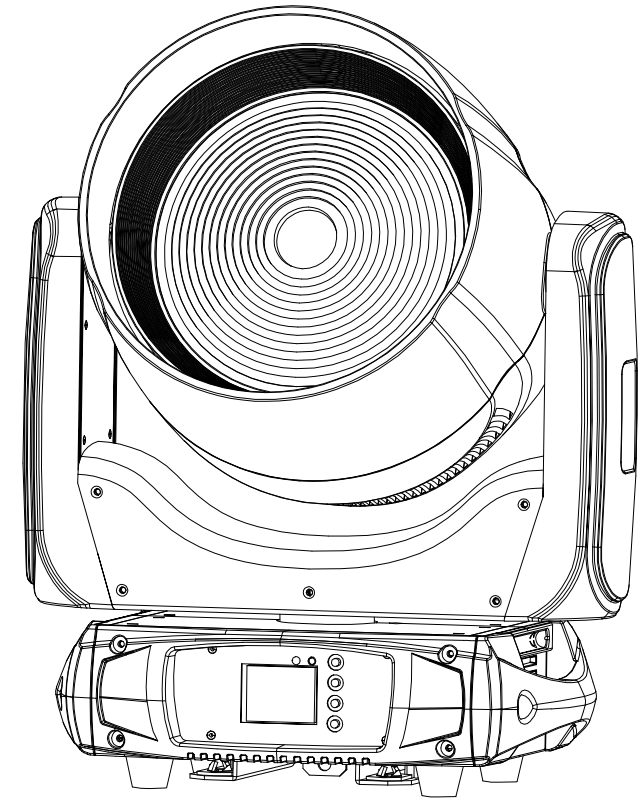# FOS Opera Wash



*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

| 35 | 26 | 144..151 | 1.9s Delay |
|----|----|----------|------------|
| | | 152..159 | 2s Delay |
| | | 160..167 | 2.1s Delay |
| | | 168..175 | 2.2s Delay |
| | | 176..183 | 2.3s Delay |
| | | 184..191 | 2.4s Delay |
| | | 192..199 | 2.5s Delay |
| | | 200..207 | 2.6s Delay |
| | | 208..215 | 2.7s Delay |
| | | 216..220 | 2.8s Delay |
| | | 224..231 | 2.9s Delay |
| | | 232..239 | 3s Delay |
| | | 240..247 | 3.1s Delay |
| | | 248..255 | 3.2s Delay |

## 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

---

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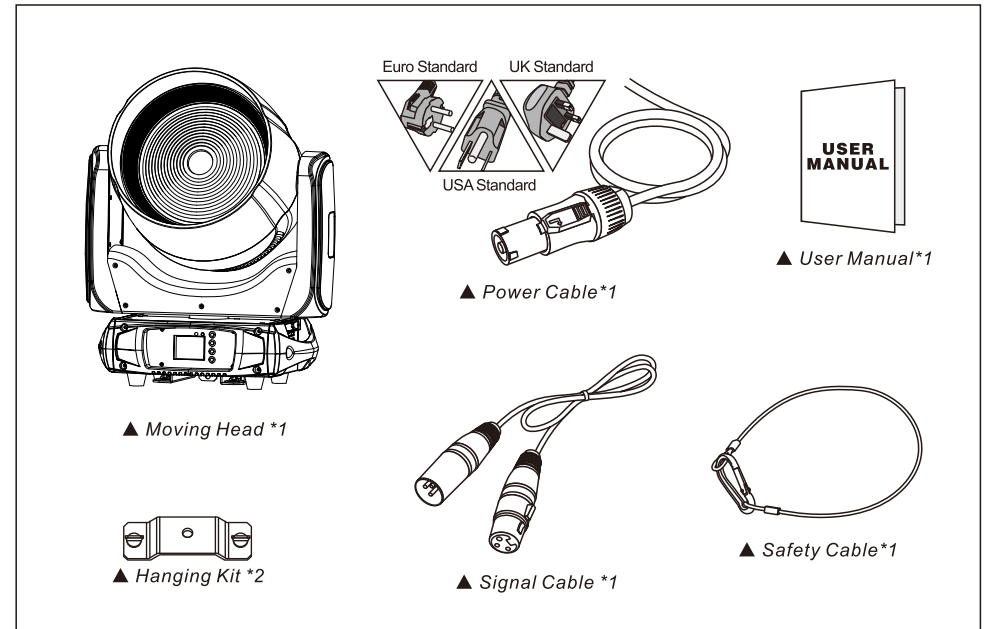
Replacing the fuse. Before replacing the fuse, unplug mains lead.
   1) Remove the fuse holder on the rear panel of the base with a fitting screwdriver from the housing (anti-clockwise).
   2) Remove the old fuse from the fuse holder.
   3) Install the new fuse in the fuse holder (only the same type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

