

The Instruction

LED Matrix Lights

- LC-01
- LC-02
- LC-04
- LC-09
- LC-12V/H

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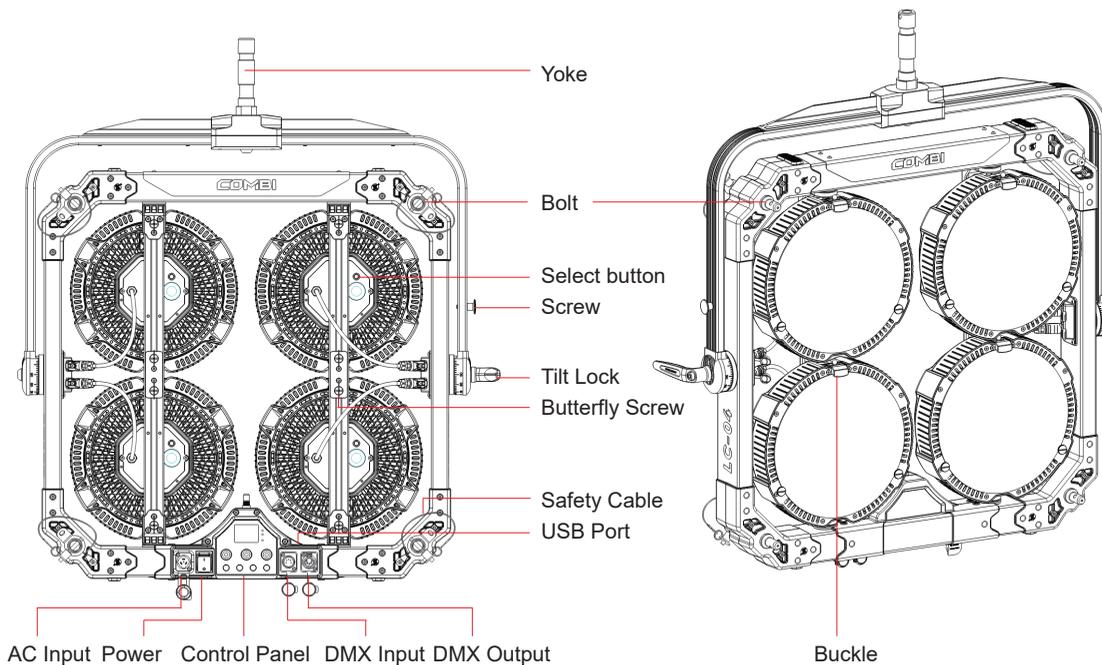
Instructions

- 01) Please check product integrity before using. If not, please contact with your sellers or Sunnyxiao immediately.
- 02) We recommended only technicians could install, operate and maintain the LED lighting fixture according to the instructions.
- 03) Please using the correct power supply according to the power specifications.
- 04) Do not cover the fixture or plug the vent. It is necessary to clean the fan frequently and keep the vent away from dust, dirt or obstacles.
- 05) Do not look directly at the light source to avoid harm to the eyes.
- 06) Only qualified technicians are allowed to repair and assemble the components of the LED lighting fixture.
- 07) Make sure that the fixture is properly secured in the appropriate frame. When hanging or clamping, the fixture must be correctly fixed with safety cables and buckled with appropriate length.
- 08) Always unplug the lighting fixture from the electrical outlet before maintenance. Do not disassemble this fixture when in use.
- 09) The optimum working angle of the lighting fixture is + 90 ° to 0 to - 90 °. Do not tilt beyond these angles, otherwise the LED lamps will suffer damage.
- 10) Do not touch the surface of the LED light source.
- 11) The manufacturer shall not be responsible for any damage caused by accidental use or wrong operation.
- 12) For any assistance, please contact your local dealer or Sunnyxiao.
- 13) Further notice will not be given if the design or specifications change.



Note: Please cut off the power supply before installation, maintenance and cleaning.

