

HALO 740 XL

Wash moving head



USER MANUAL/MANUAL DE USUARIO

PLEASE READ THE INSTRUCTIONS CAREFULLY BEFORE USE
POR FAVOR LEA LAS INSTRUCCIONES ANTES DE USAR

 **TECSHOW**

1. OVERVIEW

HALO 740XL

Versatile moving head - 7 x 40W 4-in-1 LEDs

Halo 740XL is a versatile and compact moving head that sports 7 x 40W 4-in-1 LEDs and a zoom function to have a variable 5°-70° beam angle. Thanks to its compact and lightweight design, the equipment is ideal for mobile applications of small and medium scale. With its four-color LED technology Halo 740XL achieves a smooth RGBW mix without multicolor shadows, being the user able to vary its color temperature via DMX

Source & Optics

- Light Source: 7 x 40W 4-en-1 LEDs
- LEDs life: 50,000 horas
- Beam angle: 5°-70° Zoom

Photometric data

- 5° beam angle: 28.560 Lux @ 3M (10 ft.)
- 70° beam angle: 1.260 Lux @ 3M (10 ft.)

Effects & Functions

- Dimmer: Full range 0-100%
- Strobe effect
- 4-in-1 LED technology: Smooth RGBW mix
- Vivid, saturated and uniformed colors
- Adjustable color temperature
- LEE® filters color selector

Control

- DMX Channels: 11/15/14
- Operation modes: DMX, Master/Slave, Auto and Sound/Active

Movement

- Pan: 540°
- Tilt: 220°
- 16-bit resolution
- Automatic repositioning

Physical

- DMX connectors: 2 XLR (XLR-3 in & out)
- Power supply: PowerCON® In/Out
- LCD display
- Dimensions: 310x226x412 mm. / 12.2x8.9x16.2 in.
- Weight: 10.6 Kg. / 23.4 Lbs

2. SAFETY INSTRUCTIONS

Warning Please read the instruction carefully which includes important information about the installation, usage and maintenance.

- Please keep this User Manual for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Unpack and check carefully there is no transportation damage before using the unit.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- The unit is for indoor use only. Use only in a dry location.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Disconnect main power before replacement or servicing.
- Make sure there are no flammable materials close to the unit while operating as it is fire hazard.
- Use safety cables when fixing this unit. DO NOT handle the unit by its head only, always carry by its base.
- Maximum ambient temperature is T_a : 40 degrees C. DO NOT operate it where the temperature is higher than this.
- Unit surface temperature may reach up to 75 degrees C. DO NOT touch the housing with bare hands during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.
- In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or mal-

function. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.

- Do not touch any wire during operation as high voltage may cause electric shock.

Warning

- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- The housing and lenses must be replaced if they are visibly damaged.

Caution

There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

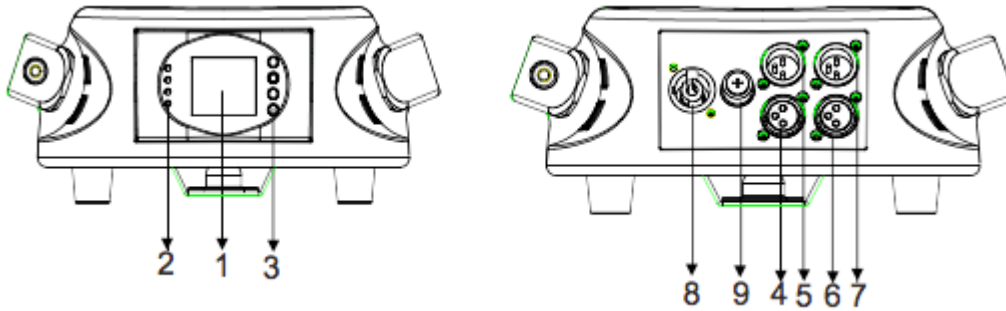
Installation

The fixture should be mounted via its Omega Quick Release Clamp bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating and make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the fixtures weight. Always use a safety cable that can hold 12 times of the weight of the fixture when installing.

The equipment must be installed by professionals. It must be installed in a place where is out of the reach of people and no one can pass by or under it.

