

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 to ensure 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 is blocked, otherwise the unit will be overheated.
- Before operation, ensure that you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Minimum ambient temperature TA:  $0^{\circ}$ C. Maximum ambient temperature TA:  $40^{\circ}$ C. Do not operate this product at a lower or higher temperature.
- DO NOT connect the device to any dimmer pack.
- Keep flammable materials away from the fixture while operating to avoid fire hazard.
- Make sure the power cord is not crimped or damaged; replace it immediately if damaged.
- Unit's surface temperature may reach up to 75℃. DO NOT touch the housing bare-handed during its operation.
- Avoid any flammable liquids, water or metal from entering the unit. Once it happens, cut off the mains power immediately.

- DO NOT operate in a dirty or dusty environment. DO clean the fixture regularly.
- DO NOT touch any wire during operation as there might be a hazard of electric shock.
- Avoid entanglement of the power cord with other wires.
- The minimum distance to objects/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 housing as there are no user serviceable parts inside.
- DO NOT attempt to operate this unit if it becomes damaged. DO NOT attempt any repairs
  yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please
  contact the nearest authorized technical assistance center if needed.
- Disconnect this product from its power source before servicing.
- DO use the original packaging if the device is to be transported.
- Avoid direct eye exposure to the light source while the product is on.
- DO NOT operate this product if you see damage on the housing, shields, or cables. Have the damaged parts replaced by an authorized technician at once.

#### Installation:

The fixture should be fixed on the clamp. Always ensure that the unit is firmly fixed to avoid vibration and slipping off during operation. Ensure that the trussing or area of installation must be able to hold 10 times the weight without any deformation. Always install a safety cable that can hold at least 12 times the weight of the fixture when installing.

DO install and operate by qualified operator. It must be installed in a place where there is out of the reach of people.

## 2. Technical Specifications

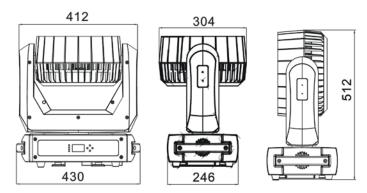
2. reciffical Specifications
Power Voltage:
100-240V~ 50/60Hz
Power Consumption:
610W
Light Source:
37x20W RGBW LED
Zoom Range:
10°~60°
Movement:
Pan: 540°
Tilt: 270°
Pan/Tilt Resolution: 16bit
Dimming/Strobe:
0~100% smooth dimming, variable strobe speeds
Control:
DMX Channel: 14/26/15 Channels
Control Mode: DMX512, RDM
Firmware Upgrade: Update via DMX link
Construction:
Display: LCD display
Data In/Out: 3-pin & 5-pin XLR
Power In/Out: Power Connector in/out
Protection Rating: IP20
Features:

Ring control, outstanding color macro effect

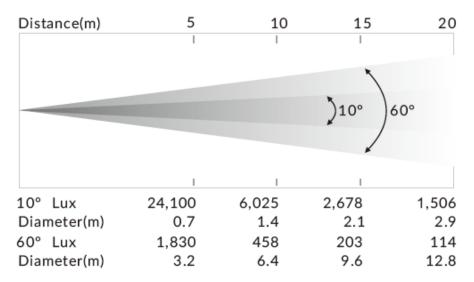
### **Dimension/Weight:**

430x246x512mm, 19.5kgs

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

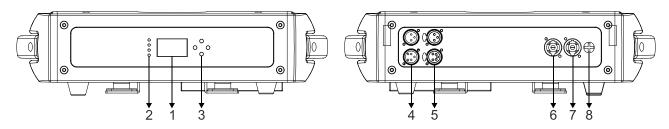


## **Photometric Diagram:**



## 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
▲ 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. POWERCON IN:

To connect to supply power

#### 7. POWERCON OUT:

To connect to the next fixture

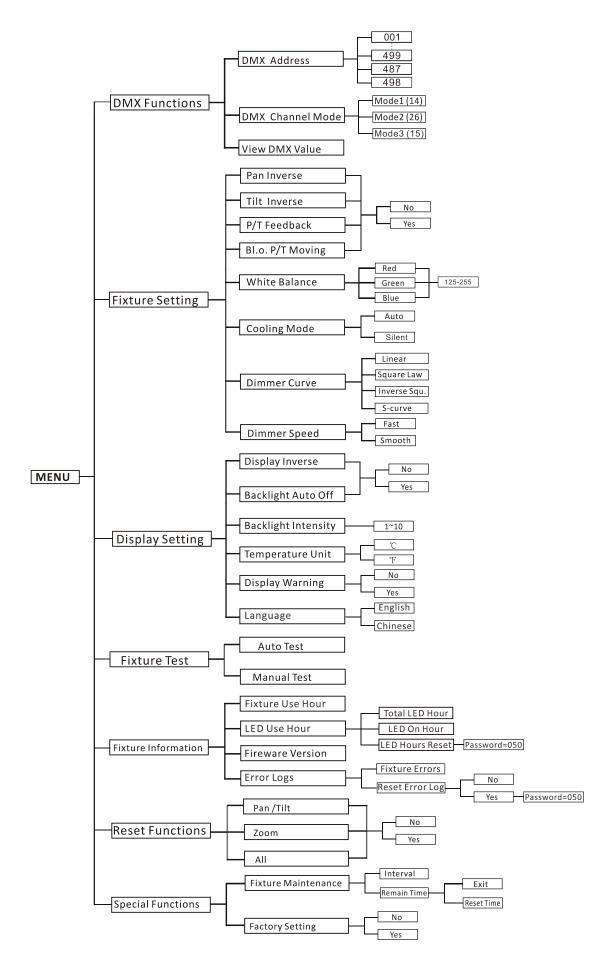
#### 8. FUSE(T 10A):

Protects the unit from damage of 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 pressing 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**

To 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

To 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** 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**

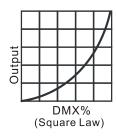
To select **Dimmer Curve**, press the **ENTER** button to confirm. Use the **UP/DOWN** button to select **Linear**, **Square Law**, **Inverse Squ.** or **S-Curve**. Once selected, press the **ENTER** button to store. Press the **MENU** button back to the last menu or let the unit idle 30 seconds to exit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

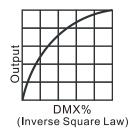
Dimmer Modes:

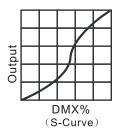
phd house

DMX%

(Optically Linear)







**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**

To 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

To 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**

To select **Fixture Information**, press the **ENTER** button to confirm, use the UP/DOWN button to select **Fixture Use Hour, LED Use Hour, Firmware Version** or **Error Logs**.

#### **Fixture Use Hour**

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

#### **LED Use Hour**

To select **LED Use Hour**, 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**

To 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.

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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**

To 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.

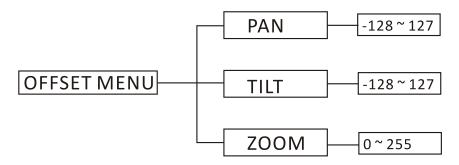
Select the PAN INVERT menu and the fixture will run the pan invert mode.

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

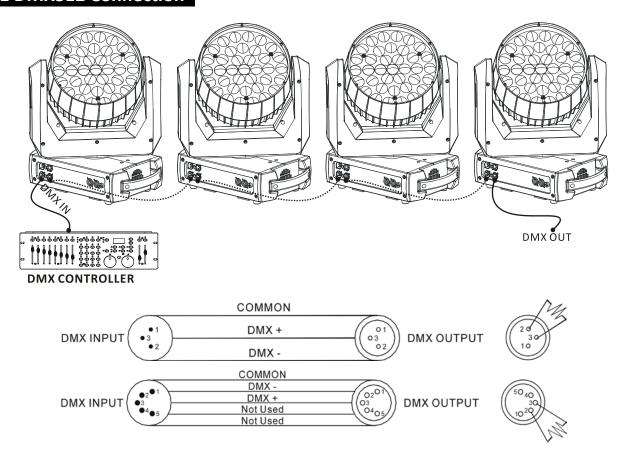
Press the MENU button into menu mode, then press the ENTER button for about 3 seconds into offset mode to adjust the home position. Select the function by pressing the ENTER button. Use the UP/DOWN button to choose the submenu, press the ENTER button to store and automatically return to the last menu. Press MENU button to exit.



Enter offset mode, 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 store. Press the **MENU** button to exit.

## 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 can only be used in series and cannot be connected in parallel. 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 in 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 control the fixture by referring to the configurations below

