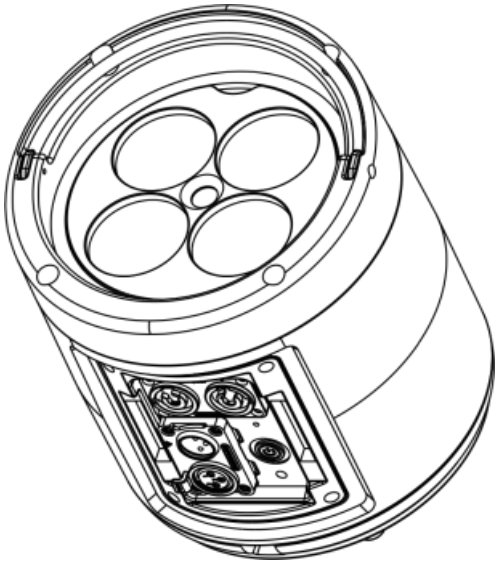
FOS OmniPar IP65



Waterproof & Battery & wireless control (W-DMX)

Instruction Manual

This product manual contains important information about the safe installation and use of this product.Please read and follow these instruction carefully and keep this manual in a safe place for future reference.

1 Understanding of Product

1.1 **Security Warning**

- When unpacking and before disposing of the carton, check if there is any transportation damage before using the product. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.
- Products should be installed in a cool place. Keep away from the wall 50cm.
- Do not install the product or project the beam onto inflammable surfaces. Minimum distance is 5 M

- The product is only intended for installation, operation and maintenance by qualified personnel. And read the user manual and labels on the lighting carefully before using.
- Do not look directly at the lamp light (especially for epilepsy), so as not to cause damage to the eyes.
- Keep the optical system clean. Do not touch the LED lens with bare hands. Do not use any alcohol liquid or any other liquid to clean the optical system. Use medicinal absorbent cotton to clean it.
- Please do not attempt to dismantle and/or modify the product inner structure. Otherwise, would not provide 1 year of free warranty.
- Electrical connection must only be carried out by qualified personnel.
- Before installation, ensure that the voltage and frequency of power supply match the power requirement of the product.
- It is essential that each product is correctly earthed and that electrical installation conforms to all relevant standards.
- Do not connect this device to any other types of dimmer apparatus.
- Make sure that the power-cord is never crimped or damaged by sharp edges.Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug.Never pull out the plug by tugging the power-cord.
- There is no user serviceable parts inside the product, do not open the housing and never operate the product with the cover removed.
- There are protection structure and circuit for the battery inside the unit, any inappropriate dismount of the light or battery might break the protection function and lead to batter getting hot, smoking, deforming or fire.
- Never short-circuit the unit.
- Heating and burning will melt the battery separator, causing loss of protection function or burning of electrolyte and overheat will cause heating, smoking, deformation or burning of batteries.
- Never use the unit in an environment over 40℃, not to charge the unit close to fire source or under direct sun. Even never wet or throw the unit to water, otherwise, the protection function inside the batter might lose or abnormal chemical reaction might arise, causing battery to be hot, smoking, deformation or fire.
- It is dangerous charging not to use the supplied power adapter.
- Never break the light or battery, not to weld the battery or dismount the battery to be used in other equipment, not to touch the leaked battery electrolyte.
- Place the unit where kids can't reach.
- If the charging time over the standard charging time for long, it is advised to stop charging. It will extend the charging time if charging while using, it is advised to turn off the light when charging.
- Never place the unit inside microwave oven or any pressure container, instant heating or leakage (or abnormal smell), the unit should be abandoned and treated properly.
- Not to use the unit in an environment where there is static electricity, the battery protection circuit might easily get broken if the static electricity is over 1000V, causing battery working abnormally, heating, smoking, deforming or fire.
- When using, keep away of hot source, high pressure, avoid kids, never throw or hit the unit.
- Use the supplied power adapter only, never charging over 24 hours.
- When not using the unit for long term, please save the unit properly in a dry place, battery should be half charged.
- Please bury the used unit, never throw to fire or water.

If you have any questions, don't hesitate to consult the dealer.

Important: Before any installation, maintenance and cleaning, please ensure that the power is cut off!