| 33 | 24 | Macro Speed | |
| | | 0..255 | Macro Speed from Slow To Fast |

| | | Special function | |
|---|---|---|---|
| 34 | 25 | 0..19 | No function |
| | | 20..24 | FAN Auto Mode |
| | | 25..29 | FAN High Speed |
| | | 30..34 | FAN Mid Speed |
| | | 35..39 | FAN Low Speed |
| | | 40..44 | Linear Dimmer Curve |
| | | 45..49 | S-Curve Dimmer Curve |
| | | 50..54 | Square Dimmer Curve |
| | | 55..59 | InvSquare Dimmer Curve |
| | | 60..79 | No function |
| | | 80..89 | All Motor reset |
| | | 90..94 | SCAN Motor Reset |
| | | 95..99 | ZOOM Motor Reset |
| | | 100..108 | Internal program 1 |
| | | 109..117 | Internal program 2 |
| | | 118..126 | Internal program 3 |
| | | 127..135 | Internal program 4 |
| | | 136..144 | Internal program 5 |
| | | 145..153 | Internal program 6 |
| | | 154..162 | Internal program 7 |
| | | 163..171 | Internal program 8 |
| | | 172..180 | Internal program 9 |
| | | 181..189 | Internal Sound program 1 |
| | | 190..198 | Internal Sound program 2 |
| | | 199..207 | Internal Sound program 3 |
| | | 208..216 | Internal Sound program 4 |
| | | 217..225 | Internal Sound program 5 |
| | | 226..234 | Internal Sound program 6 |
| | | 235..243 | Internal Sound program 7 |
| | | 244..252 | Internal Sound program 8 |
| | | 253..255 | Internal Sound program 9 |

| | | Internal program Delay(Refresh Run after Change Internal program) | |
|---|---|---|---|
| 35 | 26 | 0..2 | No Delay |
| | | 3..5 | Delay of "Slave Delay Set"(From Display Panel) |
| | | 5..7 | 0.1s Delay |
| | | 8..15 | 0.2s Delay |
| | | 16..23 | 0.3s Delay |
| | | 24..31 | 0.4s Delay |
| | | 32..39 | 0.5s Delay |
| | | 40..47 | 0.6s Delay |
| | | 48..55 | 0.7s Delay |
| | | 56..63 | 0.8s Delay |
| | | 64..71 | 0.9s Delay |
| | | 72..79 | 1s Delay |
| | | 80..87 | 1.1s Delay |
| | | 88..95 | 1.2s Delay |
| | | 96..103 | 1.3s Delay |
| | | 104..111 | 1.4s Delay |
| | | 112..119 | 1.5s Delay |
| | | 120..127 | 1.6s Delay |
| | | 128..135 | 1.7s Delay |
| | | 136..143 | 1.8s Delay |

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# 2.UNPACKING

The FOS Opera Wash adopts a 600W white 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:



Euro Standard    UK Standard
USA Standard

▲ Power Cable*1
▲ User Manual*1
▲ Moving Head *1
▲ Hanging Kit *2
▲ Signal Cable *1
▲ Safety Cable*1

The FOS Opera Wash 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.
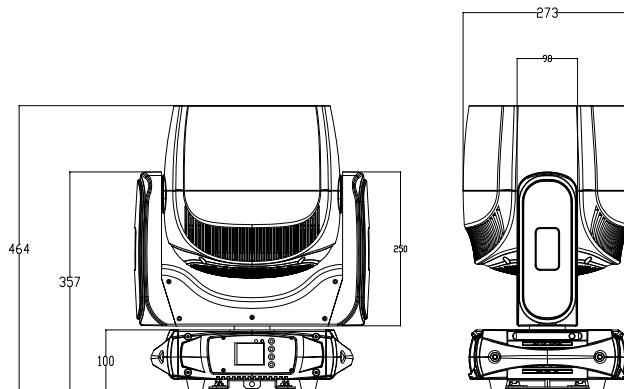
# 3.TECHNICAL INFORMATION