#### **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		PAN
1	000-255	0°→540°
2	000-255	PAN FINE
3		TILT
_	000-255	0°→270°
4	000-255	TILT FINE
5		PAN/TILT SPEED
	000-255	Fast to 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
8	105-109	Open
l °	110-124	Strobe 4: random strobe, fast to slow
	125-129	Open
	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
	205-209	Strobe 9: sine wave, fast to slow
	225-229	· ·
	230-244	Open 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	<b>WHITE</b> (0%→100%)
		COLOR MACRO
	000-009	Open
	010-014	LEE 790-Moroccan Pink
	015-019	LEE 157-Pink
	020-024	LEE 332-Special Rose Pink
	025-029	LEE 328-Follies Pink
	030-034	LEE 345-Fuchsia Pink
	035-039	LEE 194-Surprise Pink
	040-044	LEE 181-Congo Blue
	045-049	LEE 071-Tokyo Blue
	050-054	LEE 120-Deep Blue
	055-059	LEE 079-Just Blue
	060-064	LEE 132-Medium Blue
	065-069	LEE 200-Double CT Blue
	070-074	LEE 161-State Blue
	075-079	LEE 201-Full CT Blue
	080-084	LEE 202-Half CT Blue
13	085-089	LEE 117-Steel Blue
	090-094	LEE 353-Lighter Blue
	095-099	LEE 118-Light Blue
	100-104	LEE 116-Medium Blue Green
	105-109	LEE 124-Dark Green
	110-114	LEE 139-Primary Green
	115-119	LEE 089-Moss Green
	120-124	LEE 122-Fern Green
	125-129	LEE 738-JAS Green
	130-134	LEE 088-Lime Green
	135-139	LEE 100-Spring Yellow
	140-144	LEE 104-Deep Amber
	145-149	LEE 179-Chrome Orange
	150-154	LEE 105-Orange
	155-159	LEE 021-Gold Amber
	160-164	LEE 778-Millennium Gold
	165-169	LEE 135-Deep Gold Amber
	170-174	LEE 164-Flame Red

	175-179	Open
	180-201	Color Wheel Clockwise Rotation, fast to slow
	202-207	Stop (this will stop wherever the color is at the time)
	208-229	Color Wheel Counter-Clockwise Rotation, slow to fast
	230-234	Open
	235-239	Random Color, Fast
	240-244	Random Color, Medium
	245-249	Random Color, Slow
	250-255	Open
1.0		ZOOM
14	000-255	60°→10°

## 26 Channels Mode:

CHANNEL	VALUE	FUNCTION
1		PAN
	000-255	0°→540°
2	000-255	PAN FINE
3	000-255	<b>TILT</b> 0°→270°
4	000-255	TILT FINE
5		PAN/TILT SPEED
3	000-255	Fast to Slow
6		ZOOM
0	000-255	60°→10°
		SPECIAL FUNCTIONS
7	000-009	No function
<b>'</b>	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
9	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

	120 144	Ctroba Eurondona ananing mulas fast to slave
	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%)
		RING 1 COLOR PRESET
	000-009	Open
	010-019	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
14	092-099	Color12
	100-106	Color13
	107-113	Color14
	114-121	Color15
	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

1		
	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%)
10		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
		COLOR MACRO SPEED
26	000-255	slow→fast

## 15 Channels Mode:

CHANNEL	VALUE	FUNCTION
1		PAN
1	000-255	0°→540°
2	000-255	PAN FINE
3		TILT
	000-255	0°→270°
4	000-255	TILT FINE
5		PAN/TILT SPEED
	000-255	Fast to Slow
		SPECIAL FUNCTIONS
6	000-009	No function
	010-014	Reset
	015-255	No function
7		DIMMER
<b>'</b>	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
	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
13	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
14	000-255	60°→10°
		Effect
	000-031	NULL
	032-047	Effect1
	048-063	Effect2
15	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 troubleshooting:

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

- 1. Check the connected power and main fuse.
- 2. Measure the voltage.
- 3. Check the power indicator to see whether it can be lit up or not.

#### B. Not responding to the DMX controller

- 1. Check whether the DMX connectors and the DMX cables are connected correctly.
- 2. Check whether the DMX address is correctly set.
- 3. If the intermittent DMX signal problem occurs, check whether the XLR socket and the signal cable are well connected.
- 4. Try it with another DMX controller.
- 5. Check whether the DMX cables run near or alongside to the high-voltage cables, which may damage or interfere with the signal circuit.

#### C. One of the channels is not working well

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

## 6. Fixture Cleaning

It is absolutely essential that the fixture is kept clean to ensure the maximum light-output and allow the fixture to function reliably throughout its life. The fixture must be cleaned regularly to avoid dust, dirt and smoke-fluid residues building up on or within the fixture. The cleaning frequency depends on the application environment. Clean the fixture immediately if the dust enters it to avoid damage to the optical lens due to excessive dust.

- A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should solvents be used.
- Always dry the parts carefully.
- Clean the external optical lens at least every 20 days.

## **Declaration of Conformity**

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 2014/30/EU.

EN 55032: 2015+A11:2020; EN 55035: 2017+A11: 2020; EN IEC 61000-3-2: 2019; EN 61000-3-3: 2013+A1: 2019.

# & Harmonized Standard

EN 60598-2-17: 2018; EN 60598-1: 2015+A1: 2018.

Safety of household and similar electrical appliances Part 1: General requirements and tests Innovation, Quality, Performance