1.2 **Main Technical Parameters**

- **Power**
- Rated input: AC 90-240V, 50/60HZ
- Rated Power:80W (Max)
- Output Voltage: DC16.8V/5A

Lithium battery
- Charging Voltage: DC16.8V/5A
- Battery Specification: 18650 4.2V/3.2Ah*16*cells (16.8V/12.8Ah)
- Charge Time: 4~6 hours
- Circulation Life: Not less than 300 times
- Run Time Of Battery : More than 20hrs (single colour)

LED
- LED Type: 4pcs ×20Watts RGBCAL 6 in 1 LED
- Rated Power: 80W
- Colors: 16.7 million colors (0~100% saturation dimming)
- Life: 50000 hours

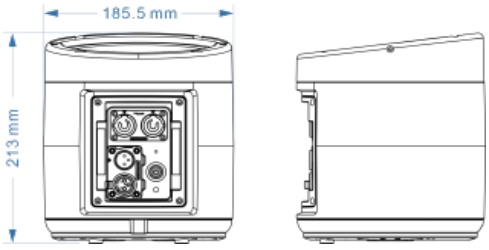
Control
- Control Protocol: International standard DMX-512 signal
- Channel Protocol: 7 kinds of control channel mode. 6CH; 12CH; 10CH; 9CH; 10CH; 15CH; 22CH;
- Control Mode: DMX-512,auto,master-slave,music,infrared remote control,wireless DMX-512

Wireless DMX Specs
- Communication Distance: 300M (open filed, varies by environment)
- Band: 2.402-2.480GHz,ISM,79 channel frequencies.Spread spectrum method: FHSS, 1100 hops per second.
- Modulation method: GFSK
- Maximum Transmit Power: 23dBm
- Receiver Sensitivity: -94dBm
- Wireless Protocol: Supports transmission and reception of W-DMX G3, GZ, and WI-DMX protocols.

Optical System
- Dimming mode: LED means fast Linear dimming. D-RES1~10 stands for soft Non-linear dimming.
- Dimmer: From 0~100 linear dimming.
- Dimming Curve: 4 dimming curves (Linear, Exponential, Logarithmic, S-Curve)
- Refresh rate: 5KHz, 10KHz, 15KHz, 20KHz, 25KHz. 30KHz is optional.
- Strobe: 1~20Hz
- Beam angle: 10°(Other angles with optional Nano diffusion filter)
- Lens: PMMA compound eye secondary optics

Physical
- Dimensions: 185.5x 185.5 x 213 mm
- Weight:6.1kg
- Surface treatment: Aluminum, powder coating
- Housing: Die-casting aluminium, black high temp powder coat
- Colour: Black (custom colors on request)

Security
- Cooling System: Natural Convection
- IP Rating: IP65
- Over temp protection: 65℃
- Operating Environment: Indoor / Outdoor



1.3 **Product Features**

Using the latest LED control technology. The newest intelligent LED pixel tube light can realise intelligent operation and control through its special menu at the back. This product is designed for stage and around event sites and can be used to create stunning lighting effects, it is also an affordable very powerful battery LED tube, A highly creative device that offers an infinite range of possibilities. Its main features include：

1) Product built-in lithium battery and the wireless DMX module.
2) Wireless DMX module can switch between transmit and receive.
3) Dual Power options: removable battery pack or AC mains.
4) Quick adjust bracket for rapid beam angle changes.
5) Snap in Nanometer diffusion filter system for fast beam angle swaps.
6) New 16 bit dimming driver for ultra smooth fade.
7) Up to 30 kHz refresh rate—no flicker on camera.
8) Low voltage protection and over current/ over load safeguards.
9) Intuitive battery level indicator.
10) Auto thermal protection.
11) IR remote control included.
12) Linear Plus 10 non linear dimmer.
13) Four select-able dimming curves.
14) Touch key with 0.96 inch OLED display.
15) Password protected keyboard.
16) 7 DMX channels mode.
17) Master-slave function for wireless synchronisation of multiple units.

1.4 **Product Packing Information**

Following accessories are packed together with the product,please check them carefully upon unpacking.

Spare parts Name	QTY	Unit	Remark
LED PAR light	1	piece	
4 lens Nano diffusion filter Cover	1	piece	
Battery Pack	1	piece	
Instruction Manual	1	piece	
Infrared remote controller	1	piece	
Power cable	1	piece	

2 Product Installation

2.1 **Power Connection Method**

Please connect power as following ：
L（live wire）=brown wire
E（earth wire）=yellow/green double color wire
N（null line）=blue wire
When connecting power, ensure that the voltage and frequency of power supply match the power requirement of the product.
This equipment belong to class 1 protection equipment, therefore, the yellow-green double colors wire must be earthed correctly by qualified personnel. Before installation, ensure that the voltage and frequency of power supply match the power requirements of product. In power supply and voltage fluctuation large areas, we suggest you to use 110V or 230V or use voltage regulator to supply power. After electrical connection, this product will have a few seconds self-check action, self-check finished can be used.