## SPECIFICATIONS:

- A 600W RGBALW LED
- Input Voltage: AC90-260V 50/60Hz
- ControlSignal: DMX512,master-slave and sound activated or auto operation
- Control Channel: 26/35DMX channel modes
- Power Consumption: 659W
- Imensions: 414(D)*286(W)*413(H)mm
- Packing Dimensions: 525(D)*380(W)*530(H)mm
- Net Weight: 14.5kgs
- Gross Weight: 18.7kgs

## FEATURES:

- Ø199mm frenel lens
- Optional ArtNet or sACN network DMX512 communication protocol
- Optional USB firmware upgrade or USB wireless DMX
- 16-bit resolution fast PAN/TILT movement
- RGBAL+WW 6 color LED Engine Evolution
- 0-100% smooth linear dimmer
- Up to 55°heavy frost
- Variable speed strobe with 1-25 flashes per second
- 10°-47°custom disigned zoom
- Advance color generation
- Beam shaper indexable, endless rotation
- Bulid-in Macro RUN

| | | 144..145 | Lee 345 fuchsia pink |
|---|---|---|---|
| 23 | 14 | 146..147 | Lee 353 lighter blue |
| | | 148..149 | Lee 506 Marlene |
| | | 150..151 | Lee 601 Silver |
| | | 152..153 | Lee 725 Old SteeLee Blue |
| | | 154..155 | Lee 728 SteeLee Green |
| | | 156..157 | Lee 731 Dirty Ice |
| | | 158..159 | Lee 765 LEE Yellow |
| | | 160..161 | Lee 777 rust |
| | | 162..163 | Lee 795 MagicaLee Magenta |
| | | 164..165 | Lee 797 Deep Purple |
| | | 166..255 | No Function |
| 24 | 15 | | GELS To Colors FADE |
| | | | Fade from gel Mix to Colors Mix |
| | | | 0 = 100% GEL LIBRARY Mix, 0% Colors Mix |
| | | | 128 = 50% GEL LIBRARY Mix, 50% Colors Mix |
| | | 000-255 | 255 = 0% GEL LIBRARY Mix, 100% Colors Mix |
| 25 | 16 | | Color Temp |
| | | 0..17 | No Function |
| | | 18..100 | 1800K-10000K(1Steps 100K) |
| | | 101..255 | 10000K |
| 26 | 17 | | Tint (Green Magenta Shift) |
| | | 0 | △uv 0 (no shift - on black body curve) |
| | | 1..127 | Magenta To △uv 0 |
| | | 128 | △uv 0 (no shift - on black body curve) |
| | | 129..255 | △uv 0 To Green |
| 27 | 18 | | Linear Crossfade from Color To CCT whites |
| | | 0..255 | Color To CCT whites 0-100% |
| 28 | 19 | | Focus |
| | | 0..255 | In(near) to out(far) |
| 29 | 20 | | Frost |
| | | 0..5 | Frost OFF |
| | | 6..255 | Frost ON |
| 30 | 21 | | Prism |
| | | 0..5 | Prism OFF |
| | | 6..255 | Prism ON |
| 31 | 22 | | Prism Rotating |
| | | 0..127 | Prism Rotating indexing |
| | | 128..189 | Forwards rotation from fast to slow |
| | | 190..193 | Prism rotation stop |
| | | 194..255 | Backwards rotation from slow to fast |
| 32 | 23 | | Macro RUN |
| | | 0..15 | No function |
| | | 16..35 | Macro Run 1 |
| | | 36..55 | Macro Run 2 |
| | | 56..75 | Macro Run 3 |
| | | 76..95 | Macro Run 4 |
| | | 96..115 | Macro Run 5 |
| | | 116..135 | Macro Run 6 |
| | | 136..155 | Macro Sound 1 |
| | | 156..175 | Macro Sound 2 |
| | | 176..195 | Macro Sound 3 |
| | | 196..215 | Macro Sound 4 |
| | | 216..235 | Macro Sound 5 |
| | | 236..255 | Macro Sound 6 |