3. HOW TO SET THE UNIT

Control



1. Display Shows the various menus and the selected functions.

2. LED

POWER	On	Power On
DMX	On	DMX input present

3. Button

Menu	To select the programming functions
▼ Down	To go backward in the selected functions
▲ Up	To go forward in the selected functions
Enter	To confirm the selected functions

4. DMX input DMX512 link, use 5-pin XLR cable to link the unit and DMX controller

5. DMX input DMX512 link, use 3-pin XLR cable to link the unit and DMX controller

6. DMX output DMX512 link, use 5-pin XLR cable to link the next unit

7. DMX output DMX512 link, use 3-pin XLR cable to link the next unit

8. Mains input Connects to power supply

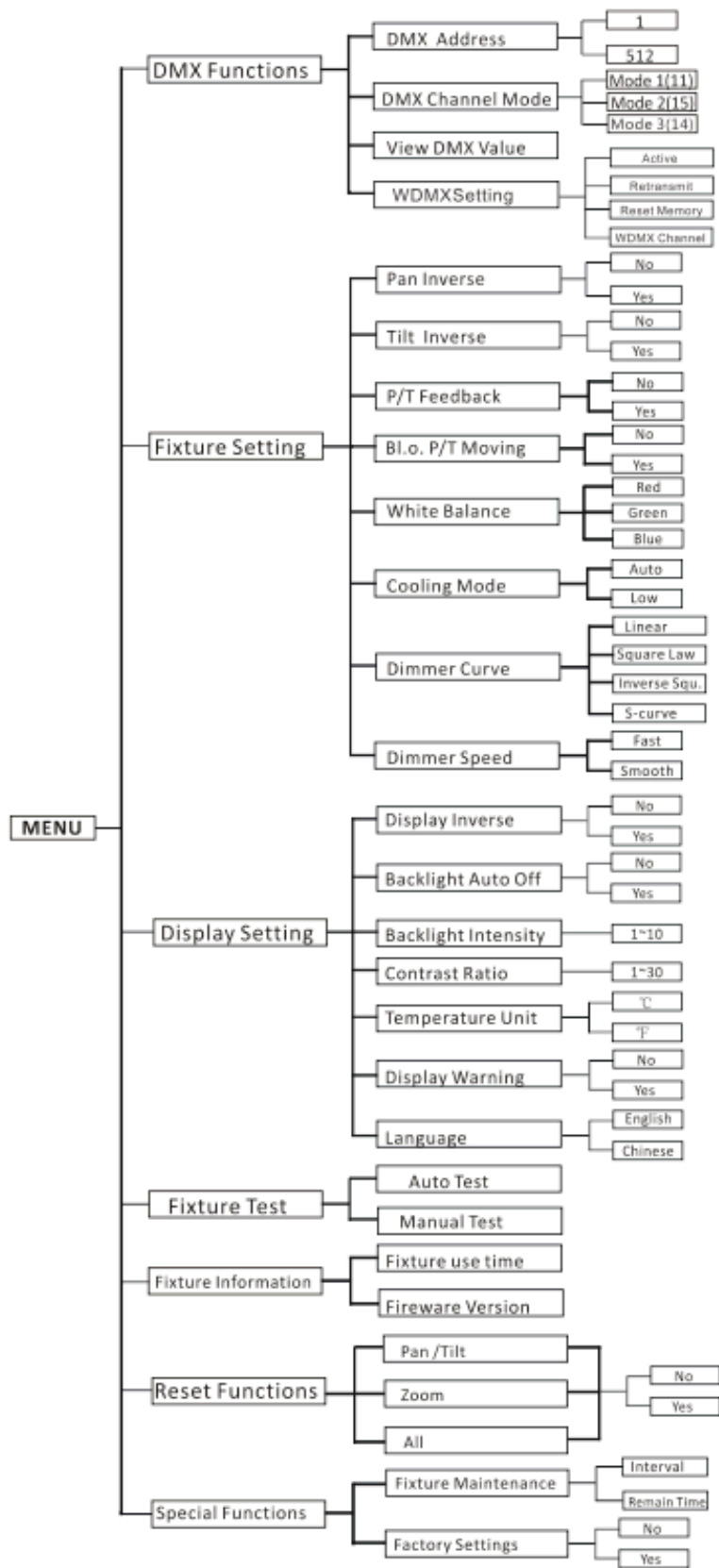
9. Mains output Connects to next fixture 10. Fuse