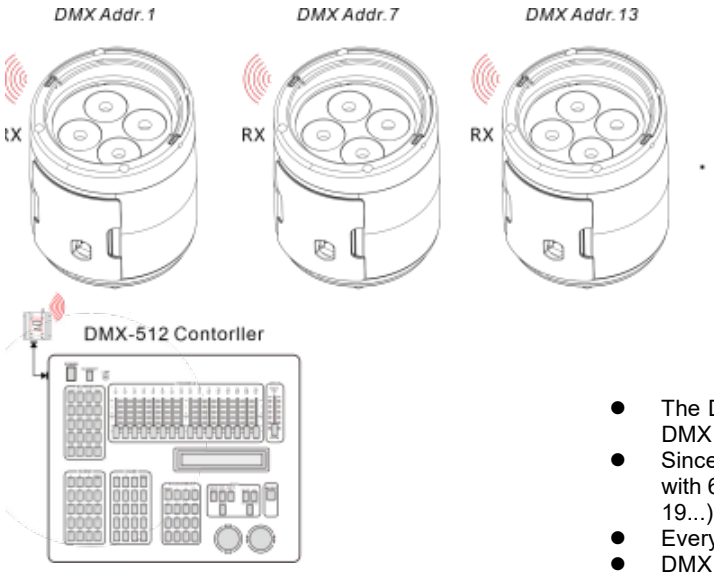
220V: 8 units may be connected in series.
110V: 4 units may be connected in series.

Important: It is essential that Yellow/green double color wire is correctly earthed and that electrical installation conforms to all relevant standards.

2.2 DMX Connection Method

- **As this this fixture's DMX signal cable connection is Parallel connection, please don't more than 15 units. If the signal cable is over 60m between the DMX512 controller and fixture or between two fixtures, then a DMX signal amplifier is needed.**

2.2.1 When set the DMX512 address code be 6CH-D mode.



XLR 3-pin Cable:

Pin#	Function
1	Ground (Screen)
2	Data Minus
3	Data Plus

- The DMX interface of lamp needs be connected to the DMX controller.
- Since 6CH-D MODE has 6 channels, the address code with 6 increment increasing progressively (e.g.,1, 7, 13, 19...).
- Every DMX address code can be reused as needed.
- DMX address code can be any data between 001 to 512.

2.3 Wireless Master-Slave Connection Method

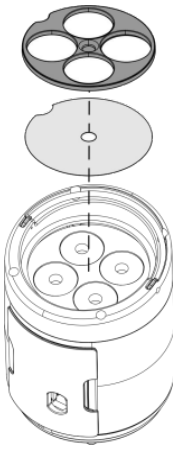
As below:

- ❖ Set the wireless DMX signal of the first light to the sending state (Master), and the wireless DMX signal of other lights to the receiving state (Slave).
- ❖ When the Slave is set to DMX512 control mode, running auto effect or other static colors on the Master to achieve the wireless master-slave synchronization.
- ❖ The DMX address code of the Master and Slave can be any data between 001 and 512 without affecting master-slave online.

2.4 Quick Beam Angle Swap (optional accessory)

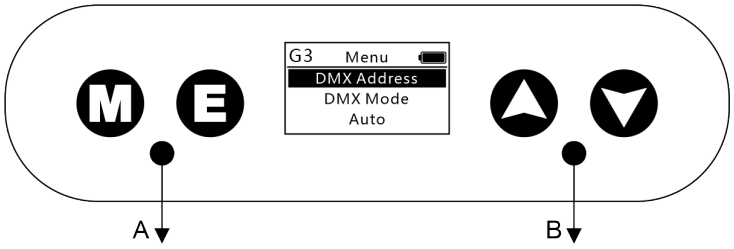
As below:

- Lift the 4 lens cover (magnetic)
- Insert the desired Nanometer diffusion filter
- Reattached cover--beam angle is changed instantly



3 Operation Method

3.1 Back panel functions introduction



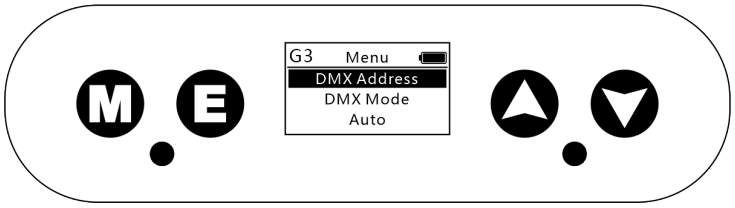
- **M**：Menu button/return button,enter the menu selection interface or previous menu.
- **E**：Confirmation button,used to confirm the selected function.
- ▲/▼：Upward/downward select function or parameter increment / decrement.
- ● A：Wireless DMX operating indicator light.
- ● B：Charger LED: Red= charging, Green= full charged

3.2 2.4G Wireless DMX Connection Method

3.2.1 Working mode

The fixture's 2.4 GHz wireless DMX transceiver uses the **W-DMX G3, GZ, WI-DMX** communications protocol. It supports two operating modes: Transmit mode and
Receive mode.

