where the DMX cable has to run 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 by electrical noise. The DMX terminator is simply an XLR plug with a3 resistor connected between pins 2 and 3,which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.
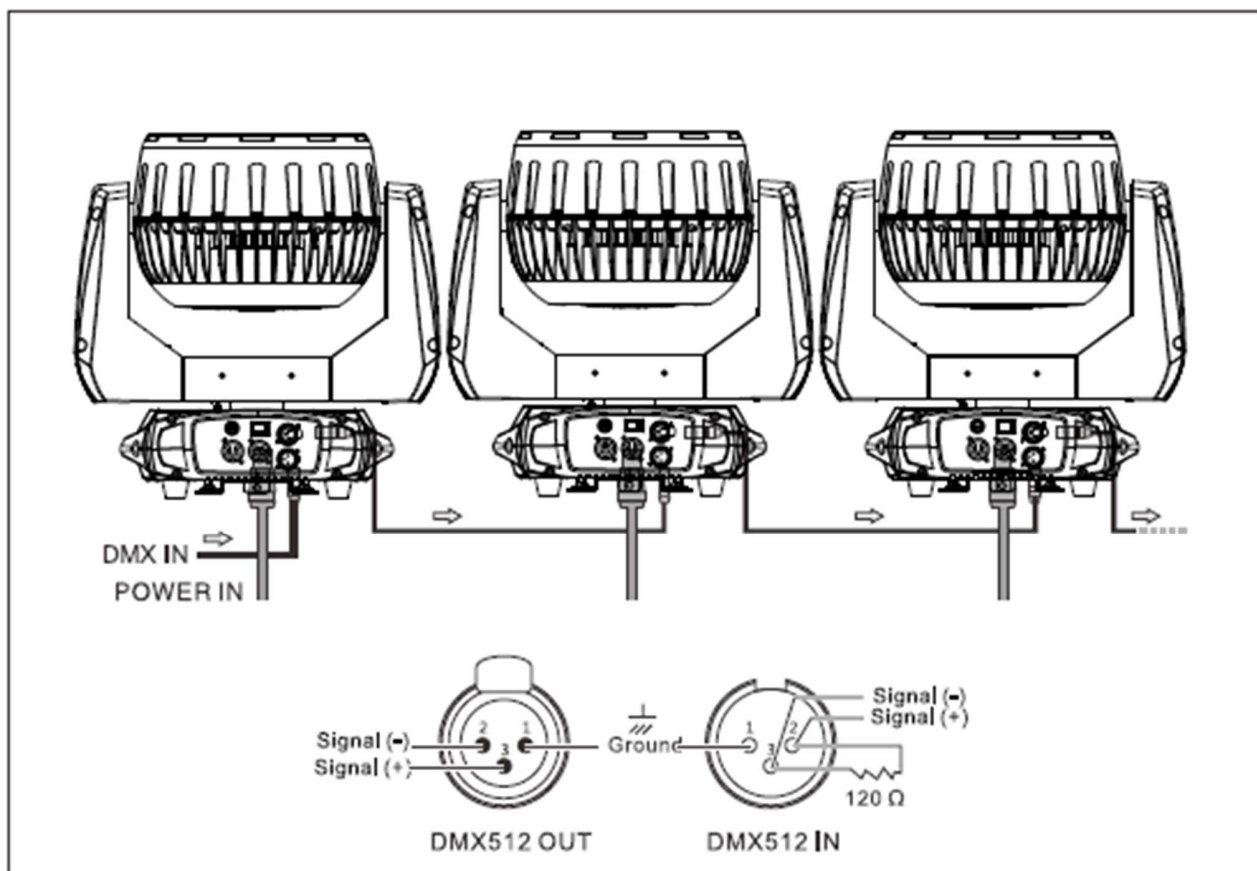
8.MENU OPERATIONS
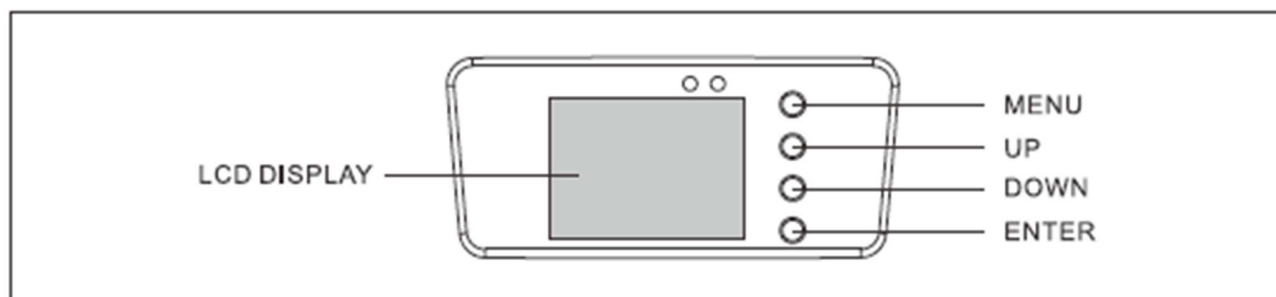
MENU				Description
Function Mode	Dmx Address	A001~AXXX		DMX address setting
	Channel Mode	CH22		22Channel mode
		CH16		16Channel mode
		CH38		38Channel mode
	Auto Run	Internal Program1~8	Master/Alone	Auto run
	Music Control	Internal Program1~8	Master/Alone	Sound Control
Option	Reset Default	Yes/No		Reset Default
	Signal Set	Wire DMX		Wire DMX
		Wireless DMX		Wireless DMX
		Act WDMX & Out		Act WDMX & Out
	Pan / Tilt	Reverse Pan (On/Off)		Reverse Pan
		Reverse Tilt (On/Off)		Reverse Tilt
		Select Pan 630°/540°/360°		Pan Degree,default is 540°
		Select Tilt 270°/180°/90°		Tilt Degree,default is 270°
	UI SET	Mic SEN 0~99%		Sensitivity Setting
		OFF Signal Mode (On/Off)		OFF at original status and ON at reset status when no DMX signal
Information	Temperature	XXX°C/°F		Current Temperature
	Software Version	V1.0~V9.9		Software Version
Manual Control	Reset	Total Reset		Total Reset
		Pan/Tilt Reset		Pan/Tilt Reset
		Zoom Reset		ZoomReset
	Channel	PAN=XXX......		Manual Control Channel
Advanced (Access Code 088)	Calibration	PAN=XXX......		Calibration (Code:088)

