

User Manual
Please read the instruction carefully before use

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1. Safety Instructions



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

WARNING

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully that there is no transportation damage before using the unit.
- This product is for indoor use only. Use only in a dry location.
- DO install and operate by qualified operator.
- DO NOT allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.
- 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, otherwise the unit will be overheated.
- 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.
- Minimum ambient temperature TA: 0° C. Maximum ambient temperature TA: 40° C.
- DO NOT connect the device to any dimmer pack.
- Make sure there are no flammable materials close to the unit while operating to avoid fire hazard.
- Examine the power wires carefully; replace them immediately if there is any damage.
- Avoid any inflammable liquids, water or metal objects entering the unit. Once it happens, cut
 off the mains power immediately.
- DO NOT operate in dirty or dusty environment, do clean fixtures regularly.

- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid power wires together twist other cables.
- The minimum distance between light output and the illuminated surface must be more than
 1.5 meters.
- Disconnect mains power before fuse replacement or servicing.
- Replace fuse only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- DO NOT open the unit as there are no user serviceable parts inside.
- Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect the mains power if the fixture is has not been used for a long time.
- DO use the original packing materials before transporting it again.
- DO NOT look directly at the light while the LED is on.
- DO NOT start on the unit without LED enclosure or when housing is damaged.

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.

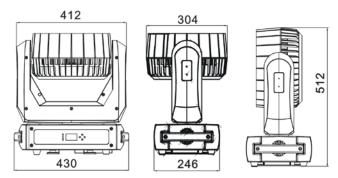
2. Technical Specifications

Power Voltage:
AC 100~240V, 50/60Hz
Power Consumption:
660W
Light Source:
37x15W RGBW LED
Zoom Range:
10°~60°
Movement:
Pan: 540°
Tilt: 270°
Pan/Tilt Resolution: 16bit
Dimming/Strobe:
Smooth dimming from 0~100%; outstanding strobe effect with variable speed
Control:
DMX Channel: 14/26/15 Channels
Control Mode: DMX, RDM
Firmware Upgrade via DMX link
Construction:
Display: LCD display
Display. LCD display
Data In/Out: 3-pin & 5-pin XLR
Data In/Out: 3-pin & 5-pin XLR
Data In/Out: 3-pin & 5-pin XLR Power In/Out: Power Connector in/out
Data In/Out: 3-pin & 5-pin XLR Power In/Out: Power Connector in/out Protection Rating: IP20

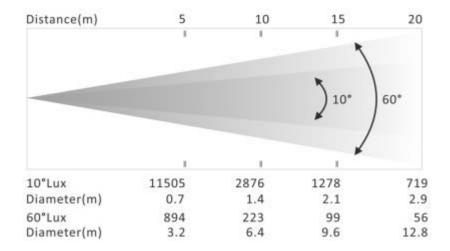
Dimension/Weight:

430x246x512mm, 19.5Kgs

17"x9.7"x20"in, 42.9lbs

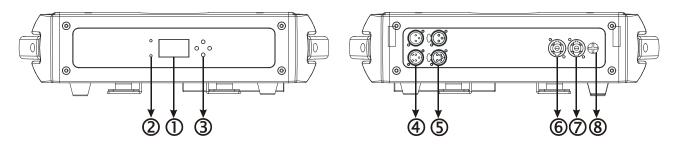


Photometric Diagram:



3. How To Set The Unit

3.1 Control Panel



1. Display: To show the various menus and the selected functions

2. LED:

POWER	ON	Power On
DMX	ON	DMX input present

3. Button:

MENU	To enter into move backward or leave the menu
▼ DOWN	To go forward in the selected functions
A UP	To go backward in the selected functions
ENTER	To confirm the selected functions

