

# **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 suitable for wet locations. Do not immerse in water.
- 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°C. Maximum ambient temperature TA: 40°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.
- 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.
- 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

**Power Voltage:** 

100-240V~ 50/60Hz

**Power Consumption:** 

170W

Light Source:

54x3W RGBW LED

Beam Angles: 19°

**Control:** 

DMX Channel: 4/5/7/8 channel

Control Mode: DMX512, Primary/Secondary

Firmware Upgrade: Update via DMX link

#### **Construction:**

Display: LED display

Data In/Out Socket: 3-pin XLR socket

Protection Rating: IP66

#### Features:

Outstanding color mixing effect

Preset program in stand-alone mode

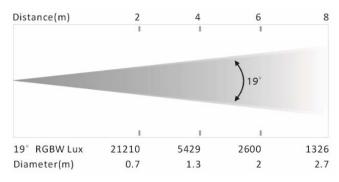
0~100% smooth dimming; various strobe speeds

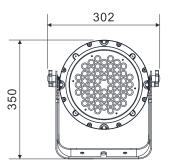
#### **Dimension/Weight:**

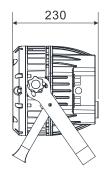
302x230x350mm, 9.1kgs

11.9"x9.1"x13.8"in, 20.1lbs

#### **Photometric Diagram:**

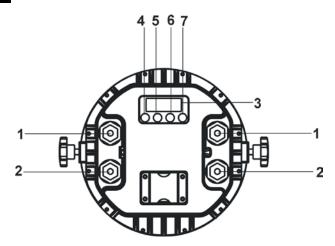






# 3. How To Set The Unit

# 3.1 Control Panel



#### 1. POWER IN/OUT:

Water proof connectors for power input/output

#### 2. DMX IN/OUT:

Water proof connectors for DMX512 operation, use 3-pin XLR cable to link the units together

#### 3. Display:

To show the menu and the selected functions

#### Button:

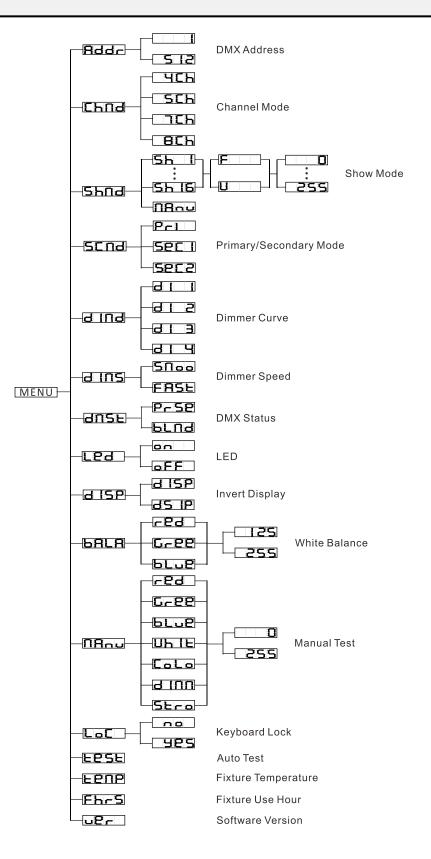
4. MENU	To select the programming functions
5. UP	To go backward in the selected functions
6. DOWN	To go forward in the selected functions
7. ENTER	To confirm the selected functions

# 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:

Once you set Loc to 985, after running in show mode for 5 minutes without any change or restarting the unit, the key board become locked. Press ENTER button to enable the menu, the display will show 0, press UP and DOWN button until it shows 23, then press ENTER to unlock.



#### 요리다 DMX Address

Press the **MENU** button up to when the **Bddr** is shown on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to change the DMX512 address. Once the address has been selected, press **ENTER** button to setup or automatically exit menu mode without any change after 30 seconds. Back to the previous functions without any change press **MENU** button.

#### **Child** Channel Mode

Press the **MENU** button up to when the **Lhnd** is shown on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **Lhnd** (4 channels), **SCH** (5 channels), **DCH** (7 channels) or **BCH** (8 channels). Once select, press **ENTER** button to setup or automatically exit menu mode without any change after 30 seconds. To go back to the functions without any change press the **MENU** button.

