AERO WASH 710Z

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
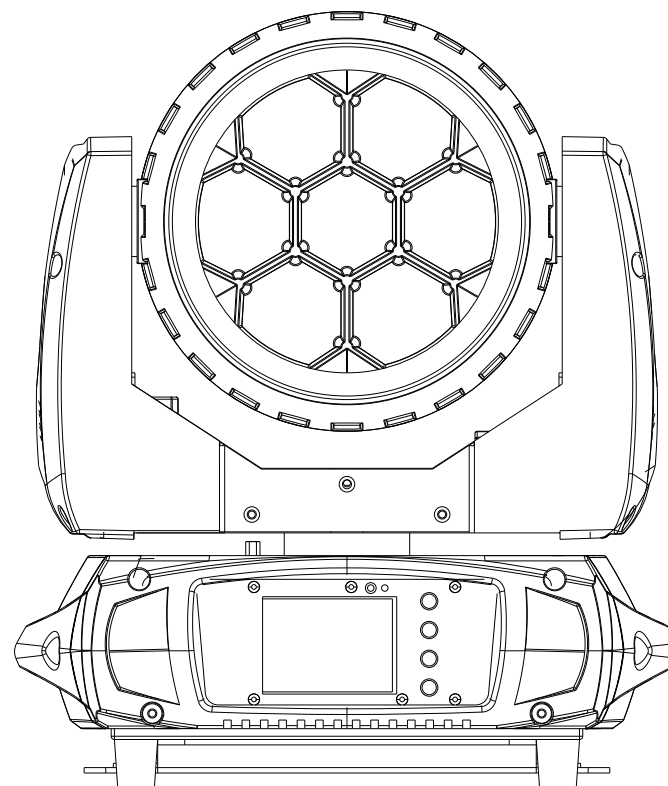

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1.Safety instructions

Thank you for choosing our AERO WASH 710Z . 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 suffer a 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) !**

12.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**

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.
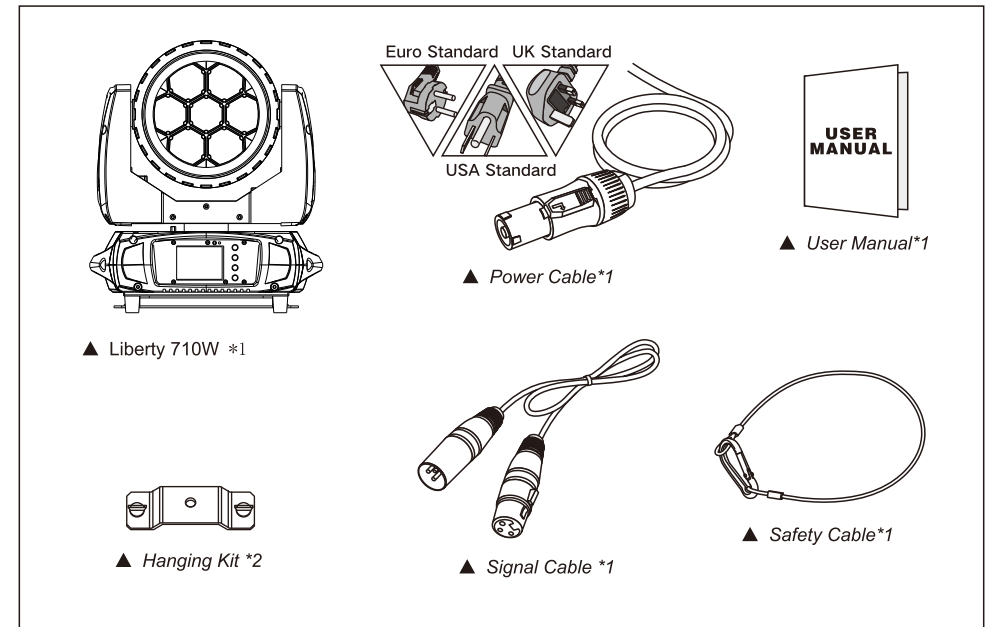
11.RF Remote Controller Instruction

1.Press 3 times "Spot" to activate Spot series RF function
2.Press 3 times "Beam" to activate Beam series RF function
3.Press 3 times "Wash" to activate Wash series RF function
4.Press 3 times "Par" to activate Wash series RF function
5. "Dimmer" brightness adjustment (press "Dimmer" button then press "+", "-") to adjust brightness.
6. "Strobe" turn on strobe effect (press "Strobe" button, can adjust speed by "+", "-").
7. "◄◄" adjust the speed of sound program or adjust the sensitivity of sound control.