4. DMX IN:

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

5. DMX OUT:

For DMX512 link, use 3/5-pin XLR cable to link the next units

6. MAINS IN:

To connect to supply power

7. MAIS OUT:

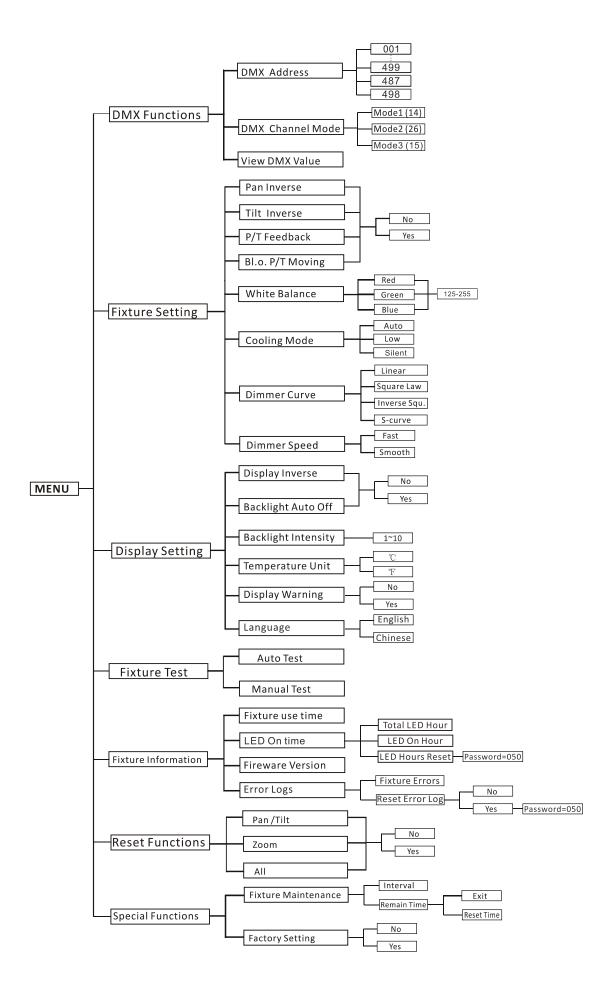
To connect to the next unit

8. FUSE(T 10A):

Protects the unit from over-voltage or short circuit

3.2 Main Function

Turn on the unit, press the MENU button into menu mode, and press the UP/DOWN button until the required function is shown on the monitor. Select the function by the ENTER button. Use the UP/DOWN button to choose the submenu, press the ENTER button to store and automatically return to the last menu. Press the MENU button or let the unit idle 30 seconds to exit menu mode. The main functions are shown below:



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** or **View DMX Value**.

DMX Address

To select **DMX Address**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to adjust the address from 001 to 499/487/498, press the **ENTER** button to setup. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

DMX Channel Mode

To select **DMX Channel Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Mode1 (14)**, **Mode2 (26)** or **Mode3 (15)**, press the **ENTER** button to setup. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

View DMX Value

To select **View DMX Value**, press the **ENTER** button to confirm. 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 30 seconds 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**, **Tilt 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 confirm. 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 30 seconds to exit menu mode.

Tilt Inverse

To select **Tilt Inverse**, press the **ENTER** button to confirm. 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 30 seconds to exit menu mode.

P/T Feedback

To select **P/T Feedback**, press the **ENTER** button to confirm. 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 30 seconds to exit menu mode.

BL.O. P/T Moving

To select **BL.O. P/T Moving**, press the **ENTER** button to confirm. 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 30 seconds to exit menu mode.

White Balance

To select **White Balance**, press the **ENTER** button to confirm. 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 30 seconds to exit menu mode.

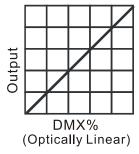
Cooling Mode

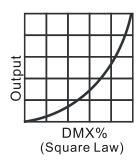
To select **Cooling Mode**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Auto**, **Low** or **Silent**. Once selected, press the **ENTER** button to setup. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

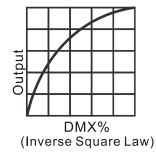
Dimmer Curve

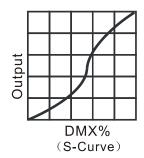
To select **Dimmer Curve**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Linear**, **Square Law**, **Inverse Squ.** or **S-Curve**. Once selected, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Dimmer Modes:









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 finger at high levels.