(T 6.3A): Protects the unit from over-voltage or short circuit

Main Function

To select any of the given functions, press the MENU button until the required function is showing on the display. Select the function by pressing the ENTER button and the display will blink. Use the DOWN/UP buttons to change the mode. Once the required mode has been selected, press the ENTER button to setup, to go back to the functions without any change press the MENU button again. Press and hold the MENU button for about one second or wait for one minute to exit the menu mode.

The main functions are shown overleaf (next page):



DMX Functions

Enter MENU mode, select DMX Functions, press the ENTER button to confirm, use the UP/DOWN button to select DMX Address, DMX Channel Mode, View DMX Value or WDMX Setting.

DMX Address

To select DMX Address, press the ENTER button to show the DMX ADDRESS on the display. Use the UP/DOWN button to adjust the address from 001 to 512, press the ENTER button to setup. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

DMX Channel Mode

To select DMX Channel Mode, press the ENTER button to show the DMX CHANNEL MODE on the display. Use the UP/DOWN button to select Mode 1(11), Mode 2(15) or Mode 3 (14), press the ENTER button to setup. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

View DMX Value

To select View DMX Value, press the ENTER button to show the VIEW DMX VALUE on the display. Use the UP/DOWN button to view the DMX channel values. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

WDMX Setting

To select WDMX Setting, press the ENTER button to show the WDMX SETTING on the display. Use the UP/DOWN button to select Active, Retransmit, Reset Memory or WDMX Setting, press the ENTER button to setup. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Fixture Setting

Enter MENU mode, select Fixture Setting, press the ENTER button to confirm, use the UP/DOWN button to select Pan Inverse, Tile Inverse, P/T Feedback, BL.O. P/T Moving, White Balance, Cooling Mode, Dimmer Curve or Dimmer Speed.

Pan Inverse

To select Pan Inverse, press the ENTER button to show the PAN INVERSE on the display. Use the UP/DOWN button to select No (normal) or Yes (pan inverse), press the ENTER button to setup. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Tilt Inverse

To select Tilt Inverse, press the ENTER button to show the TILT INVERSE on the display. Use the UP/DOWN button to select No (normal) or Yes (tilt inverse), press the ENTER button to setup. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

P/T Feedback

To select P/T Feedback, press the ENTER button to show the PAN/TILT FEEDBACK on the display. Use the UP/DOWN button to select No (Pan or tilt's position will not feedback while out of step) or Yes (Feedback while pan/tilt out of step), press the ENTER button to setup. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

BL.O. P/T Moving

To select BL.O. P/T Moving, press the ENTER button to show the BLACKOUT WHILE PAN/TILT MOVING on the display, use the UP/DOWN button to select No (normal while pan/tilt moving) or Yes (blackout while pan/tilt moving), press the ENTER button to setup. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

White Balance

To select White Balance, press the ENTER button to show the WHITE BALANCE on the display, use the UP/DOWN button to select Red, Green or Blue. Once selected, press the ENTER button to confirm, and use the UP/DOWN button to adjust the value from 125 to 255, press the ENTER button to setup. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

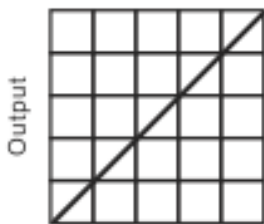
Cooling Mode

To select Cooling Mode, press the ENTER button to show the COOLING MODE on the display. Use the UP/DOWN button to select Auto (Normal) or Low (Low speed). Once selected, press the ENTER button to setup. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

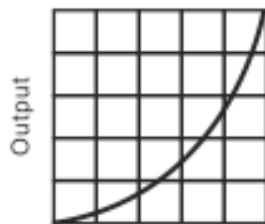
Dimmer Curve

To select Dimmer Curve, press the ENTER button to show the DIMMER CURVE on the display, use the UP/DOWN button to select Linear, Square Law, Inverse Squ. or S-curve. Once selected, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