273

98

464

357

250

100

| | | | |
|---|---|---|---|
| | | 30..31 | Lee 058 Lavender |
| | | 32..33 | Lee 068 Sky Blue |
| | | 34..35 | Lee 079 Just Blue |
| | | 36..37 | Lee 085 Deeper Blue |
| | | 38..39 | Lee 088 Lime Green |
| | | 40..41 | Lee 089 moss green |
| | | 42..43 | Lee 100 Spring Yellow |
| | | 44..45 | Lee 101 yellow |
| | | 46..47 | Lee 102 light amber |
| | | 48..49 | Lee 103 Straw |
| | | 50..51 | Lee 104 DEEP AMBER |
| | | 52..53 | Lee 105 Orange |
| | | 54..55 | Lee 106 primary red |
| | | 56..57 | Lee 108 English rose |
| | | 58..59 | Lee 111 dark pink |
| | | 60..61 | Lee 113 magenta |
| | | 62..63 | Lee 115 peacock blue |
| | | 64..65 | Lee 117 SteeLee Blue |
| | | 66..67 | Lee 118 Light Blue |
| | | 68..69 | Lee 119 dark blue |
| | | 70..71 | Lee 121 lee green |
| | | 72..73 | Lee 122 fern green |
| | | 74..75 | Lee 124 dark green |
| | | 76..77 | Lee 126 mauve |
| | | 78..79 | Lee 132 Medium Blue |
| | | 80..81 | Lee 136 Pale Lavender |
| | | 82..83 | Lee 137 SpeciaLee lavender |
| | | 84..85 | Lee 138 Pale Green |
| 23 | 14 | 86..87 | Lee 139 primary green |
| | | 88..89 | Lee 142 Pale Violet |
| | | 90..91 | Lee 147 apricot |
| | | 92..93 | Lee 151 Gold Tint |
| | | 94..95 | Lee 152 pale gold |
| | | 96..97 | Lee 154 pale rose |
| | | 98..99 | Lee 156 Chocolate |
| | | 100..101 | Lee 164 flame red |
| | | 102..103 | Lee 170 deep lavender |
| | | 104..105 | Lee 174 dark steeLee blue |
| | | 106..107 | Lee 176 loving amber |
| | | 108..109 | Lee 179 chrome orange |
| | | 110..111 | Lee 180 dark lavender |
| | | 112..113 | Lee 181 congo blue |
| | | 114..115 | Lee 182 Light Red |
| | | 116..117 | Lee 194 Surprise Pink |
| | | 118..119 | Lee 195 zenith blue |
| | | 120..121 | Lee 200 Double C.T. Blue |
| | | 122..123 | Lee 201 FulLee C.T. Blue |
| | | 124..125 | Lee 202 Half C.T Blue |
| | | 126..127 | Lee 203 Quarter C.T. Blue |
| | | 128..129 | Lee 204 FulLee C.T. Orange |
| | | 130..131 | Lee 205 Half C.T. Orange |
| | | 132..133 | Lee 206 Quarter C.T. Orange |
| | | 134..135 | Lee 242 Fluorescent 4300 Kevin |
| | | 136..137 | Lee 249 1/4 minus green |
| | | 138..139 | Lee 323 jade |
| | | 140..141 | Lee 328 Follies Pink |
| | | 142..143 | Lee 343 speciaLee medium lavender |

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# 4.PHOTOMETRICS DIAGRAM
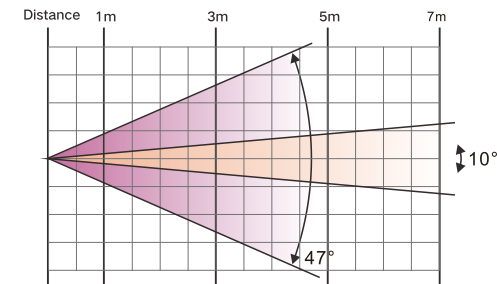