S-Curve: Light intensity control is finger at low levels and high levels and coarser at medium levels.

Dimmer Speed

To select **Dimmer Speed**, press the **ENTER** button to confirm. 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 30 seconds 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**, **Temperature Unit**, **Display Warning** or **Language**.

Display Inverse

To select **Display Inverse**, press the **ENTER** button to confirm. 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 30 seconds to exit menu mode.

Backlight Auto Off

To select **Backlight Auto Off**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** (display always on) or **Yes** (display goes off 30 seconds 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 30 seconds to exit menu mode.

Backlight Intensity

To select **Backlight Intensity**, press the **ENTER** button to confirm. 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 30 seconds to exit menu mode.

Temperature Unit

To Select **Temperature Unit**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select $^{\circ}$ C or $^{\circ}$ F, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Display Warning

To select **Display Warning**, press the **ENTER** button to confirm. 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 30 seconds to exit menu mode.

Language

To select **Language**, press the **ENTER** button to confirm. 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 30 seconds 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 confirm, the unit will run built-in programs to automatically test pan, tilt, dimmer, shutter, spe. func. and etc. 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 confirm. 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 30 seconds.

(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**, **LED On time**, **Firmware Version** or **Error Logs**.

Fixture use time

To select **Fixture use time**, press the **ENTER** button to confirm, fixture use time will show on the display. Press the **MENU** button to exit.

LED On Time

To select **LED On Time**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Total LED Hour**, **LED On Hour** or **LED Hours Reset**, press the **ENTER** button to store. Use the **UP/DOWN** button to select **LED Hours Reset**, press the **ENTER** button to confirm, use the **UP/DOWN** button to set the password **050** to reset the LED hours, press the **ENTER** button to store. Press the **MENU** button back to the last menu or exit menu mode let the unit idle 30 seconds.

Firmware Version

To select **Firmware Version**, press the **ENTER** button to confirm, firmware version will show on the display. Press the **MENU** button to exit.

Error Logs

To select **Error Logs**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Fixture Errors** or **Reset Error Log**, press the **ENTER** button to store. To select **Reset Error Log**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **No** or **Yes**, press the **ENTER** button to store. To select **Yes**, press the **ENTER** button to confirm, use the **UP/DOWN** button to set the password **050**, press the **ENTER** button to reset error log. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit menu mode.

Reset Functions

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

Pan/Tilt

To Select **Pan/Tilt**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** or **Yes** (the unit will run built-in program to reset pan and tilt to their home positions), press the **ENTER** button to store. Press the **MENU** button to exit menu mode.

Zoom

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

ΑII

To select **All**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **No** or **Yes** (the unit will run built-in program to reset all motors to their home positions), 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 confirm. Use the **UP/DOWN** button to select **Interval** or **Remain Time**. To select **Interval**, press the **ENTER** button to confirm, the interval time will be shown on the display. Press the **MENU** button to exit. To select **Remain Time**, press the **ENTER** button to confirm, use the **UP/DOWN** button to select **Exit** or **Reset Time**. Press the **ENTER** button to confirm, press the **MENU** button to exit.

Factory Setting

To select **Factory Setting**, 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). Press the **ENTER** button to confirm, press the **MENU** button to exit.

RDM FUNCTIONS

Select the MANUFACTURER menu to display the manufacturer of the fixture.

Select the SOFTWARE VERSION menu and the program version number of the fixture will be displayed.

Select the DMX START ADDRESS menu to change the DMX 512 address (001-512).

Select the DEVICE MODEL DESCRIPTION menu to display the model of the fixture.

Select the DEVICE LABEL menu to change the model of the fixture.

Select the DMX PERSONALITY menu to set the channel mode of the fixture (14/26/15 channel).

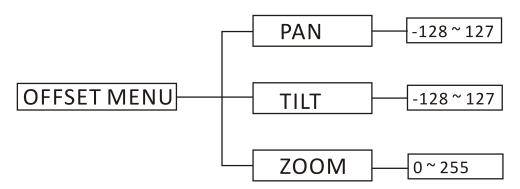
Select the DMX PERSONALITY DESCRIPTION menu to display the current channel mode of the fixture.