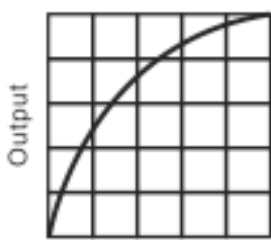
Dimmer Modes



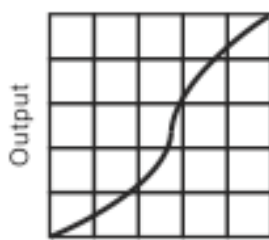
DMX %
Optically Linear



DMX %
Square Law



DMX %
Inverse Square Law



DMX %
S-curve

Linear The increase in light intensity appears to be linear as DMX value is increased.

Square Law Light intensity control is finer at low levels and coarser at high levels.

Inverse Square Law Light intensity control is coarser at low levels and finer at high levels. **S-curve** Light intensity control is finer at low levels and high levels

els and coarser at medium levels.

Dimmer Speed

To select Dimmer Speed, press the ENTER button to show the DIMMER SPEED on the display. Use the UP/DOWN button to select Fast or Smooth. Once selected, press the ENTER button to setup. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Display Setting

Enter MENU mode, select Display Setting, press the ENTER button to confirm, use the UP/DOWN button to select Display Inverse, Backlight Auto Off, Backlight Intensity, Contrast Ratio, Temperature unit, Display Warning or Language.

Display Inverse

To select Display Inverse, press the ENTER button to show the DISPLAY INVERSE on the display. Use the UP/DOWN button to select No (normal) or Yes (display inverse). Once selected, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Backlight Auto Off

To select Backlight Auto Off, press the ENTER button to show the BACKLIGHT AUTO OFF on the display. Use the UP/DOWN button to select No (display always on) or Yes (display goes off one minute after exiting menu mode). Once selected, press the ENTER button to confirm and store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Backlight Intensity

To select Backlight Intensity, press the ENTER button to show the BACKLIGHT INTENSITY on the display. Use the UP/DOWN button to adjust the intensity from 1 (dark) to 10 (bright). Once selected, press the ENTER button to setup and store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Contrast Ratio

To select Contrast Ratio, press the ENTER button to show the CONTRAST RATIO on the display. Use the UP/DOWN button to adjust the intensity from 1 to 30. Once selected, press the ENTER button to setup and store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Temperature Unit

To Select Temperature Unit, press the ENTER button to show the TEMPERATURE UNIT on the display. Use the UP/DOWN button to select °C or °F, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Display Warning

To select Display Warning, press the ENTER button to show the DISPLAY WARNING on the display. Use the UP/DOWN button to select No (Normal) or Yes (display will show the error warning when the unit went wrong), press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Language

To select Language, press the ENTER button to show the LANGUAGE on the display. Use the UP/DOWN button to select English or Chinese, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Fixture Test

Enter MENU mode, select Fixture Test, press the ENTER button to confirm, use the UP/DOWN button to select Auto Test or Manual Test

Auto Test

To select Auto Test, press the ENTER button to show the AUTO TEST on the display. Press the ENTER button, the unit will run built-in programs to automatically test pan, tilt and zoom. Press the

MENU button back to the last menu or exit menu mode after auto test.

Manual Test

To select Manual Test, press the ENTER button to show the MANUAL TEST on the display. Press the ENTER button, and then use the UP/DOWN button to select channel, and adjust the channel value. Once selected, press the ENTER button to setup, the fixture will run as the channel value indicates. Press the MENU button back to the last menu or exit menu mode let the unit idle one minute.

(All channels value will become 0 after exiting Manual Test menu).

Fixture Information

Enter MENU mode, select Fixture Information, press the ENTER button to confirm, use the UP/DOWN button to select Fixture use time or Firmware Version.

Fixture use time

To select Fixture use time, press the ENTER button to show the FIXTURE USE TIME on the display. Press the ENTER button, the fixture working hours will show on the display. Press the MENU button to exit.

Firmware Version

To select Firmware Version, press the ENTER button to show the FIRMWARE VERSION on the display. Press the ENTER button and the fixture software version will show on the display. Press the MENU button to exit.