Product Structure



Control Panel Operation Instructions (1)



No.	Features	Indication
①	Display Screen	Display the current menu settings and other information
②	Power Indicator	Light stays on when power is connected
③	Communication Indicator	Flashing when receiving communication signal
④	Photosensitive Hole	Screen adaptive brightness adjustment
⑤	CCT/Hue	CCT mode: continuous adjustment, 2700-10000K HSI mode: full range hue adjustment, 0°-359° X.Y mode: X coordinate adjustment, 0.2000-0.8000 Effect mode: speed adjustment, 0-100

No.	Features	Indication
⑥	GM/Sat	CCT mode: green/Red adjustment, -100 to +100 HSI mode: saturation adjustment, 0%-100% GEL mode: continuous adjustment of color temperature, 2 basic modes: 3200K and 5600K RGBW mode: switch different options X.Y mode: Y coordinate adjustment, 0.2000-0.8000 Effect mode: switch type/ different parameters adjustment
⑦	INT/Select	Under main menu, twist INT/Select button to switch from different options. Press the INT/Select button to confirm and enter next-level interface. CCT mode & HSI mode: brightness adjustment, 0.0%-100.0% GEL mode: switch and confirm different mode; press the INT/Select button to adjust the brightness, 0.0%-100.0% RGBW mode: different parameters adjustment X.Y mode: brightness adjustment, 0.0%-100.0% Effect mode: different parameters adjustment Lock/unlock usage: Hold the INT/Select button for 3 seconds to lock all buttons and keys. Hold the INT wheel 3 seconds again to unlock all buttons and keys.
⑧	Mode Button	Quick selection for CCT, HSI, GEL and EFFECT
⑨	Back / Menu button	Return to previous page or main menu: The main menu is including CCT, HSI, GEL, RGBW, X.Y, EFFECT, Communication and Setting

Control Panel Operation Instructions (2)

Control Panel Setting

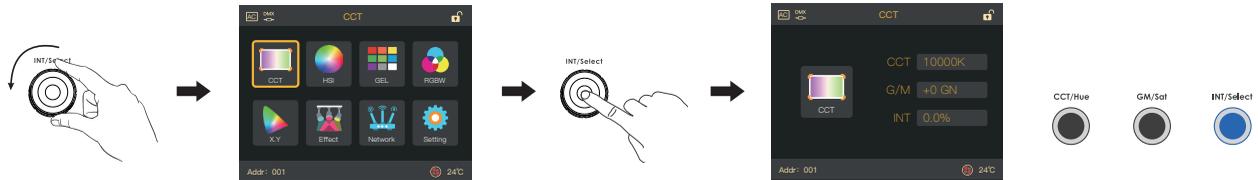
Press "Back/Menu" to enter the menu.



Menu > CCT:

Option 1: Shortcut key "CCT";

Option 2: Switch and press the INT/Select to choose CCT.



Color Temperature Adjustment: twist the CCT/Hue button to adjust CCT from 2700K to 10000K; shortly press the CCT/Hue to quickly switch the color temperature to 2700K/3200K/4300K/5600K/6200K.

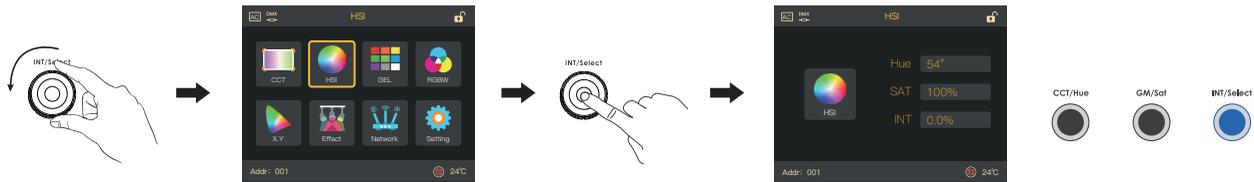
Green-Magenta-Adjustment: twist the GM/Sat button to adjust from -100 to +100.

Intensity: twist INT/Select button to adjust from 0.0% to 100.0%; Shortly press the button to quickly switch intensity to 0.0%/25.0%/50.0%/100%.

Menu>HSI

Option 1: Shortcut key "HSI";

Option 2: Twist INT/Select button HSI and press it.



Hue: switch the CCT/Hue button to adjust Hue from 0° to 359°; shortly press CCT/Hue button to switch Hue among 0°/60°/120°/180°/240°/300°.

Saturation: twist the GM/Sat button to adjust saturation from 0% to 100%.

Intensity: twist INT/Select button to adjust brightness from 0.0% to 100.0%.

Menu > GEL

Twist "INT/Select" button to GEL option, and press to confirm.