Select the PAN INVERT menu and the fixture will run the pan invert mode.

Select the TILT INVERT menu and the fixture will run the tilt invert mode.

Select the RESET DEVICE menu, the WARM RESET/COLD RESET option will be displayed. When WARM RESET is selected, the fixture will start a warm reset, and exit when COLD RESET is selected.

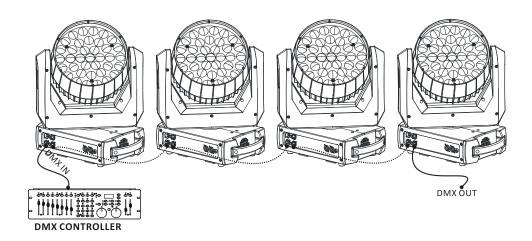
3.3 Home Position Adjustment

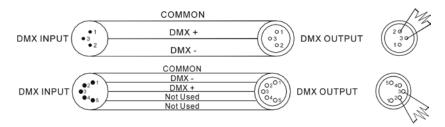


In the main functions, hold the ENTER button for at least 3 seconds into offset mode, use the DOWN/UP button up to select Pan, Tilt or Zoom, and press the ENTER button to confirm. Use the DOWN/UP button to adjust the home position of the Pan, Tilt or Zoom, once the position has been selected, press the 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 30 seconds to exit the menu mode.

4. Control By Universal DMX Controller

4.1 DMX512 Connection





- 1. 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-pin XLR-plug and plug it in the DMX-output of the last unit.
- 2. Connect the unit together in a "daisy chain" by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be 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.
- 3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units' power is disconnected.
- 4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 1-512.
- 5. The end of the DMX 512 system should be terminated to reduce signal errors.
- 6. 3 pin XLR connectors are more popular than 5 pins 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 (+), Pin4, Pin5 not used.

4.2 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 the 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, press the ENTER button to store. Press the MENU button back to the last menu or let the unit idle 30 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
14 channels	1	15	29	43
26 channels	1	27	53	79
15 channels	1	16	31	46

4.3 DMX512 Configuration

Please refer to below configurations to control the fixtures

Attentions:

- 1. The unit will maintain the last condition until reset if you cut-off the DMX signal.
- 2. For the channel Function, keep the value for about 3 seconds, then the corresponding function will take into effect.

14 Channels Mode:

CHANNEL	VALUE	FUNCTION
1	000-255	PAN 0°→540°
2	000-255	PAN FINE
3	000-255	TILT 0°→270°

4	000-255	TILT FINE
F		PAN/TILT SPEED
5	000-255	fast→slow
		SPECIAL FUNCTIONS
6	000-009	No function
0	010-014	Reset
	015-255	No function
7		DIMMER
,	000-255	0%→100%
		SHUTTER
	000-019	Blackout
	020-024	Open
	025-064	Strobe 1: fast to slow
	065-069	Open
	070-084	Strobe 2: opening pulse, fast to slow
	085-089	Open
	090-104	Strobe 3: closing pulse, fast to slow
	105-109	Open
	110-124	Strobe 4: random strobe, fast to slow
_	125-129	Open
8	130-144	Strobe 5: random opening pulse, fast to slow
	145-149	Open
	150-164	Strobe 6: random closing pulse, fast to slow
	165-169	Open
	170-184	Strobe 7: burst pulse, fast to slow
	185-189	Open
	190-204 205-209	Strobe 8: random burst pulse, fast to slow Open
	210-224	Strobe 9: sine wave, fast to slow
	225-229	Open
	230-244	Strobe 10: burst, fast to slow
	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%)
		COLOR MACRO
	000-009	Open
13	010-014	LEE 790 – Moroccan Pink
	015-019	LEE 157 – Pink
	020-024	LEE 332 – Special Rose Pink