9.DMX PROTOCOL

Mode/Channel			Value	Function
38	22	16		
1	1	1		Pan
			0..255	PAN Movement
2	2	2		Pan -fine
			0..255	Fine control of Pan movement
3	3	3		Tilt
			0..255	Tilt Movement
4	4	4		Tile -fine
			0..255	Fine control of Tilt movement
5	5	5		Speed pan/tile
			0..225	max to min speed
			226..235	blackout by movement
			236..255	no function
6	6	6		Dimmer
			0..255	Dimmer 0%...100%
7	7	7		Shutter
			0..31	Shutter closed
			32..63	shutter open
			64..95	Strobe effect slow to fast
			96..127	shutter open
			128..159	Pulse-effect in sequences slow to fast
			160..191	shutter open
			192..223	Random strobe effect slow to fast
			224..255	shutter open
8	8	8		Red
			0..255	0-100% Red dimmer from dark to bright
9	9	9		Green
			0..255	0-100% Green dimmer from dark to bright
10	10	10		Blue
			0..255	0-100% Blue dimmer from dark to bright

11	11	11		White
			0..255	0-100% White dimmer from dark to bright
12	12	12		Zoom
			0..255	In(near)to out(far)
13	13	13		Virtual color
			0..0	No Function
			1..13	Red
			14..27	Green
			28..41	Blue
			42..55	White
			56..69	Red+White
			70..83	Green+White
			84..97	Blue+White
			98..111	Green+Blue
			112..125	Red+Blue
			126..139	Red+Green
			140..153	Green+Blue+White
			154..167	Red+Blue+White
			168..181	Red+Green+White
			182..195	Red+Blue+Green+White
			196..202	2700K
			203..209	3200K
			210..216	3500K
			217..223	5000K
			224..230	5500K
			231..237	6000K
			238..244	6500K
			245..251	7000K
			252..255	8000K
14	14	14		Color Temp
			0..15	No Function
			16..45	Below 3200K
			46..75	3200K – 3500K
			76..105	3500K – 5000K
			106..135	5000K – 5500K
			136..165	5500K – 6000K
			166..195	6000K – 6500K
			196..225	6500K – 7000K
			226..255	7000K – 8000K

				Visual Tungsten Lamp
15	15	15	0..15	No Function
			16..255	Tungsten lamp effect is gradually enhanced
16	16			Foreground color for patterns
			0..0	No Function
			1..13	Red
			14..27	Green
			28..41	Blue
			42..55	White
			56..69	Red+White
			70..83	Green+White
			84..97	Blue+White
			98..111	Green+Blue
			112..125	Red+Blue
			126..139	Red+Green
			140..153	Green+Blue+White
			154..167	Red+Blue+White
			168..181	Red+Green+White
			182..195	Red+Blue+Green+White
			196..202	2700K
			203..209	3200K
			210..216	3500K
			217..223	5000K
			224..230	5500K
			231..237	6000K
			238..244	6500K
			245..251	7000K
			252..255	8000K
17	17			Foreground dimmer
				Choose Foreground color for Dynamic/Static Scene,no function for Multicolor Scene
			000..255	Foreground dimmer 0 – 100%.