| Distance | 1m | 3m | 5m | 7m |
|---|---|---|---|---|
| 10°(LUX) R | 15783 | 3013 | 1199 | 681 |
| G | 14964 | 2706 | 1077 | 573 |
| B | 23020 | 3929 | 1561 | 832 |
| A | 25320 | 4531 | 1729 | 935 |
| L | 40540 | 7338 | 2865 | 1520 |
| W | 17184 | 3212 | 1251 | 661 |
| RGBALW | 112650 | 19649 | 7855 | 4127 |
| Diameter(m) | 0.18 | 0.53 | 0.88 | 1.30 |
| 47°(LUX) R | 3390 | 465 | 164 | 103 |
| G | 3025 | 430 | 160 | 90 |
| B | 4340 | 646 | 234 | 126 |
| A | 4872 | 736 | 260 | 141 |
| L | 7179 | 1200 | 417 | 224 |
| W | 3172 | 490 | 187 | 100 |
| RGBALW | 21050 | 3500 | 1266 | 656 |
| Diameter(m) | 0.88 | 2.60 | 4.40 | 6.01 |

# 5.OPERATION INSTRUCTIONS

● The FOS Opera Wash 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.**
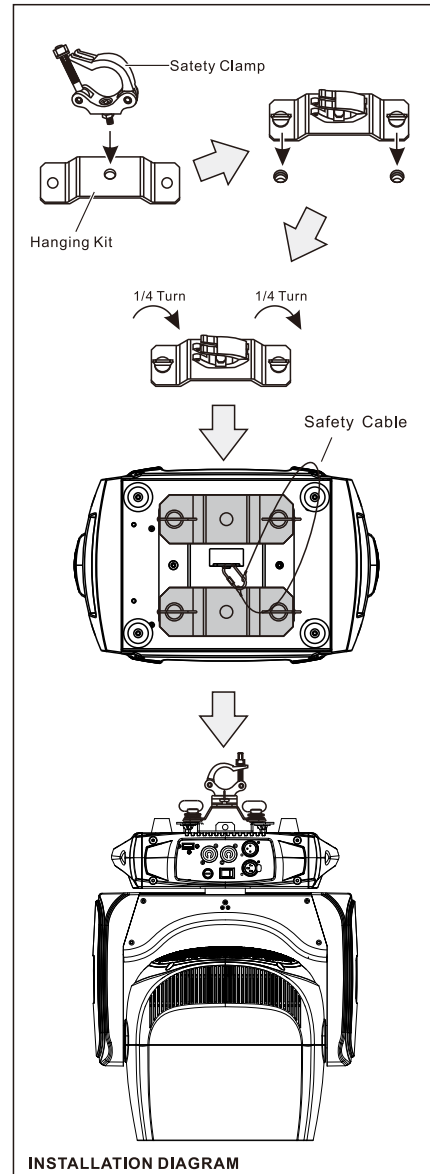
Mounting points:

**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:

**FOS Opera Wash 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 .**

**INSTALLATION DIAGRAM**

| | | 96..97 | Lee 154 pale rose |
|---|---|---|---|
| | | 98..99 | Lee 156 Chocolate |
| | | 100..101 | Lee 164 flame red |
| | | 102..103 | Lee 170 deep lavender |
| | | 104..105 | Lee 174 dark steeLee blue |
| | | 106..107 | Lee 176 loving amber |
| | | 108..109 | Lee 179 chrome orange |
| | | 110..111 | Lee 180 dark lavender |
| | | 112..113 | Lee 181 congo blue |
| | | 114..115 | Lee 182 Light Red |
| | | 116..117 | Lee 194 Surprise Pink |
| | | 118..119 | Lee 195 zenith blue |
| | | 120..121 | Lee 200 Double C.T. Blue |
| | | 122..123 | Lee 201 FulLee C.T. Blue |
| | | 124..125 | Lee 202 Half C.T Blue |
| | | 126..127 | Lee 203 Quarter C.T. Blue |
| 21 | 12 | 128..129 | Lee 204 FulLee C.T. Orange |
| | | 130..131 | Lee 205 Half C.T. Orange |
| | | 132..133 | Lee 206 Quarter C.T. Orange |
| | | 134..135 | Lee 242 Fluorescent 4300 Kevin |
| | | 136..137 | Lee 249 1/4 minus green |
| | | 138..139 | Lee 323 jade |
| | | 140..141 | Lee 328 Follies Pink |
| | | 142..143 | Lee 343 speciaLee medium lavender |
| | | 144..145 | Lee 345 fuchsia pink |
| | | 146..147 | Lee 353 lighter blue |
| | | 148..149 | Lee 506 Marlene |
| | | 150..151 | Lee 601 Silver |
| | | 152..153 | Lee 725 Old SteeLee Blue |
| | | 154..155 | Lee 728 SteeLee Green |
| | | 156..157 | Lee 731 Dirty Ice |
| | | 158..159 | Lee 765 LEE Yellow |
| | | 160..161 | Lee 777 rust |
| | | 162..163 | Lee 795 MagicaLee Magenta |
| | | 164..165 | Lee 797 Deep Purple |
| | | 166..255 | No Function |
| | | | GELS X-FADE |
| 22 | 13 | 000-255 | Fade from gel 1 to gel 2<br>0 = 100% GEL LIBRARY 1, 0% GEL LIBRARY 2<br>128 = 50% GEL LIBRARY 1, 50% GEL LIBRARY 2<br>255 = 0% GEL LIBRARY 1, 100% GEL LIBRARY 2 |
| | | | GEL LIBRARY 2 |
| | | 0..9 | No Function |
| | | 10..11 | Lee 002 Rose Pink |
| | | 12..13 | Lee 007 Pale Yellow |
| | | 14..15 | Lee 015 Deep Straw |
| 23 | 14 | 16..17 | Lee 019 fire |
| | | 18..19 | Lee 020 medium amber |
| | | 20..21 | Lee 021 Gold Amber |
| | | 22..23 | Lee 022 Dark Amber |
| | | 24..25 | Lee 025 sunset red |
| | | 26..27 | Lee 046 Dark Magenta |
| | | 28..29 | Lee 049 Medium Purple |