Reset Functions

Enter MENU mode, select Reset Function, press the ENTER button to confirm, use the UP/DOWN button to select Pan/Tilt, Zoom or All.

11G

Pan/Tilt

To Select Pan/Tilt, press the ENTER button to show the PAN/TILT on the display. Use the UP/DOWN button to select Yes (the unit will run built-in program to reset pan and tilt to their home positions) or No,

press the ENTER button to store. Press the MENU button to exit menu mode.

Zoom

To select Zoom, press the ENTER button to show the ZOOM on the display. Use the UP/DOWN button to select Yes (the unit will run built-in program to reset zoom to its home positions) or No, press the ENTER button to store. Press the MENU button to exit menu mode.

All

To select All, press the ENTER button to show the ALL on the display. Use the UP/DOWN button to select Yes (the unit will run built-in program to reset all motors to their home positions) or No, press ENTER button to store. Press MENU button to exit menu mode.

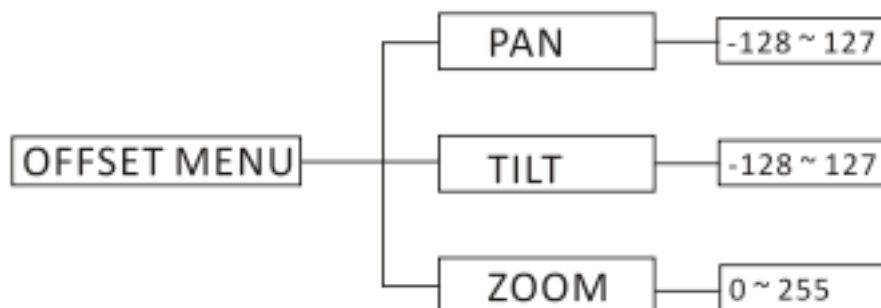
Special Functions

Enter MENU mode, select Special Functions, press the ENTER button to confirm, use the UP/DOWN button to select Fixture Maintenance or Factory Setting.

Fixture Maintenance

To select Fixture Maintenance, press the ENTER button to show the FIXTURE MAINTENANCE on the display.

Home Position Adjust



In the main functions, hold the ENTER button for at least 3 seconds into offset mode, use the DOWN/UP button up to select Pan Offset, Tilt Offset or Zoom Offset, and press the ENTER button to confirm. Use

play. Use the UP/DOWN button to select Interval or Remain Time.

Interval

To select Interval, press the ENTER button to confirm, the interval time will be shown on the display. Press the MENU button to exit.

Remain Time

To select Remain Time, press the ENTER button to confirm, the remaining time will be shown on the display. Press the ENTER button to confirm, use the UP/DOWN button to select Exit or Reset time, press the MENU button to exit.