- 【WIRELESS】for wireless DMX control ON/OFF.
- 【MODE】W-DMX G3 transmit and receive mode settings, GZ. WI-DMX are invalid.



The top left corner of the menu will display the abbreviation of the current wireless protocol mode, which is G3, GZ, and WI.

- 【WAP】W-DMX G3, GZ, WI-DMX wireless communication protocol settings.
- 【CONNECT】means the paired connection of W-DMX G3 wireless DMX module. In the transmitting mode, all the reset receiving mode lights will be paired. The receiving mode of W-DMX G3, GZ and WI-DMX is invalid.
- 【RESET】The W-DMX G3 wireless module's data is reset. In the transmitting mode, it will reset all the paired receiving mode lights. In the W-DMX G3 receiving mode, it will reset the current operating lights pairing. The GZ and WI-DMX receiving modes are invalid.
- 【GROUP】GZ, WI-DMX wireless protocol group settings. GZ has 7 groups, WI-DMX has 6 groups. For W-DMX G3 is invalid.

3.2.2 Description of the status of the wireless protocol operation indicator light

Wireless protocol	Action	Status description
GZ / WI-DMX	Red, green, yellow, blue, purple, cyan, white	Wireless group
	Red flash	Wireless transmitting DMX
	Green flash	Wireless receiving DMX
W-DMX G3 receiving mode	White	Connection is not established
	Red	Deleting the connection
	Red fast flash	Connection is lost
	Green fast flash	Connecting to transmitter
	Green slow flash	Connected. Without DMX signal
	Green	Connected. Receiving DMX signal
W-DMX G3 transmitting mode	Red	Deleting all receivers' connection
	Blue fast flash	Connecting with the Receiver(s)
	Blue slow flash	No DMX signal input
	Blue	Transmitting DMX signal

Note: The wireless transceiver will remember the chosen protocol even after you disconnecting the power supply. There is no need for repeated setting.

3.3 Infrared Remote Controller Instruction

Wireless DMX function button

- ✧ TX: Press to switch to Transmit mode, G3 mode is effective.
- ✧ RX: Press to switch to Receive mode, G3 mode is effective.
- ✧ CONNECT: (In Transmit mode only) press to initiate a wireless link. no effect in Receive mode, G3 mode is effective.
- ✧ RESET: Press to clear/reset the wireless link in either Transmit or Receive mode, G3 mode is effective.

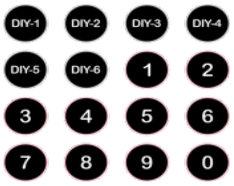
Color Function Buttons

- ✧ These buttons correspond to the Color Macro menu and select the following preset colours:
- ✧ R – Red, G – Green, B – Blue, W – White, C – Cyan, A – Amber, L – Lemon, P – Pink, UV,
- ✧ After pressing colour button, use the **Dimmer** button to adjust its intensity.

Dimming Function Buttons

- ✧ ON: Light On

- ✧ OFF: light off
- ✧ CCT:Enters the CCT menu. Use the UP/DOWN buttons to adjust the parameter, then press ENTER to confirm your selection.



Custom Colour & Numeric Function Buttons

- ✧ DIY / 1–6: Correspond to the “DIY COLOR” menu presets. Use the keys 

to programme custom colour effects; the button logic same to the on-panel controls.
- ✧ Numeric Keys (0–9): Allow rapid entry of numerical parameters. For example, to set the DMX address: press **DMX ADDR** button, then enter the desired address directly using keys 0–9.

Menu Navigation Buttons: Provide on-screen menu control
- ✧ MENU: Opens or returns to the main menu.
- ✧ UP: Scrolls up through menu items.
- ✧ DOWN: Scrolls down through menu items.
- ✧ ENTER: Confirms the selected menu item.

Menu Function button: Provide on-screen menu control
- ✧ Such as AUTO key : Switch to auto mode, press MENU, up, down and ENTER key to select effect, the button logic same to the on-screen menu control

Menu Function button: Provide on-screen menu control
- ✧ Press the DIMMER button to set the brightness and the SPEED button to set the chase or fade speed.
- ✧ can adjust both brightness and speed using the UP/DOWN key or enter exact values directly via the numeric keys (0 – 9).

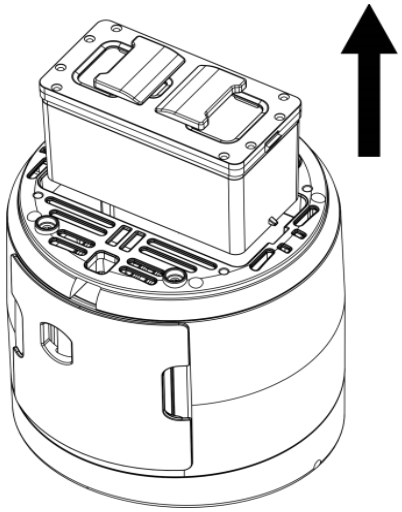
Note: The IR remote controller should be pointed at the IR infrared receiver. Otherwise, the light will not be controlled.