| 19 | 11 | White | |
| | | 0..255 | 0-100% White dimmer from dark to bright |
| 20 | | White_Fine | |
| | | 0..255 | 0-100% White Fine dimmer from dark to bright |
| 21 | 12 | GEL LIBRARY 1 | |
| | | 0..9 | No Function |
| | | 10..11 | Lee 002 Rose Pink |
| | | 12..13 | Lee 007 Pale Yellow |
| | | 14..15 | Lee 015 Deep Straw |
| | | 16..17 | Lee 019 fire |
| | | 18..19 | Lee 020 medium amber |
| | | 20..21 | Lee 021 Gold Amber |
| | | 22..23 | Lee 022 Dark Amber |
| | | 24..25 | Lee 025 sunset red |
| | | 26..27 | Lee 046 Dark Magenta |
| | | 28..29 | Lee 049 Medium Purple |
| | | 30..31 | Lee 058 Lavender |
| | | 32..33 | Lee 068 Sky Blue |
| | | 34..35 | Lee 079 Just Blue |
| | | 36..37 | Lee 085 Deeper Blue |
| | | 38..39 | Lee 088 Lime Green |
| | | 40..41 | Lee 089 moss green |
| | | 42..43 | Lee 100 Spring Yellow |
| | | 44..45 | Lee 101 yellow |
| | | 46..47 | Lee 102 light amber |
| | | 48..49 | Lee 103 Straw |
| | | 50..51 | Lee 104 DEEP AMBER |
| | | 52..53 | Lee 105 Orange |
| | | 54..55 | Lee 106 primary red |
| | | 56..57 | Lee 108 English rose |
| | | 58..59 | Lee 111 dark pink |
| | | 60..61 | Lee 113 magenta |
| | | 62..63 | Lee 115 peacock blue |
| | | 64..65 | Lee 117 SteeLee Blue |
| | | 66..67 | Lee 118 Light Blue |
| | | 68..69 | Lee 119 dark blue |
| | | 70..71 | Lee 121 lee green |
| | | 72..73 | Lee 122 fern green |
| | | 74..75 | Lee 124 dark green |
| | | 76..77 | Lee 126 mauve |
| | | 78..79 | Lee 132 Medium Blue |
| | | 80..81 | Lee 136 Pale Lavender |
| | | 82..83 | Lee 137 SpeciaLee lavender |
| | | 84..85 | Lee 138 Pale Green |
| | | 86..87 | Lee 139 primary green |
| | | 88..89 | Lee 142 Pale Violet |
| | | 90..91 | Lee 147 apricot |
| | | 92..93 | Lee 151 Gold Tint |
| | | 94..95 | Lee 152 pale gold |