Factory Setting

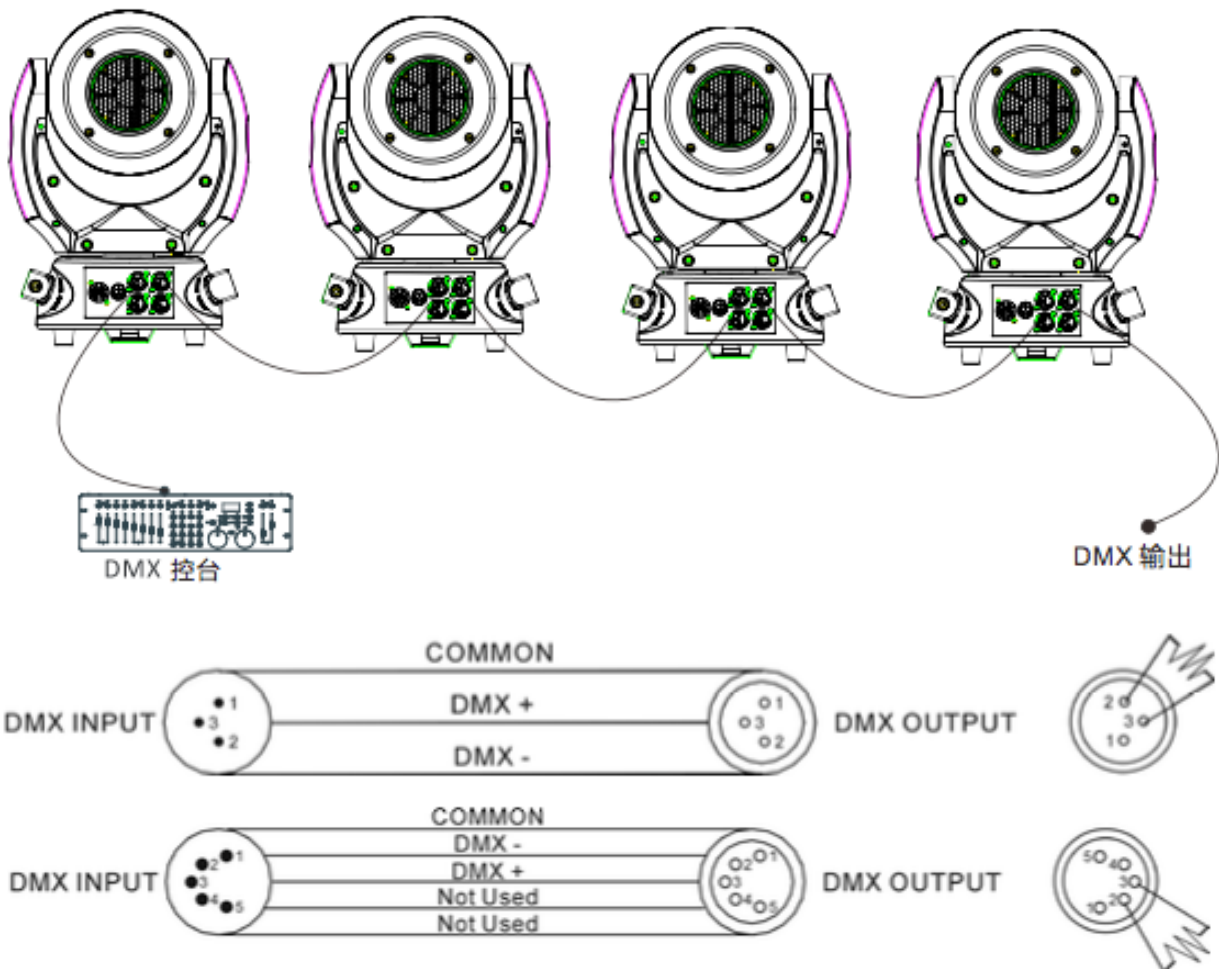
To select Factory Setting, press the ENTER button to show the FACTORY SETTING on the display. Press the ENTER button to confirm, use the UP/DOWN button to select No or Yes (the fixture will reset to factory settings and exit menu mode).

the DOWN/UP button to adjust the home position of the Pan, Tilt or Zoom, Once the position has been selected, press the ENTER button to setup, to go back to the functions without any change press the

MENU button again. Press and hold the MENU button about one second or wait for about one minute to exit the menu mode.

4. CONTROL BY UNIVERSAL DMX CONTROLLER

DMX 512 Connection



1. If you using a controller with 5 pins DMX output, you need to use a 5 to 3 pin adapter-cable.
2. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120 ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a
3. Connect the unit together in a `daisy chain` by XLR plug from the output of the unit to theinput of the next unit. The cable can not branched or

split to a `Y` cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.

4. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.
5. Each lighting unit needs to have an address set to receive the data sent by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).
6. The end of the DMX 512 system should be terminated to reduce signal errors.
7. 3 pin XLR connectors are more popular than 5 pin XLR.
 - 3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)
 - 5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin 4/Pin 5: Not used.

Address Setting

If you use a universal DMX controller to control the units, you have to set DMX address from 1 to 512 so that the units can receive DMX signal.

Press MENU button to enter menu mode, select DMX Functions, press the ENTER button to confirm, use the UP/DOWN button to select DMX Address, press the ENTER button to confirm, the present address will blink on the display, use the UP/DOWN button to adjust the address from 001 to 512, and press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle 7 seconds to exit menu mode.