R series:120 options
L series:195 options

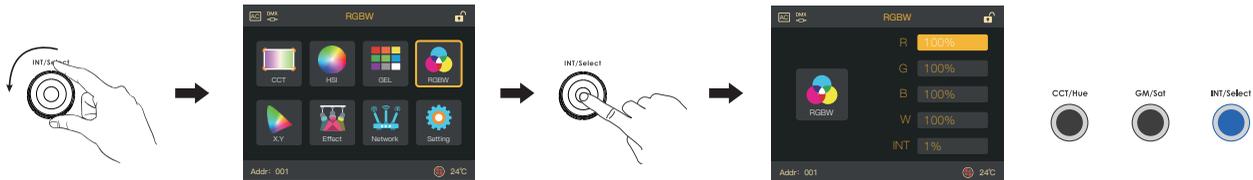


Color Temperature Adjustment: twist GM/Sat button to switch between color temperatures 3200K/5600K.

Intensity: twist INT/Select button to adjust brightness, ranging from 0.0% to 100.0%; Shortly press INT/Select to quickly switch light intensity among 0.0%/25.0%/50.0%/100%.

Menu>RGBW

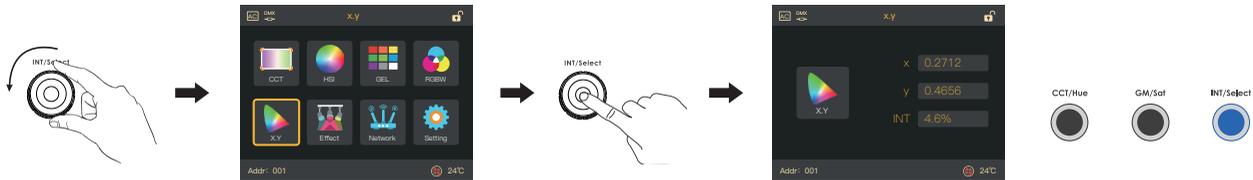
Twist INT/Select button to RGBW, and press to confirm.



Twist GM/Sat button to switch different options,Red/Green/Blue/White/Intensity.
Twist INT/Select to adjust parameters.

Menu>X.Y

Twist INT/Select button to X.Y mode, and press to confirm.

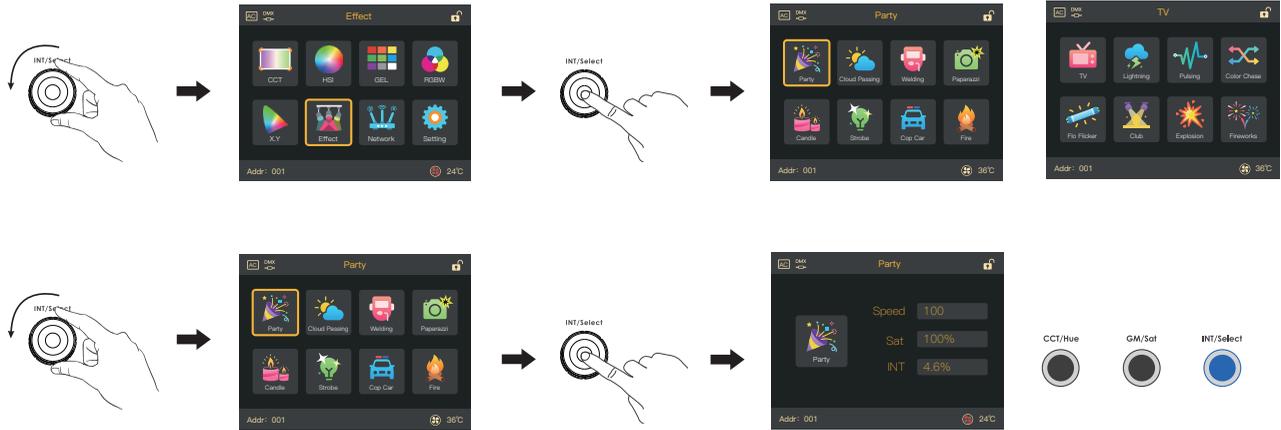


Twist CCT/Hue button to adjust the X-coordinate, ranging from 0.2000 to 0.8000.
Twist GM/Sat button to adjust the Y-coordinate, ranging from 0.2000 to 0.8000.
Twist INT/Select button to adjust brightness, ranging from 0.0% to 100.0%.

Menu > EFFECT

Option 1: Shortcut key "EFFECT".

Option 2: twist INT/Select button to EFFECT, and press to confirm.



Twist INT/Select button to switch from different lighting effects, including Party, Cloud Passing, Wedding, Paparazzi, Candle, Strobe, Cop Car, Fire, TV, Lightning, Pulsing, Color Chase, Flo Flicker, Club, Explosion, Fireworks.