	000-255	60°→10°
14		ZOOM
	250-255	Open
	245-249	Random Color, Slow
	240-244	Random Color, Medium
	235-239	Random Color, Fast
	230-234	Open
	208-229	Color Wheel Counter-Clockwise Rotation, slow to fast
	202-207	Stop (this will stop wherever the color is at the time)
	180-201	Color Wheel Clockwise Rotation, fast to slow
	175-179	Open
	170-174	LEE 164 – Flame Red
	165-169	LEE 135 – Deep Gold Amber
	160-164	LEE 778 – Millennium Gold
	155-159	LEE 021 – Gold Amber
	150-154	LEE 105 – Orange
	145-149	LEE 179 – Chrome Orange
	140-144	LEE 104 – Deep Amber
	135-139	LEE 100 – Spring Yellow
	130-134	LEE 088 – Lime Green
	125-129	LEE 738 – JAS Green
	120-124	LEE 122 – Fern Green
	115-119	LEE 089 – Moss Green
	110-114	LEE 139 – Primary Green
	105-109	LEE 124 – Dark Green
	100-104	LEE 116 – Medium Blue Green
	095-099	LEE 118 – Light Blue
	090-094	LEE 353 – Lighter Blue
	085-089	LEE 117 – Steel Blue
	080-084	LEE 202 – Half CT Blue
	075-079	LEE 201 – Full CT Blue
	070-074	LEE 161 – State Blue
	065-069	LEE 200 – Double CT Blue
	060-064	LEE 132 – Medium Blue
	055-059	LEE 079 – Just Blue
	050-054	LEE 120 – Deep Blue
	045-049	LEE 071 – Tokyo Blue
	040-044	LEE 181 – Congo Blue
	035-039	LEE 194 – Surprise Pink
	030-034	LEE 345 – Fuchsia Pink
I	025-029	LEE 328 – Follies Pink

18G

26 Channels Mode:

CHANNEL	VALUE	FUNCTION
		PAN
1	000-255	0°→540°
2	000-255	PAN FINE
_		TILT
3	000-255	0°→270°
4	000-255	TILT FINE
5		PAN/TILT SPEED
3	000-255	fast→slow
6		ZOOM
	000-255	60°→10°
		SPECIAL FUNCTIONS
7	000-009	No function
	010-014	Reset
	015-255	No function
8		DIMMER
	000-255	0%→100%
		SHUTTER
	000-019	Blackout
	020-024	Open
	025-064	Strobe 1: fast to slow
	065-069	Open
	070-084	Strobe 2: opening pulse, fast to slow
	085-089	Open
	090-104	Strobe 3: closing pulse, fast to slow
	105-109	Open
	110-124	Strobe 4: random strobe, fast to slow
	125-129	Open
9	130-144	Strobe 5: random opening pulse, fast to slow
	145-149	Open
	150-164	Strobe 6: random closing pulse, fast to slow
	165-169	Open
	170-184	Strobe 7: burst pulse, fast to slow
	185-189	Open
	190-204	Strobe 8: random burst pulse, fast to slow
	205-209	Open
	210-224	Strobe 9: sine wave, fast to slow
	225-229	Open
	230-244	Strobe 10: burst, fast to slow
	245-255	Open

10	000-255	RING 1 RED (0%→100%)
11	000-255	RING 1 GREEN (0%→100%)
12	000-255	RING 1 BLUE (0%→100%)
13	000-255	RING 1 WHITE (0%→100%)
	000-009	RING 1 COLOR PRESET Open
	010-009	Color1
	020-024	Color2
	025-032	Color3
	033-039	Color4
	040-047	Color5
	048-054	Color6
	055-061	Color7
	062-069	Color8
	070-076	Color9
	077-084	Color10
	085-091	Color11
	092-099	Color12
	100-106	Color13
	107-113	Color14
	114-121	Color15
14	122-128	Color16
	129-136	Color17
	137-143	Color18
	144-151	Color19
	152-158	Color20
	159-165	Color21
	166-173	Color22
	174-180	Color23
	181-188	Color24
	189-195	Color25
	196-203	Color26
	204-210	Color27
	211-217	Color28
	218-225	Color29
	226-232	Color30
	233-240	Color31
	241-247	Color32
	248-255	Color33
15	000-255	RING 2 RED (0%→100%)
16	000-255	RING 2 GREEN (0%→100%)