Please refer to the following diagram to address your DMX512 channel for the first 4 units:

Channel mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
11 channels	1	12	33	44
15 channels	1	16	31	46
14 channels	1	15	29	43

DMX 512 Configuration

11CH MODE (MODE 1):

CHANNEL	VALUE	FUNCTION
1		PAN
	000 - 255	0° - 540°
2		TILT
	000 - 255	0° - 220°
3	000 - 255	PAN/TILT SPEED Fast - Slow
4		SHUTTER:
	000 - 019	Off
	020 - 024	Open
	025 - 064	Strobe: Fast - Slow
	065 - 069	Open
	070 - 084	Pulse, fast close slow open

	085 - 089	Open
	090 - 104	Pulse, fast open slow close
	105 - 109	Open
	110 - 124	Dimmer macro random strobe
	125 - 129	Open
	130 - 144	Dimmer macro random fast close slow open
	145 - 149	Open
	150 - 164	Dimmer macro random fast open slow close
	165 - 169	Open
	170 - 184	Dimmer macro burst pulse
	185 - 189	Open
	190 - 204	Dimmer macro random burst pulse
	205 - 209	Open
	210 - 224	Dimmer macro slow close slow open
	225 - 229	Open
	230 - 244	Dimmer macro burst little
	245 - 255	Open
5	000 - 255	RED: 0% - 100%
6	000 - 255	GREEN: 0% - 100%
7	000 - 255	BLUE: 0% - 100%
8	000 - 255	WHITE: 0% - 100%
9	000 - 255	DIMMER: 0% - 100%
10	000 - 255	ZOOM: 0% - 100%
11		SPECIAL FUNCTION:
	000 - 009	Null
	010 - 014	Reset All
	015 - 255	Null

15CH MODE (MODE 2):

CHANNEL	VALUE	FUNCTION
1		SHUTTER
	000-019	Off
	020-024	Open
	025-064	Strobe: Fats - Slow
	065-069	Open
	070-084	Pulse, fast close slow open
	085-089	Open

	090-104	Pulse, fast open slow close
	105-109	Open
	110-124	Dimmer macro random strobe
	125-129	Open
	130-144	Dimmer macro random fast close slow open
	145 - 149	Open
	150 - 164	Dimmer macro random fast open slow close
	165 - 169	Open
	170 - 184	Dimmer macro burst pulse
	185 - 189	Open
	190 - 204	Dimmer macro random burst pulse
	205 - 209	Open
	210 - 224	Dimmer macro slow close slow open
	225 - 229	Open
	230 - 244	Dimmer macro burst little
245 - 255	Open	
2	000 - 255	DIMMER: 0% - 100%
3	000 - 255	ZOOM: 0% - 100%
4		PAN
	000 - 255	0° - 540°
5	000 - 255	PAN FINE
6		TILT
	000 - 255	0° - 220°
7	000 - 255	TILT FINE
8	000 - 255	PAN/TILT SPEED
9		SPECIAL FUNCTION
	000 - 009	Null
	010 - 014	Reset All
	015 - 255	Null
10		Color
	000 - 009	Open
	010 - 014	Color 1
	015 - 019	Color 2
	020 - 024	Color 3
	025 - 029	Color 4
	030 - 034	Color 5
	035 - 039	Color 6
	040 - 044	Color 7

	045 – 049	Color 8
	050 – 054	Color 9
	055 – 059	Color 10
	060 – 064	Color 11
	065 – 069	Color 12
	070 – 074	Color 13
	075 – 079	Color 14
	080 – 084	Color 15
	085 – 089	Color 16
	090 – 094	Color 17
	095 – 099	Color 18
	100 – 104	Color 19
	105 – 109	Color 20
	110 – 114	Color 21
	115 – 119	Color 22
	120 – 124	Color 23
	125 – 129	Color 24
	130 – 134	Color 25
	135 – 139	Color 26
	140 – 144	Color 27
	145 – 149	Color 28
	150 – 154	Color 29
	155 – 159	Color 30
	160 – 164	Color 31
	165 – 169	Color 32
	170 – 174	Color 33
	175 – 179	Open
	180 - 201	CCW Rotation : fast → slow
	202 – 207	Stop
	208 – 229	CW Rotation: slow → fast
	230 – 234	Open
	235 – 239	Random color rotation (fast speed)
	240 – 244	Random color rotation (medium speed)
	245 – 249	Random color rotation (slow speed)
	250 - 255	Open
11	000 – 255	RED: 0% - 100%
12	000 – 255	GREEN: 0% - 100%
13	000 – 255	BLUE: 0% - 100%