8. "►►" adjust the speed of self-propelled program or adjust the sensitivity of voice control.
9. "1-9" Auto programs or sound activated state , press the corresponding button into the corresponding program; In the "Dimmer" or "Strobe" state, press this button can be optional color matching

10. "■" All reset
11. "DMX" selects wire DMX signal as signal source.

Tips:
1.When activated RF function, the lamp will not control by DMX signal, and the lamp is in the RF control state. And each remote controller can only control a series of lamps at the same time.

2.When Wash series opens "Dimmer" and "Strobe", it needs to press the number button to brighten the corresponding color. In this mode, the number botton can only switch the color wheel, but not the corresponding key color for Spot and Beam series.

3.To turn off RF function, there are the following methods:
(1). Select the signal input mode needed, "DMX" can exit RF function;
(2). Switch to other series of lamps, "Spot", "Beam", "Wash", "Par" switch to other units, will be restored to the original set signal source input;
(3). Press the menu button of the display panel.

2.UNPACKING

AERO WASH 710Z adopts 7*10W 4 IN 1 LEDs 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:

Euro Standard   UK Standard

USA Standard

USER MANUAL

▲ User Manual*1

▲ Power Cable*1

▲ Liberty 710W ＊1

▲ Hanging Kit *2

▲ Signal Cable *1

▲ Safety Cable*1

The AERO WASH 710Z 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

Light Source
- Lamp: 7x10W Quad RGBW LEDs
- Life span: 50000 Hours
- Color: RGBW

Optics
- Beam angle: 6°-60°
- Improved optics and flat beam field

Power Supply
- Input Voltage:AC90-260V 50/60Hz
- Power Consumption: Sate of charge 200W; non-charged state: 90W

Battery
- LED full use 8 hours, built-in program to use 8-12 hours
- Temperature detection function (-20 ℃ to 50 ℃ normal charge,;not the range,it do damage to the battery and can not be normal charged)
- Battery short circuit protection, overcurrent protection
- Overflow charging
- After the battery is switched on, the battery is automatically charged when the battery is low, and the charging function is automatically stopped when the battery is fully charged.
- Support battery extension.

Control
- 4 Operating Modes:Sound Active,Show Mode,DMX Controlled and RF Remote Control
- 9 Built-in lighting Shows
- Built-in wireless DMX Technology
- Control channel:15/17DMX channels USITT DMX-512
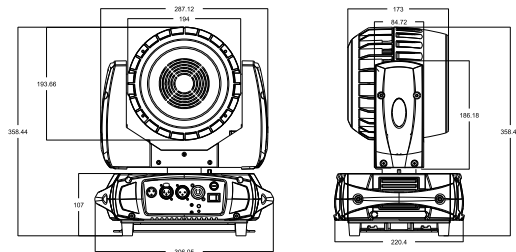- DMX recorder and function integrated

Movement
- 630° /540° /360° PAN and 270°/180° /90° TILT movement optional
- Smooth and precise resolution for PAN/TILT movement
- Scan position memory, auto reposition after unexpected movement.
- PAN/TILT reversible advantage
- PAN/TILT calibration available

Working Enviroment
- -20°C-45°C max ambient temperature
- Constant temperature readout and management function.
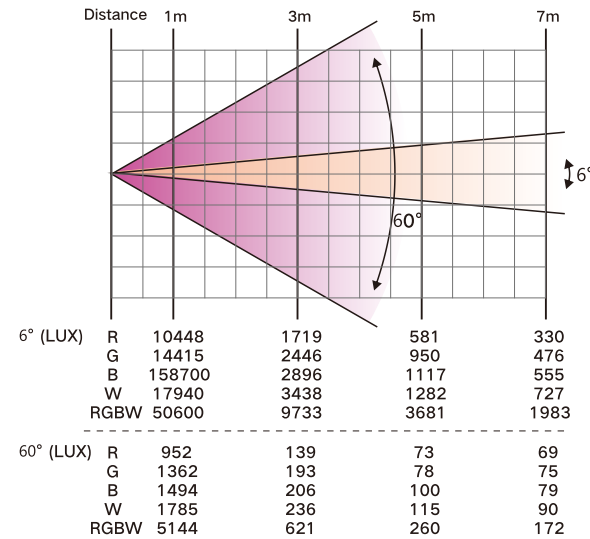- Protection Rating : IP 20