#### Shad Show Mode

Press the **MENU** button up to when the **Shad** is shown on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **Shad** (show 1) ...**Shad** (show 16) or **Manual**. After select the show mode, use **DOWN** and **UP** button to adjust the value for fade mode and speed mode. Once select, press **ENTER** button to store or automatically return to the main functions without any change after 30 seconds. To go back to the previous functions without any change press the **MENU** button.

#### SCNd Primary/Secondary Mode

Press the **MENU** button up to when the **SCOO** is shown on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **Primer** (Primary), **SECO** (Secondary 1) or **SECO** (Secondary 2). Once select, press **ENTER** button to store or automatically return to the main functions without any change after 30 seconds. To go back to the previous functions without any change press the **MENU** button.

#### d Ind Dimmer Curve

Press the **MENU** button up to when the **d Ind** is shown on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **d I I** (Dimmer Curve 1) ...**d I I** (Dimmer Curve 4). Once select, press **ENTER** button to store or automatically return to the main functions without any change after 30 seconds. To go back to the previous functions without any change press the **MENU** button.

#### d INS Dimmer Speed

Press the **MENU** button up to when the **DINS** is shown on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **SADD** (Smooth) or **ERSE** (Fast). Once select, press **ENTER** button to store or automatically return to the main functions without any change after 30 seconds. To go back to the previous functions without any change press the **MENU** button.

#### **る**のちと DMX Status

Press the **MENU** button up to when the **DISE** is shown on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **PrSE** (Primary/Secondary Mode) or **DLOO** (Blackout Mode). Once select, press **ENTER** button to store or automatically return to the main functions without any change after 30 seconds. To go back to the previous functions without any change press the **MENU** button.

#### L29 TED

Press the **MENU** button up to when the **Led** is shown on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **DOM** (On) or **DFF** (Off). Once select, press **ENTER** button to store or automatically return to the main functions without any change after 30 seconds. To go back to the previous functions without any change press the **MENU** button.

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#### d ISP Invert Display

Press the **MENU** button up to when the **DISP** is shown on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **DISP** (Normal) or **DIS IP** (Invert Display). Once select, press **ENTER** button to store or automatically return to the main functions without any change after 30 seconds. To go back to the previous functions without any change press the **MENU** button.

#### **BALR** White Balance

Press the **MENU** button up to when the **BRLA** is showing on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **CO** (Red), **CCP** (Green) or **BLCP** (Blue). Once the mode has been selected, press the **DOWN** and **Up** button to select the value from 125 to 255, press the **ENTER** button to setup or automatically return to the main functions without any change after 30 seconds. To go back to the previous functions without any change press the **MENU** button.

#### **NR**ດບ Manual Test

Press the **MENU** button up to when the **DRou** is showing on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **PCO** (Red), **GPO** (Green), **BLue** (Blue), **Uhie** (White), **Colo**(Color), **Ginn** (Dimmer) or **SEco** (Strobe). Once the mode has been selected, press the **DOWN** and **Up** button to select the value from 0 to 255, press the **ENTER** button to setup or automatically return to the main functions without any change after 30 seconds. To go back to the previous functions without any change press the **MENU** button.

#### Loc Keyboard Lock

Press the **MENU** button up to when the **Loc** is showing on the display. Press **ENTER** button and the display will blink. Use **DOWN** and **UP** button to select the **no** (Keyboard lock On) or **UPES** (Keyboard lock Off). Once select, press the **ENTER** button to setup or automatically return to the main functions without any change after 30 seconds. Back to the previous functions press **MENU** button.

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#### **논문도는** Auto Test

Press the **MENU** button up to when the **EPSE** is blinking on the display. Press **ENTER** button and the unit will run self-test by built-in program. To go back to the functions press the **MENU** button again.

#### **EBNP** Fixture Temperature

Press the **MENU** button up to when the **EPNP** is blinking on the display. Press **ENTER** button and the display will show the temperature of the unit. To go back to the functions press the **MENU** button again.