3.4 Power Instruction

3.4.1 Battery Pack Operation

This fixture employs a removable battery-pack design. When the pack’s charge is depleted, the users can quickly swap in a fully charged unit to resume operation.Connector orientation must be observed when changing packs. Do not force the connection.

The internal AC power input also serves as a lithium-battery charger:
Red LED = charging
Green LED = fully charged



3.4.2 AC Power Operation

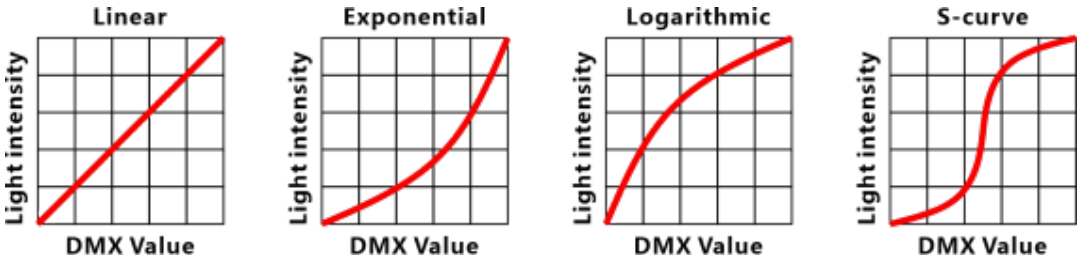
For extended fixed installations, remove the battery pack and connect the unit directly to the AC mains via the power cable.

3.5 Menu Overview

No.	Main menu	Primary-menu	Sub-menu	Function
1	DMX Address	001--512		DMX address setting
	DMX Mode	6CH-RGBCAL		
		12CH 16bit-RGBCAL		
		10CH Color Macro		
		9CH HSI		
		10CH-CCT		
		15CH-RGBW+DIM		
		22CH-RGBW+DIM		
2	Auto	Program1	Dimmer：000-255 Speed：000-100	5 kind of Auto effect settings, each Auto effect can be set brightness and speed. The default DIM=255,Speed=50
		Program2		
		Program3		
		Program4		
		Program5		
3	Color Macro	Red	Dimmer：000-255	Color Macro settings, each macro color can be set brightness.The default DIM=255
		Amber		
		Yellow		
		Green		
		Lemon		
		Cyan		
		Blue		
		Lavender		
		UV		
		Magenta		
		Pink		
		Warm white		
		White		
4	Static	Dimmer	000-255	Static color settings. The default =000
		Strobe	000-255	
		Red	000-255	
		Green	000-255	
		Blue	000-255	
		Cyan	000-255	
		Amber	000-255	
		Lemon	000-255	
5	DIY Color	DIY Color 1	Dimmer： 000-255 Strobe： 000-255 Red ： 000-255	Custom static color settings, restore factory settings will be invalid
		DIY Color 2		
		DIY Color 3		
		DIY Color 4		

		DIY Color 5	Green： 000-255 Blue： 000-255 Cyan： 000-255 Amber： 000-255 Lemon： 000-255	
		DIY Color 6		
6	CCT	Dimmer	000-255	
		CCT	2500~10000K	Colour temperature adjusts in increments of 100K.
		G/M:	1.00M--1.00G	-1.00--1.00
7	Wireless DMX	Wireless	OFF/ON	
		Mode	Receive/Transmit	G3 mode is effective
		WAP	G3 / GZ / WI	Wireless protocols
		Connect	NO/YES	Connect all slave devices , G3 mode is effective
		Reset	NO/YES	Delete the all connected slave devices, G3 mode is effective
		Group	Group 0~6	GZ / WI wireless groups settings
8	Setting	Display Reverse	ON/OFF	Display orientation settings
		DMX Fail	Hold	Hold the last DMX setting
			Blackout	Output off
		Curve (Dimmer curve)	Linear	
			Exponential	
			Logarithmic	
			S-curve	
		D-RES (Dimmer response)	LED（0ms）	Light responds abruptly to changes in DMX value
			D-RES 1（1000ms）	Light behaves like a halogen spotlight with slight brightness changes
			D-RES 2（2000ms）	
			D-RES 3（3000ms）	
			D-RES 4（4000ms）	
			D-RES 5（5000ms）	
			D-RES 6（6000ms）	
			D-RES 7（7000ms）	
			D-RES 8（8000ms）	
			D-RES 9（9000ms）	
			D-RES 10（10000ms）	
		PWM Fre (PWM Frequency)	5K Hz/ 10K Hz/ 15K Hz/ 20K Hz/ 25K Hz/ 30K Hz	Configuration of LED PWM frequency
		Fan	Auto	NO FUNCTION
			Quiet	
			Studio	
			Live	
		Auto lock	NO / YES	
		Upload data	NO / YES	
		Reset	NO / YES	
9	System Info	Ver	MA6-V1.0	Version number
		Hours	xxHxxMxxS	Operation hours
		Temperature	xx °C	