14	000 – 255	WHITE: 0% - 100%
15	000 – 255	CTC: 0% - 100%

14CH MODE (MODE 3):

CHANNEL	VALUE	FUNCTION
1		PAN
	000 – 255	0° - 540°
2	000 – 255	PAN FINE
3		TILT
	000 – 255	0° - 220°
4	000 – 255	TILT FINE
5	000 – 255	PAN/TILT SPEED Fast - Slow
6		RESET
	000-009	No Function
	010-014	Reset All
	015-255	No Function
7		DIMMER
	000 – 255	0% - 100%
8		SHUTTER
	000 – 019	Off
	020 – 024	Open
	025 – 064	Strobe: Fast - Slow
	065 – 069	Open
	070 – 084	Pulse, fast close slow open
	085 – 089	Open
	090 – 104	Pulse, fast open slow close Open
	105 – 109	Open
	110 – 124	Dimmer macro random strobe
	125 - 129	Open
	130 – 144	Dimmer macro random fast close slow open
	145 - 149	Open
	150 – 164	Dimmer macro random fast open slow close
	165 - 169	Open
	170 – 184	Dimmer macro burst pulse
	185 - 189	Open
	190 – 204	Dimmer macro random burst pulse

	205 - 209	Open
	210 - 224	Dimmer macro slow close slow open
	225 - 229	Open
	230 - 244	Dimmer macro burst little
	245 - 255	Open
9	000 – 255	Red 0% - 100%
10	000 – 255	Green 0% - 100%
11	000 – 255	Blue 0% - 100%
12	000 – 255	White 0% - 100%
13	000-009 010-014 015-019 020-024 025-029 030-034 035-039 040-044 045-049 050-054 055-059 060-064 065-069 070-074 075-079 080-084 085-089 090-094 095-099 100-104 105-109 110-114 115-119 120-124 125-129 130-134 135-139 140-144 145-149 150-154	COLOR MACRO Open LEE 790 – Moroccan Pink LEE 157 – Pink LEE 332 – Special Rose Pink LEE 328 – Follies Pink LEE 345 – Fuchsia Pink LEE 194 – Surprise Pink LEE 181 – Congo Blue LEE 071 – Tokyo Blue LEE 120 – Deep Blue LEE 079 – Just Blue LEE 132 – Medium Blue LEE 200 – Double CT Blue LEE 161 – State Blue LEE 201 – Full CT Blue LEE 202 – Half CT Blue LEE 117 – Steel Blue LEE 353 – Lighter Blue LEE 118 – Light Blue LEE 116 – Medium Blue Green LEE 124 – Dark Green LEE 139 – Primary Green LEE 089 – Moss Green LEE 122 – Fern Green LEE 738 – JAS Green LEE 088 – Lime Green LEE 100 – Spring Yellow LEE 104 – Deep Amber LEE 179 – Chrome Orange LEE 105 – Orange

	155-159 160-164 165-169 170-174 175-179	LEE 021 – Gold Amber LEE 778 – Millennium Gold LEE 135 – Deep Gold Amber LEE 164 – Flame Red Open
	180-201 202-207 208-229 230-234	Color wheel rotation effect Clockwise, fast - slow Stop (this will stop wherever the color is at the time) Counter-clockwise, slow - fast Open
	235-239 240-244 245-249 250-255	Random color Fast Medium Slow Open
14	000 – 255	ZOOM: 0% - 100%

5. TROUBLESHOOTING

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work, no light and the fan does not work.

1. Check the connection of power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED.

B. Not responding to DMX controller.

1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX-polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check if the DMX cables run near or run along-

side to high voltage cables that may cause damage or interference to DMX interface circuit.

C. One of the channels is not working well.

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

6. FIXTURE CLEANING

The cleaning must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

- Clean with soft cloth using normal glass cleaning fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 30 days.

Design and product specifications are subject to change without prior notice.