#### Ehc5 Fixture Use Hour

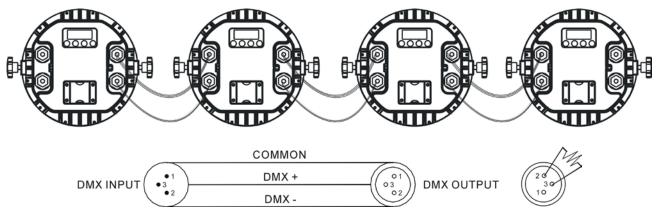
Press the **MENU** button up to when the **Ehr5** is blinking on the display. Press **ENTER** button and the display will show the working hours of the unit. To go back to the functions press the **MENU** button.

#### 고 온 - Software Version

Press the **MENU** button up to when the **P** is blinking on the display. Press **ENTER** button and the display will show the version of software of the unit. To go back to the functions press the **MENU** button again.

# 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

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

Press the MENU button up to when the **Bddr** is showing on the display. Press the ENTER button and the display will blink. Use the UP/DOWN button to change the DMX512 address. Once the address has been selected, press and keep the ENTER button pressed up to when the display stops blinking or storing automatically 30 seconds later. To go back to the functions without any change press the MENU button again.

Channel mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
4 Channels	1	5	9	13
5 Channels	1	6	11	16
7 channels	1	8	15	22
8 channels	1	9	17	25

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

# 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.

# 4 Channels Mode (Mode 1):

CHANNEL	VALUE	FUNCTION
1	0-255	<b>RED</b> 0%→100%
2	0-255	GREEN 0%→100%
3	0-255	BLUE 0%→100%
4	0-255	<b>WHITE</b> 0%→100%

### 5 Channels Mode (Mode 2):

CHANNEL	VALUE	FUNCTION
1		RED
_	0-255	0%→100%
2		GREEN
2	0-255	0%→100%
2		BLUE
3	0-255	0%→100%
4		WHITE
4	0-255	0%→100%
5		DIMMER
5	0-255	0%→100%

# 7 Channels Mode (Mode 3):

CHANNEL	VALUE	FUNCTION
1	0-255	<b>RED</b> 0%→100%
2	0-255	<b>GREEN</b> 0%→100%
3	0-255	BLUE 0%→100%
4	0-255	<b>WHITE</b> 0%→100%
5		PRESET COLOR

	0-7	OFF
	8-15	PRESET COLOR 1
	16-23	PRESET COLOR 2
	24-31	PRESET COLOR 3
	32-39	PRESET COLOR 4
	40-47	PRESET COLOR 5
	48-55	PRESET COLOR 6
	48-33 56-63	PRESET COLOR 7
	50-05 64-71	PRESET COLOR 7
	64-71 72-79	PRESET COLOR 8 PRESET COLOR 9
		PRESET COLOR 9
	80-87	
	88-95	PRESET COLOR 11 PRESET COLOR 12
	96-103	
	104-111	PRESET COLOR 13
	112-119	PRESET COLOR 14
	120-127	PRESET COLOR 15
	128-135	PRESET COLOR 16
	136-143	PRESET COLOR 17
	144-151	PRESET COLOR 18
	152-159	PRESET COLOR 19
	160-167	PRESET COLOR 20
	168-175	PRESET COLOR 21
	176-183	PRESET COLOR 22
	184-191	PRESET COLOR 23
	192-199	PRESET COLOR 24
	200-207	PRESET COLOR 25
	208-215	PRESET COLOR 26
	216-223	PRESET COLOR 27
	224-231	PRESET COLOR 28
	232-239	PRESET COLOR 29
	240-247	PRESET COLOR 30
	248-254	PRESET COLOR 31
	255	Off
		STROBE
	0-7	OFF
	8-15	OPEN
	16-131	STROBE FROM SLOW TO FAST
	132-139	OPEN
6	140-181	FAST CLOSE SLOW OPEN
	182-189	OPEN
	190-231	FAST OPEN SLOW CLOSE
	232-239	OPEN
	240-247	RANDOM STROBE
	248-255	OPEN

7		DIMMER
/	0-255	0%→100%

# 8 Channels Mode (Mode 4):

CHANNEL	VALUE	FUNCTION
		RED
1	0-255	0%→100%
2		GREEN
2	0-255	0%→100%
3		BLUE
3	0-255	0%→100%
4		WHITE
· · ·	0-255	0%→100%
		СТО(8000К-2500К)
	001-004	8000K
	005-009	7900K
	010-013	7800K
	014-018	7700K
	019-022	7600K
	023-027	7500K
	028-031	7400K
	032-036	7300K
	037-040	7200K
	041-045	7100K
	046-049	7000K
	050-054	6900K
5	055-058	6800K
	059-063	6700K
	064-067	6600K
	068-072	6500K
	073-076	6400K
	077-081	6300K
	082-085	6200K
	086-090	6100K
	091-094	6000K
	095-099	5900K
	100-103	5800K
	104-108	5700K
	109-112	5600K
	113-117	5500K