3.5.1 DMX Curve



- Press【UP/DOWN】 to select【Setting】menu and press【ENTER】to enter system settings menu.
- Press【UP/DOWN】button to select 【Curve】menu and press【ENTER】to enter dimming curve setting.
- Press【UP/DOWN】button to select 【Linear】,【Exponential-1】,【Exponential-2】or【S-Curve】4kinds of dimming curve.
- Press【ENTER】to confirm and the selected will be automatically saved.

3.5.2 Dimmer Response

- Press【UP/DOWN】 to select【Setting】menu and press【ENTER】to enter system settings menu.
- Press【UP/DOWN】button to select 【D-RES】menu and press【ENTER】to enter dimming mode setting.

  LED: The light fixture responds quickly to DMX values, and the brightness changes instantaneously without fine brightness changes.

  D-RES/1~ 10: The brightness change is similar to Tungsten effect, the brightness change is relatively smooth, and the delay time is 1 to 10 second.
- Press【UP/DOWN】button to select dimming mode and press【ENTER】to confirm and the selected will be automatically saved.

3.5.3 Factory Resetting (Factory set)

- Press【UP/DOWN】 to select【Setting】menu and press【ENTER】to enter system settings menu.
- Press【UP/DOWN】button to select 【Reset】menu and press【ENTER】to enter and select YES/NO.

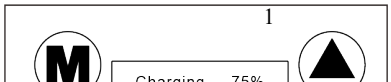
Restore factory settings parameters（Factory Reset):

1, DMX Address=001	11,SPEED=50
2, DMX Mode=Mode 6: 15CH-RGBCAL+DIM	12, Dimmer Curve=Linear
3, Auto=Program1	13, Auto lock=OFF
4, Color Macro=Red	14, PWM Frequency=20KHz
5, Static=000	15, Fan=Auto
6, User Color	16, Mirror Pixel=OFF
7, Display Reverse=OFF	17, D-RES=LED
8, DMX Fail=Blackout	18, CCT=2500K
9, Dimmer：=255	19, G/M=0.00
10, STROBE=000	

3.5.4 Menu Lock Function (Auto Lock)

- From【Set】menu to find【Auto Lock】menu.
- Press【ENTER】button to enter select 【YES/ON】.
- When the menu locked, press and hold button【MENU】 , the screen will display a countdown of 5/4/3/2/1, it will unlock successfully.

3.5.5 Charging Display



Note: when charging, the display will show the charging interface. To operate the fixture while charging, press 【MENU】button, then you may control and run the fixture as normal.

4 Control Channel

4.1 DMX Channel Table

4.1.1---6CH-RGBCAL, 8 bit resolution per function:

Channel	Control function	Detail description	DMX Data
1	Red	0~ 100%	0~255
2	Green	0~ 100%	0~255
3	Blue	0~ 100%	0~255
4	Cyan	0~ 100%	0~255
5	Amber	0~ 100%	0~255
6	Lemon	0~ 100%	0~255

4.1.2----12CH-RGBCAL, 16 bit resolution per function:

Channel		Control function	Detail description	DMX Data
1	2	Red	0~ 100%	0~65535
3	4	Green	0~ 100%	0~65535
5	6	Blue	0~ 100%	0~65535
7	8	Cyan	0~ 100%	0~65535
9	10	Amber	0~ 100%	0~65535
11	12	Lemon	0~ 100%	0~65535

4.1.3----10CH-Color Macro, 8 bit resolution per function:

Channel	Control function	Detail description	DMX Data
1	DIMMER	0~ 100%	0~255
2	Red	0~ 100%	0~255
3	Green	0~ 100%	0~255
4	Blue	0~ 100%	0~255
5	Cyan	0~ 100%	0~255
6	Amber	0~ 100%	0~255
7	Lemon	0~ 100%	0~255
8	Color Macro	The control function is shown in Sheet 1	0~255
9	Speed	Only for AUTO effect	From low to fast
10	Strobe	NO FUNCTION	0~ 10
		Strobe from 100~0%	11~33
		Strobe from 0~ 100%	34~56
		Fade strobe	57~79
		1 flash / s → 20 flashes / s	80~255