# 7.CONTROL CONNECTION
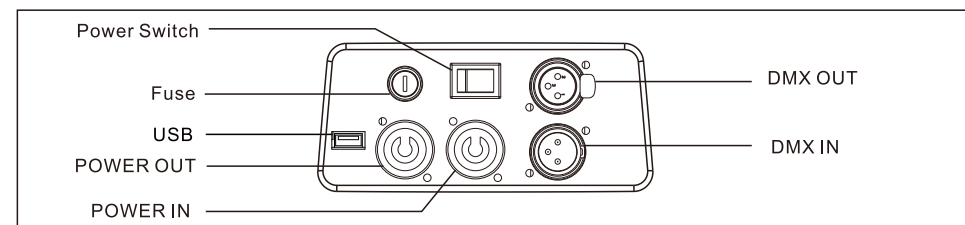


Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. 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 a 3 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



LCD DISPLAY
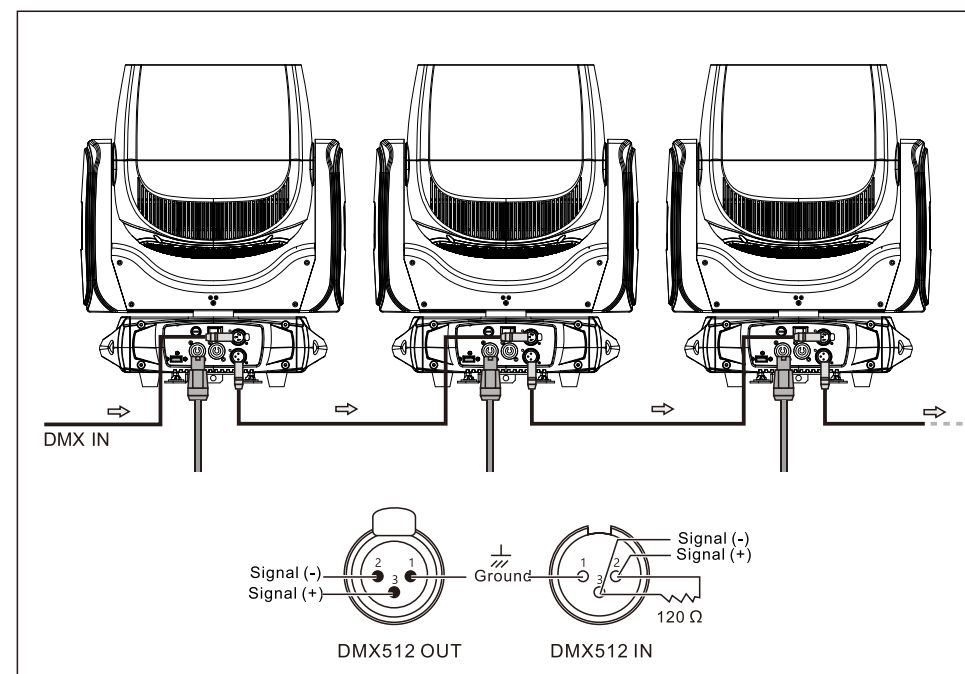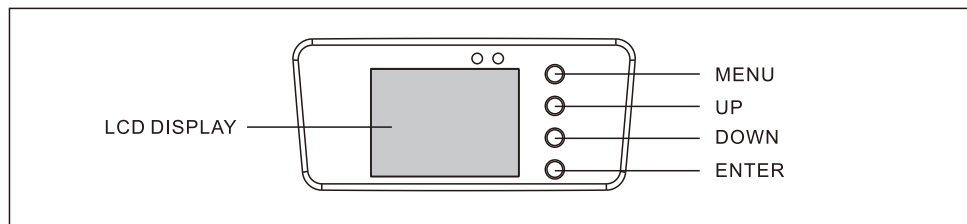
MENU
UP
DOWN
ENTER