Construction & Weight
- Dimensions:12"x 14"x 9'' / 30.6x35.8x22.4cm
- Packing Dimensions:14.6"x 11"x 16.7'' / 37x28x42.5cm
- Net Weight:18.7 lbs. / 8.5kgs
- Gross Weight: 30 lbs. / 13.8kgs

Features
- ABS die-cast plastic cover with Aluminium structure
- Full pixel controllable individually
- Color temperature Liner up and down in 2700-8000K
- 8/16 Bit smooth and precise resolution for PAN/TILT movement
- Scan position memory,auto reposition after unexpected movement
- Fast,smooth and quiet motorized zoom with 6°-60° range
- Even,soft edge and pure color mixing coverage
- Flicker free sources management
- Scan position memory,auto re-position after unexpected movement
- 0-100% Linear LED dimmer
- 7 Built-in default programs for easy operations
- Variable speed strobe effect with 1-25 flashes per second
- Variable pulse and random effects
- 2.4'' TFT LCD display (320*240pix) with 4 control buttons
- LCD display switch-off automatically after 30 second
- 180°Reversible for LCD display
- 3-Pin XLR connectors IN/OUT
- Constant temperature readout and management function
- 2*1/4 Turn fastening Omega Clamps(Adaptable vertically and horizontally)
- 1*Safety attachment point

17	15		Special function
		0..19	No function
		20..39	No function
		40..59	Enter power saving mode
		60..79	Exit power saving mode
		80..84	All Motor reset
		85..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

			White
12	10	0..255	0-100% White dimmer from dark to bright
			Macro
		0..15	No Function
		16..31	Red
		32..47	Green
		48..63	Blue
		64..79	White
		80..95	Red+Green
13	11	96..111	Red+Blue
		112..127	Red+White
		128..143	Green+Blue
		144..159	Green+White
		160..175	Blue+Wtihe
		176..191	R+G+B
		192..207	R+G+B+W
		208..223	Jump effect
		224..239	Fading effect
		240..255	Pulse-effect
14	12		Macro Speed
		0..255	Macro Speed from Slow To Fast
			Color Temp
		0..15	No Function
		16..45	Below 3200K
		46..75	3200K - 3500K
		76..105	3500K - 5000K
15	13	106..135	5000K - 5500K
		136..165	5500K - 6000K
		166..195	6000K - 6500K
		196..225	6500K - 7000K
		226..255	7000K - 8000K
			Visual Tungsten Lamp
16	14	0..15	No Function
		16..255	Tungsten lamp effect is gradually enhanced

4.PHOTOMETRICS DIAGRAM

Distance	1m	3m	5m	7m
6° (LUX) R	10448	1719	581	330
G	14415	2446	950	476
B	158700	2896	1117	555
W	17940	3438	1282	727
RGBW	50600	9733	3681	1983
60° (LUX) R	952	139	73	69
G	1362	193	78	75
B	1494	206	100	79
W	1785	236	115	90
RGBW	5144	621	260	172

5.OPERATION INSTRUCTIONS

● The AERO WASH 710Z is for beam 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.
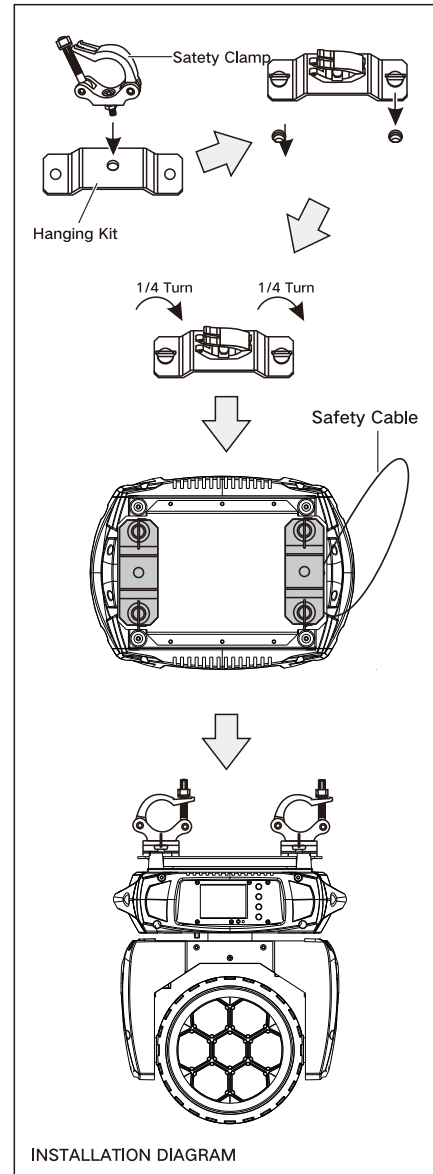
Mounting points:

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:

AERO WASH 710Z 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

10.DMX PROTOCOL

Mode/Channel		Value	Function
17	15		
1	1		**Dimmer**
		0..255	Dimmer 0%...100%
2	2		**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
3	3		**Pan**
		0..255	PAN Movement
4			**Pan-fine**
		0..255	Fine control of Pan movement
5	4		**Tilt**
		0..255	Tilt Movement
6			**Tile-fine**
		0..255	Fine control of Tilt movement
7	5		**Zoom**
		0..255	In(near) to out(far)
8	6		**Speed pan/tile**
		0..225	max to min speed
		226..235	blackout by movement
		236..255	no function
9	7		**Red**
		0..255	0-100% Red dimmer from dark to bright
10	8		**Green**
		0..255	0-100% Green dimmer from dark to bright
11	9		**Blue**
		0..255	0-100% Blue dimmer from dark to bright

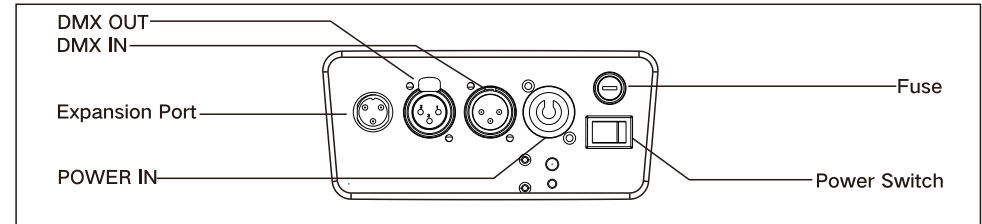**Description of the Wireless Indicator for Wireless DMX**

1. Under the Set-up mode, each color on the indicator means different communication protocols:

1. Red ----------------- Wi-MAZ Protocol
2. Yellow ------------- (Generic) Protocol

2. Under the Operation mode, explanation of the indicator's status:

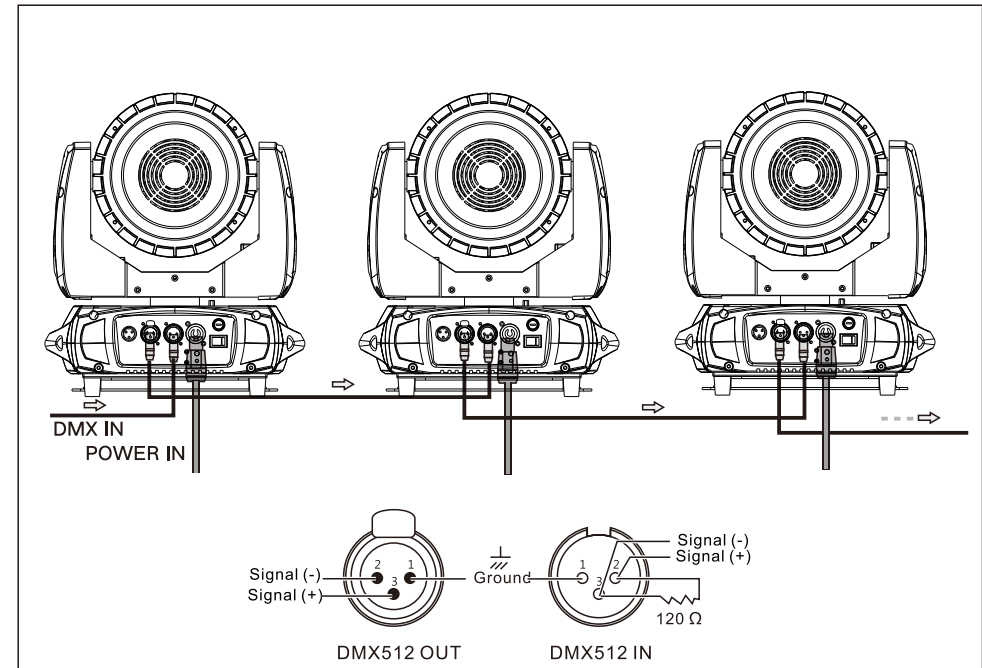| Protocol	Action	Status Description
Wi-MAZ or Generic Protocol	Red, Green, Blue, Yellow, Cyan, Purple, (White)	Different Wireless Groups
	Flashing Red	Transmitting Wireless DMX Signal
	Flashing Green	Receiving Wireless DMX Signal