4.1.4----9CH-HSI, 8 bit resolution per function:

Channel	Control function	Detail description	DMX Data
1	DIMMER	0~ 100%	0~255
2	Hue	0~ 100%	0~255
3	Saturation	0~ 100%	0~255
4	CCT	NO FUNCTION	0~004
		The control function is shown in Sheet 3	5~255
5	G/M	NO FUNCTION	000~054
		G/M Adjustment	055~255
6	Strobe	NO FUNCTION	0~ 10
		Strobe from 100~0%	11~33
		Strobe from 0~ 100%	34~56
		Fade strobe	57~79
		1 flash / s → 20 flashes / s	80~255
7	POWER	NO FUNCTION	0~49
		100% POWER	50~99
		50% POWER	100~149
		NO FUNCTION	150~255
8	Dimmer curve	NO FUNCTION	000~005
		Linear Dimmer Curve	006~063
		Exponential Dimmer Curve	064~127
		Logarithmic Dimmer Curve	128~191
		S-Curve Dimmer Curve	192~255
9	Device Settings	The control function is shown in Sheet2	0~255

4.1.5----10CH-CCT, 8 bit resolution per function:

Channel	Control function	Detail description	DMX Data
1	DIMMER	0~ 100%	0~255
2	Red	0~ 100%	0~255
3	Green	0~ 100%	0~255
4	Blue	0~ 100%	0~255
5	Cyan	0~ 100%	0~255
6	Amber	0~ 100%	0~255
7	Lemon	0~ 100%	0~255
8	CCT	NO FUNCTION	0~004
		The control function is shown in Sheet 3	5~255
9	G/M	NO FUNCTION	000~054
		G/M Adjustment	055~255
10	Strobe	NO FUNCTION	0~ 10
		Strobe from 100~0%	11~33
		Strobe from 0~ 100%	34~56
		Fade strobe	57~79
		1 flash / s → 20 flashes / s	80~255

4.1.6----15CH-RGBCAL+DIM, 8 bit resolution per function:

Channel	Control function	Detail description	DMX Data
1	Dimmer	0~100%	0~255
2	Strobe	NO FUNCTION	0~10
		Strobe from 100~0%	11~33
		Strobe from 0~ 100%	34~56
		Fade strobe	57~79
		1 flash / s → 20 flashes / s	80~255
3	Red	0~100%	0~255
4	Green	0~100%	0~255
5	Blue	0~100%	0~255
6	Cyan	0~100%	0~255
7	Amber	0~100%	0~255
8	Lemon	0~100%	0~255
9	Color Macro	The control function is shown in Sheet 1	0~255
10	Speed	Only for AUTO effect	From low to fast
11	CCT	NO FUNCTION	0~004
		The control function is shown in Sheet 3	5~255
12	G/M	NO FUNCTION	000~054
		G/M Adjustment	055~255
13	POWER	NO FUNCTION	0~49
		100% POWER	50~99
		50% POWER	100~149
		NO FUNCTION	150~255
14	Dimmer curve	NO FUNCTION	000~005
		Linear Dimmer Curve	006~063
		Exponential Dimmer Curve	064~127
		Logarithmic Dimmer Curve	128~191
		S-Curve Dimmer Curve	192~255
15	Device Settings	The control function is shown in Sheet2	0~255

4.1.7: 22CH-RGBW+DIM, 16 bit resolution per function:

Channel	Control function	Detail description	DMX Data
1	Dimmer	0~100%	0~255
2	Dimmer 16bit	0~100%	0~255
3	Strobe	NO FUNCTION	0~10
		Strobe from 100~0%	11~33
		Strobe from 0~ 100%	34~56
		Fade strobe	57~79
		1 flash / s → 20 flashes / s	80~255
4	Red	0~100%	0~255
5	Red 16bit	0~100%	0~255
6	Green	0~100%	0~255
7	Green 16bit	0~100%	0~255

8	Blue	0~100%	0~255
9	Blue 16bit	0~100%	0~255
10	Cyan	0~100%	0~255
11	Cyan 16bit	0~100%	0~255
12	Amber	0~100%	0~255
13	Amber 16bit	0~100%	0~255
14	Lemon	0~100%	0~255
15	Lemon 16bit	0~100%	0~255
16	Color Macro	The control function is shown in Sheet 1	0~255
17	Speed	Only for AUTO effect	From low to fast
18	CCT	NO FUNCTION	0~004
		The control function is shown in Sheet 3	5~255
19	G/M	NO FUNCTION	000~054
		G/M Adjustment	055~255
20	POWER	NO FUNCTION	0~49
		100% POWER	50~99
		50% POWER	100~149
		NO FUNCTION	150~255
21	Dimmer curve	no function	000~005
		Linear Dimmer Curve	006~063
		Exponential Dimmer Curve	064~127
		Logarithmic Dimmer Curve	128~191
		S-Curve Dimmer Curve	192~255
22	Device Settings	The control function is shown in Sheet2	0~255