	118-121	5400K
	122-126	5300K
	127-130	5200K
	131-135	5100K
	136-139	5000K
	140-144	4900K
	145-148	4800K
	149-153	4700K
	154-157	4600K
	158-162	4500K
	163-166	4400K
	167-171	4300K
	172-175	4200K
	176-180	4100K
	181-184	4000K
	185-189	3900K
	190-193	3800K
	194-198	3700К
	199-202	3600K
	203-207	3500К
	208-211	3400K
	212-216	3300K
	217-220	3200К
	221-225	3100K
	226-229	3000K
	230-234	2900K
	235-238	2800K
	239-243	2700К
	244-247	2600K
	248-255	2500K
		PRESET COLOR
	0-7	OFF
	8-15	PRESET COLOR 1
	16-23	PRESET COLOR 2
	24-31	PRESET COLOR 3
	32-39	PRESET COLOR 4
	40-47	PRESET COLOR 5
6	48-55	PRESET COLOR 6
	56-63	PRESET COLOR 7
	64-71	PRESET COLOR 8
	72-79	PRESET COLOR 9
	80-87	PRESET COLOR 10
	88-95	PRESET COLOR 11
	96-103	PRESET COLOR 12
	30 100	

	104-111	PRESET COLOR 13
	112-119	PRESET COLOR 14
	120-127	PRESET COLOR 15
	128-135	PRESET COLOR 16
	136-143	PRESET COLOR 17
	144-151	PRESET COLOR 18
	152-159	PRESET COLOR 19
	160-167	PRESET COLOR 20
	168-175	PRESET COLOR 21
	176-183	PRESET COLOR 22
	184-191	PRESET COLOR 23
	192-199	PRESET COLOR 24
	200-207	PRESET COLOR 25
	208-215	PRESET COLOR 26
	216-223	PRESET COLOR 27
	224-231	PRESET COLOR 28
	232-239	PRESET COLOR 29
	240-247	PRESET COLOR 30
	248-254	PRESET COLOR 31
	255	Off
		STROBE
	0-7	OFF
	0-7 8-15	
		OFF
	8-15	OFF OPEN
7	8-15 16-131	OFF OPEN STROBE FROM SLOW TO FAST
7	8-15 16-131 132-139	OFF OPEN STROBE FROM SLOW TO FAST OPEN
7	8-15 16-131 132-139 140-181	OFF OPEN STROBE FROM SLOW TO FAST OPEN FAST CLOSE SLOW OPEN
7	8-15 16-131 132-139 140-181 182-189	OFF OPEN STROBE FROM SLOW TO FAST OPEN FAST CLOSE SLOW OPEN OPEN
7	8-15 16-131 132-139 140-181 182-189 190-231 232-239 240-247	OFF OPEN STROBE FROM SLOW TO FAST OPEN FAST CLOSE SLOW OPEN OPEN FAST OPEN SLOW CLOSE OPEN RANDOM STROBE
7	8-15 16-131 132-139 140-181 182-189 190-231 232-239	OFF OPEN STROBE FROM SLOW TO FAST OPEN FAST CLOSE SLOW OPEN OPEN FAST OPEN SLOW CLOSE OPEN
	8-15 16-131 132-139 140-181 182-189 190-231 232-239 240-247	OFF OPEN STROBE FROM SLOW TO FAST OPEN FAST CLOSE SLOW OPEN OPEN FAST OPEN SLOW CLOSE OPEN RANDOM STROBE
7 8	8-15 16-131 132-139 140-181 182-189 190-231 232-239 240-247	OFF OPEN STROBE FROM SLOW TO FAST OPEN FAST CLOSE SLOW OPEN OPEN FAST OPEN SLOW CLOSE OPEN RANDOM STROBE OPEN

## 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.
- 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.

Innovation, Quality, Performance