					Background color for patterns
18	18			0..0	No Function
				1..13	Red
				14..27	Green
				28..41	Blue
				42..55	White
				56..69	Red+White
				70..83	Green+White
				84..97	Blue+White
				98..111	Green+Blue
				112..125	Red+Blue
				126..139	Red+Green
				140..153	Green+Blue+White
				154..167	Red+Blue+White
				168..181	Red+Green+White
				182..195	Red+Blue+Green+White
				196..202	2700K
				203..209	3200K
				210..216	3500K
				217..223	5000K
				224..230	5500K
				231..237	6000K
				238..244	6500K
				245..251	7000K
				252..255	8000K
19	19				Background dimmer
					Choose Background color for Dynamic/Static Scene,no function for Multicolor Scene
				000..255	Background dimmer 0 — 100%,
20	20				Patterns
				000..015	No function
				016..031	Static patterns
				032..045	Dynamic Scene1
				046..059	Dynamic Scene2
				060..073	Dynamic Scene3
				074..087	Dynamic Scene4
				088..101	Dynamic Scene5
				102..115	Dynamic Scene6
				116..129	Dynamic Scene7
				130..143	Dynamic Scene8
				144..157	Multicolor Dynamic Scene1
				158..171	Multicolor Dynamic Scene2
				172..185	Multicolor Dynamic Scene3
				186..199	Multicolor Dynamic Scene4
				200..213	Multicolor Dynamic Scene5
				214..227	Multicolor Dynamic Scene6
				228..241	Multicolor Dynamic Scene7
				242..255	Multicolor Dynamic Scene8

21	21			Static patterns or patterns speed	
				Static Patterns (If Patterns channel is in the interval 016 – 031)	
				000..015	static scene1
				016..031	static scene2
				032..047	static scene3
				048..063	static scene4
				064..079	static scene5
				080..095	static scene6
				096..111	static scene7
				112..127	static scene8
				128..143	static scene9
				144..159	static scene10
				160..175	static scene11
				176..191	static scene12
				192..207	static scene13
				208..223	static scene14
				224..239	static scene15
				240..255	static scene16
				Dynamic Patterns (If Patterns channel is in the interval 032 – 255)	
				000..023	No function
				024..137	Forward speed from zero speed to fast speed
				138..141	Stop movement
				142..255	Reverse speed from zero speed to fast speed

22				Red in Pixel 1
			0..255	Red in pixel 1 saturation control (0-100%)
23				Green in Pixel 1
			0..255	Green in pixel 1 saturation control (0-100%)
24				Blue in Pixel 1
			0..255	Blue in pixel 1 saturation control(0-100%)
25				White in pixel 1
			0..255	White in pixel 1 saturation control(0-100%)
26				Red in pixel 2
			0..255	Red in pixel 2 saturation control(0-100%)
27				Green in pixel 2
			0..255	Green in pixel 2 saturation control(0-100%)
28				Blue in pixel 2
			0..255	Blue in pixel 2 saturation control(0-100%)
29				White in pixel 2
			0..255	White in pixel 2 saturation control(0-100%)
30				Red in Pixel 3
			0..255	Red in pixel 3 saturation control (0-100%)
31				Green in pixel 3
			0..255	Green in pixel 3 saturation control(0-100%
32				Blue in pixel 3
			0..255	Blue in pixel 3 saturation control(0-100%)
33				White in pixel 3
			0..255	White in pixel 3 saturation control(0-100%)
34				Red in Pixel 4
			0..255	Red in pixel 4 saturation control (0-100%)

35				Green in pixel 4
			0..255	Green in pixel 4 saturation control(0-100%)
36				Blue in pixel 4
			0..255	Blue in pixel 4 saturation control(0-100%)
37				White in pixel 4
			0..255	White in pixel 4 saturation control(0-100%)
38	22	16		Special function
			0..19	No function
			20..29	No function
			30..39	No function
			40..79	No function
			80..89	All Motor reset
			90..94	SCAN Motor Reset
			95..99	ZOOM Motor Reset
			100..119	Internal program 1
			120..139	Internal program 2
			140..159	Internal program 3
			160..179	Internal program 4
			180..199	Internal program 5
			200..219	Internal program 6
			220..239	Internal program 7
			240..255	Internal Sound program 1

10.Maintenance and cleaning

It is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not build up on or within the fixture. Otherwise, the fixture's light-output will be significantly reduced. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to function reliably throughout its life.A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!

DANGER !
Disconnect from the mains before starting any maintenance work

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The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly. The cooling-fans should be cleaned monthly.

The interior of the fixture should be cleaned at least annually using a vacuum-cleaner or an air-jet. Remove dust and dirt from the fans and cooling vents using a soft brush and vacuum-cleaner.

Important! Check the air filters periodically and clean before they become clogged!

Clean two air filters placed in the fixture's covers and two in the fixture base. Use a vacuum cleaner, compressed air or you can wash them and put back dry.

After replacing the air filters, reset the elapsed time counter in the menu "Information" (Information--->Air Filters--->Elapsed Time).

Replacing the fuse. Before replacing the fuse, unplug mains lead.
1) Remove the fuse holder on the rear panel of the base with a fitting screwdriver from the housing (anti-clockwise).
2) Remove the old fuse from the fuse holder.
3) Install the new fuse in the fuse holder (only the same type and rating).
4) Replace the fuseholder in the housing and fix it.