17	000-255	RING 2 BLUE (0%→100%)
18	000-255	RING 2 WHITE (0%→100%)
19		RING 2 COLOR PRESET
19	000-255	(The same as CH14: RING 1 COLOR PRESET)
20	000-255	RING 3 RED (0%→100%)
21	000-255	RING 3 GREEN (0%→100%)
22	000-255	RING 3 BLUE (0%→100%)
23	000-255	RING 3 WHITE (0%→100%)
24		RING 3 COLOR PRESET
24	000-255	(The same as CH14: RING 1 COLOR PRESET)
		RING COLOR MACRO
	000-007	Blackout
	008-022	Macro1
	023-037	Macro2
	038-052	Macro3
	053-067	Macro4
	068-082	Macro5
	083-097	Macro6
	098-112	Macro7
25	113-127	Macro8
	128-142	Macro9
	143-157	Macro10
	158-172	Macro11
	173-187	Macro12
	188-202	Macro13
	203-217	Macro14
	218-232	Macro15
	233-247	Macro16
	248-255	Mocro17
26		COLOR MACRO SPEED
20	000-255	slow→fast

15 Channels Mode:

CHANNEL	VALUE	FUNCTION
_		PAN
1	000-255	0°→540°
2	000-255	PAN FINE
2		TILT
3	000-255	0°→270°
4	000-255	TILT FINE
5		PAN/TILT SPEED
	000-255	fast→slow
		SPECIAL FUNCTIONS
6	000-009	No function
	010-014	Reset
	015-255	No function
7		DIMMER
	000-255	0%→100%
		SHUTTER
	000-019	Blackout
	020-024	Open
	025-064	Strobe 1: fast to slow
	065-069	Open
	070-084	Strobe 2: opening pulse, fast to slow
	085-089	Open
	090-104	Strobe 3: closing pulse, fast to slow
	105-109	Open
	110-124	Strobe 4: random strobe, fast to slow
	125-129	Open
8	130-144	Strobe 5: random opening pulse, fast to slow
	145-149	Open
	150-164	Strobe 6: random closing pulse, fast to slow
	165-169	Open
	170-184	Strobe 7: burst pulse, fast to slow
	185-189	Open
	190-204	Strobe 8: random burst pulse, fast to slow
	205-209	Open
	210-224	Strobe 9: sine wave, fast to slow
	225-229	Open
	230-244	Strobe 10: burst, fast to slow
	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%)
		Color
13	000-009	Open
	010-017	Color1
	018-024	Color2
	025-032	Color3
	033-039	Color4
	040-047	Color5
	048-054	Color6
	055-061	Color7
	062-069	Color8
	070-076	Color9
	077-084	Color10
	085-091	Color11
	092-106	Color12
	107-113	Color13
	114-121	Color14
	122-128	Color15
	129-136	Color16
	137-143	Color17
	144-151	Color18
	152-158	Color19
	159-165	Color20
	166-173	Color21
	174-180	Color22
	181-188	Color23
	189-195	Color24
	196-203	Color25
	204-210	Color26
	211-217	Color27
	218-225	Color28
	226-232	Color29
	233-240	Color30
	241-247	Color31
	248-255	Color32
14		ZOOM
	000-255	60°→10°
15	022.27	Effect
	000-031	NULL
	032-047	Effect1
	048-063	Effect2
	064-079	Effect3

080-095	Effect4
096-111	Effect5
112-127	Effect6
128-143	Effect7
144-159	Effect8
160-175	Effect9
176-191	Effect10
192-207	Effect11
208-223	Effect12
224-239	Effect13
240-255	Effect14

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 connect power and main fuse.
- 2. Measure the mains voltage on the main connector.
- 3. Check the power on LED to see if it can be light up or not.

B. Not responding to DMX controller

- 1. DMX LED should be on. If not, check DMX connectors, cables to see if they are linked 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 to see if the DMX cables run near or run alongside 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 of internal and external optical lenses and/or mirrors 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 and use normal glass to clean liquid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days.

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