7.CONTROL CONNECTION

DMX OUT
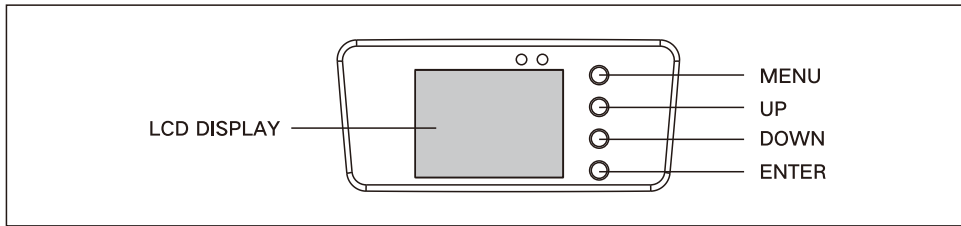DMX IN
Expansion Port
Fuse
POWER IN
Power Switch

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.

DMX IN
POWER IN

Signal (-)
Signal (+)
Ground
Signal (-)
Signal (+)
120 Ω

DMX512 OUT   DMX512 IN

8.MENU OPERATIONS

MENU			Description
Function Mode	Dmx Address	A001~AXXX	**DMX address setting**
	Channel Mode	CH17	**Standard mode**
		CH15	**Vector mode**
	Auto Run	Internal Program1~9	**Auto run**
		State: Master/Alone	**State: Master/Alone**
		Auto Run (On/Off)	**Auto Run (On/Off)**
	Music Control	Internal Program1~9	**Sound Control**
		State: Master/Alone	**State: Master/Alone**
		Music Run (On/Off)	**Music Run (On/Off)**
Option	Reset Default	Yes/No	**Reset Default**
	Signal Set	Wire DMX	**Wire DMX**
		Wireless DMX	**Wireless DMX**
		Act WiMAZ & Out	**Act Wi-MAZ & Out**
		Wi-MAZ Out	**Wi-MAZ 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 sensitivity 0~99%	**MIC Sensitivity Setting**
		OFF Signal Mode (On/Off)	**OFF at original status and ON at reset status when no DMX signal**
		Start Up Saving	**Start Up Saving**
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**
		The Others Reset	**The Others Reset**
	Channel	PAN=XXX......	**Channel Control**
Advanced (Access Code 088)	Calibration	PAN=XXX......	**Calibration(code:088)**

9.Operation Guide for the Wireless DMX

How to Set-up the Wireless DMX Mode:
Turn the power switch to off on the back of the light, press and hold the "SELECT" button then turn the power switch to ON. When you see status indicator turns into the white color, release the button to enter the Set-up mode. In this mode you can select different transmission protocols. Each time you press the "SELECT" button, you would see the status indicator changes in following order: red, green, blue and yellow. Choose one of the protocols **(recommended using RED- Wi-MAZ protocol)**, then press and hold the "SELECT" button for two seconds, when you see the indicator light turns to white color, release the "SELECT" button and it will enter the operation mode, the set up for wireless DMX is done.

* Under the Wi-MAZprotocol or Generic protocol, you can select different DMX Group:

Press the "SELECT" button once, it will indicated the current DMX group. Press the "SELECT" button twice, you can switch over to different DMX group.

Explanation of the DMX Signal setting on the menu

Options:	Function:
Wire DMX	Using wire DMX signal input
Wireless DMX	Using Wireless DMX signal input
Act Wi-MAZ & Out	Using Wireless DMX signal input, at the same time, it will send out DMX signal to the DMX output on the back of the light
Wi-MAZ Out	Using wire DMX signal input, at the same time, it will send out wireless DMX signal through the wireless transmitter. (In case if there is no wire DMX input signal, the device will stay at Wireless DMX receiving mode)