Sheet1：Color Macro（Color Macro function channel）

Channel	Control function	Detail description	DMX Data
1	Color Macro	Color off	0~8
		Red	9~17
		Amber	18~26
		Yellow	27-35
		Green	36-44
		Lemon	45-53
		Cyan	54-62
		Blue	63-71
		Lavender	72-80
		UV	81-89
		Magenta	90-98
		Pink	99-107
		Warm white	108-116
		White	117-125
		Color 1	126~135

	DIY Color	Color 2	136~145
		Color 3	146~155
		Color 4	156~165
		Color 5	166~175
		Color 6	176~185
	AUTO	Program1	186~199
		Program2	200~213
		Program3	214~227
		Program4	228~241
		Program5	242~255

Sheet 2：Device Settings (Device function settings channel)

Channel	Control function	Detail description	DMX Data
1	Device Settings	no function	0~105
		Dimmer Response LED (hold 1,5s)	106~115
		D-RES 1（1000ms）	116~118
		D-RES 2（2000ms）	119~121
		D-RES 3（3000ms）	122~124
		D-RES 4（4000ms）	125~127
		D-RES 5（5000ms）	128~130
		D-RES 6（6000ms）	131~133
		D-RES 7（7000ms）	134~136
		D-RES 8（8000ms）	137~139
		D-RES 9（9000ms）	140~142
		D-RES 10（10000ms）	143~145
		LED Frequency 2.5HHz	146~165
		LED Frequency 5KHz	166~185
		LED Frequency 10KHz	186~205
		LED Frequency 15KHz	206~225
		LED Frequency 20KkHz	226~245
		LED Frequency 25KHz	245~255

Sheet 3：CCT color temperature channel value

CCT	DMX Data	CCT	DMX Data
2500	5~7	6300	119~121
2600	8~10	6400	122~124
2700	11~13	6500	125~127
2800	14~16	6600	128~130
2900	17~19	6700	131~133
3000	20~22	6800	134~136
3100	23~25	6900	137~139
3200	26~28	7000	140~142
3300	29~31	7100	143~145
3400	32~34	7200	146~148
3500	35~37	7300	149~151
3600	38~40	7400	152~154
3700	41~43	7500	155~157
3800	44~46	7600	158~160
3900	47~49	7700	161~163

4000	50~52	7800	164~166
4100	53~55	7900	167~169
4200	56~58	8000	170~172
4300	59~61	8100	173~175
4400	62~64	8200	176~178
4500	65~67	8300	179~181
4600	68~70	8400	182~184
4700	71~73	8500	185~187
4800	74~76	8600	188~190
4900	77~79	8700	191~193
5000	80~82	8800	194~196
5100	83~85	8900	197~199
5200	86~88	9000	200~202
5300	89~91	9100	203~205
5400	92~94	9200	206~208
5500	95~97	9300	209~211
5600	98~100	9400	212~214
5700	101~103	9500	215~217
5800	104~106	9600	218~220
5900	107~109	9700	221~223
6000	110~112	9800	224~226
6100	113~115	9900	227~229
6200	116~118	10000	230~255

5 Maintenance

5.1 Product Maintenance

To prolong the life of the product,it is very important to do maintenance work. The environment is hash outdoors, or if the product is idle for a long time, damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on its LED lens cover, fan vents and housing. So it should be cleaned to maintain an optimum light output and at the same time to prevent it from corrupted by acid gas.

Cleaning frequency depends on the environment in which the fixture operates.Soft cloth and typical glass cleaning products should be used for cleaning.It is recommended to clean product at least one every 20 days.

Friendly notice: Please do not use any organic solvent, e.g. alcohol to clean the housing of the apparatus, lest cause damage.

5.2 Troubleshooting

Problems	Action
The product doesn't switch on	Power connection is not correct--Re-connect it.
	Power supply is damaged or abnormal. Call a qualified personnel to fix it.
	Control section is damaged. Call a qualified personnel to fix it.
	Connection of internal circuitry is not correct. Call a qualified personnel to fix it.
The product can turn on,but LEDs do not emit light and are out of control	DMX address is wrongly setting up. Resetting it according to instruction book.
	DMX Signal wrongly connected. Connect it correctly according to instruction book.
	Control section is damaged. Call a qualified personnel to fix it.
The beam appears dim	The product is too hot.Take ventilation measures to make it cool.

Remark: This product warranty for one year. We provide pay-needed maintenance service after the warranty. But because of natural and man-made disasters or improper operation caused damage not under warranty range.