| MENU | | | | Description |
|---|---|---|---|---|
| Function Mode | Dmx Address | A001~AXXX | | Dmx Address setting |
| | Channel Mode | 35CH | | 35CH mode |
| | | 26CH | | 26CH mode |
| | Auto Run | Program    1~9 | | Auto program 1-9 |
| | | State:        Master/Alone | | Auto program master/alone |
| | | AutoRun:   (On/Off) | | Auto program On/Off |
| | | SlaveDelay:Off/(0.1-3.2s) | | Auto program slave delay time |
| | Music Run | Program    1~9 | | Sound program 1-9 |
| | | State:        Master/Alone | | Sound program master/alone |
| | | MusicRun:   (On/Off) | | Sound program On/Off |
| Option | Reset Default | Yes/No | | Reset Default |
| | Signal Set | DMX: | XLR DMX | Wire DMX |
| | Pan / Tilt | Reverse Pan | (On/Off) | Reverse Pan |
| | | Reverse Tilt | (On/Off) | Reverse Tilt |
| | | Select Pan | 630/540/360 | Select Pan degree |
| | | Scan Feedback | (On/Off) | Scan Feedback |
| | UI SET | Mic sensitivity | 0~99% | Mic sensitivity |
| | | OFF Signal Mode | (On/Off) | No DMX signal, (OFF) keep original state, ON keep reset state |
| | | Display Invert | (On/Off) | Display Invert |
| | | Dimmer Curve | Linear | Linear curve |
| | | | S-Curve | S-Curve |
| | | | Square | Square curve |
| | | | InvSquare | InvSquare curve |
| | | Fan Mode | Auto/High/Mid/Low | Auto/High/Mid/Low fan speed |
| Information | Temperature | XXX℃/℉ | | Current temperature |
| | Software Version | V1.0~V9.9 | | Software Version |
| Manual Control | Reset | Total Reset | | Total Reset |
| | | Scan Reset | | Scan Reset |
| | | Other Reset | | Other Reset |
| | Channel | PAN=XXX…… | | Manual control channel |
| Advanced (AccessCode088) | Calibration | PAN=XXX…… | | Calibration |
| | UID Code | XX XX | | UID code setting |
| | USB Upgrade | | | USB upgrate |
| | Cal CTO | 1800K=XXX | | CTO calibration |

# 9.DMX PROTOCOL

| Mode/Channel | | Value | Function |
|---|---|---|---|
| CH35 | CH26 | | |
| 1 | 1 | | Pan |
| | | 0..255 | PAN Movement |
| 2 | | | Pan-fine |
| | | 0..255 | Fine control of Pan movement |
| 3 | 2 | | Tilt |
| | | 0..255 | Tilt Movement |
| 4 | | | Tile-fine |
| | | 0..255 | Fine control of Tilt movement |
| 5 | 3 | | Speed pan/tile |
| | | 0..225 | max to min speed |
| | | 226..235 | blackout by movement |
| | | 236..255 | no function |
| 6 | 4 | | Dimmer |
| | | 0..255 | Dimmer 0%...100% |
| 7 | | | Dimmer Fine |
| | | 0..255 | Dimmer Fine 0%...100% |
| 8 | 5 | | Shutter |
| | | 0..31 | Shutter closed |
| | | 32..63 | shutter open |
| | | 64..95 | Strobe effect slow to fast |
| | | 96..127 | shutter open |
| | | 128..143 | Opening pulse in sequences slow to fast |
| | | 144..159 | Closing pulse in sequences fast to slow |
| | | 160..191 | shutter open |
| | | 192..223 | Random strobe effect slow to fast |
| | | 224..255 | shutter open |
| 9 | 6 | | Red |
| | | 0..255 | 0-100% Red dimmer from dark to bright |
| 10 | | | Red_Fine |
| | | 0..255 | 0-100% Red Fine dimmer from dark to bright |
| 11 | 7 | | Green |
| | | 0..255 | 0-100% Green dimmer from dark to bright |
| 12 | | | Green_Fine |
| | | 0..255 | 0-100% Green Fine dimmer from dark to bright |
| 13 | 8 | | Blue |
| | | 0..255 | 0-100% Blue dimmer from dark to bright |
| 14 | | | Blue_Fine |
| | | 0..255 | 0-100% Blue Fine dimmer from dark to bright |
| 15 | 9 | | Amber |
| | | 0..255 | 0-100% Amber dimmer from dark to bright |
| 16 | | | Amber_Fine |
| | | 0..255 | 0-100% Amber Fine dimmer from dark to bright |
| 17 | 10 | | Lime |
| | | 0..255 | 0-100% Lime dimmer from dark to bright |
| 18 | | | Lime_Fine |
| | | 0..255 | 0-100% Lime Fine dimmer from dark to bright |