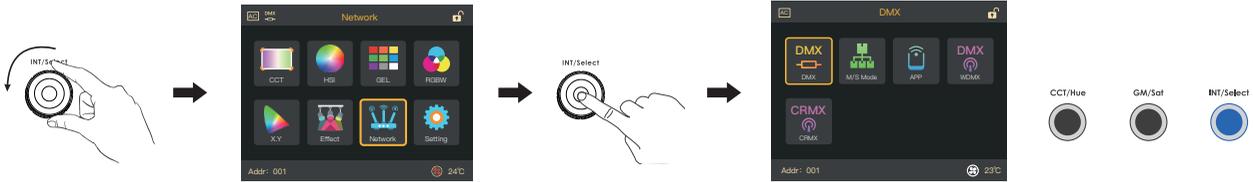
Speed: twist the CCT/Hue button to adjust from 1 to 100.

Saturation: Twist GM/Sat to adjust saturation, ranging from 0% to 100%.

Intensity: Twist INT/Select button to adjust brightness, ranging from 0.0% to 100.0%.

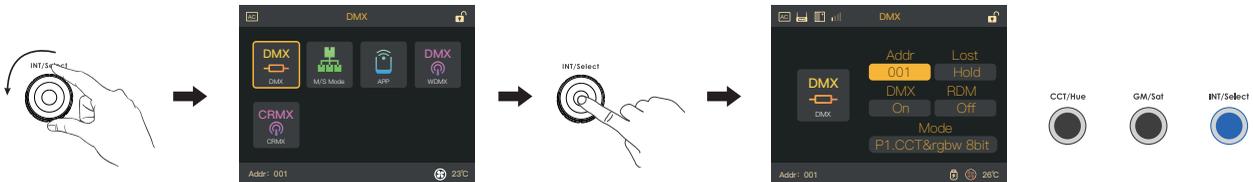
Menu>Network

Twist INT/Select button to Network, and press to confirm.



DMX Setting

Twist INT/Select button to DMX, and press to confirm.



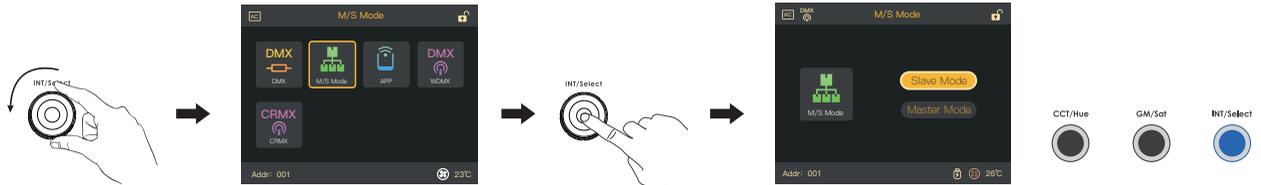
Twist GM/Sat button to switch from different options, and twist INT/Select button to adjust parameters.

Address: 001-512; Lost status: Hold/Delay DMX status: On/Off; RDM status: On/Off;

Mode (19 kinds):P1.CCT&rgbw 8bit/P2.CCT 8bit/P3.CCT&HSI 8bit/P4.rgbw 8bit/P5.HSI 8bit/P6.CCT&rgbw 16bit/P7.CCT 16bit/P8.CCT&HSI 16bit/P9.rgbw 16bit/P10.HSI 16bit/P16.GEL V2 8bit/P17.GEL V2 16bit/P18.x.y 8bit/P19.x.y 16bit/P22.Effect 8bit/P23.Effect 16bit/P24.LE CCT&RGBW 8bit/P26.LE HSI 8bit/P30.Ultimate DMX 8bit.

M/S Mode

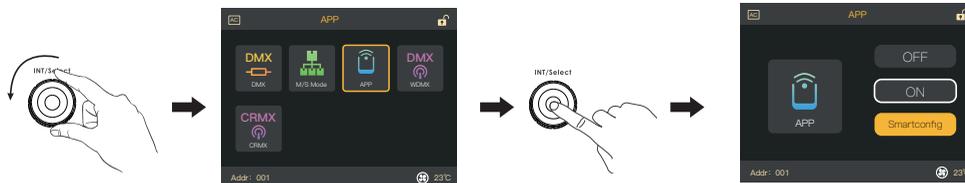
Twist INT/Select button to M/S mode, and press to confirm.



Then twist INT/Select button to switch from Slave mode and Master mode; shortly press INT/Select button to confirm.

APP Setting

Twist INT/Select button to "APP", press INT/Select to confirm, then enter the setting interface.

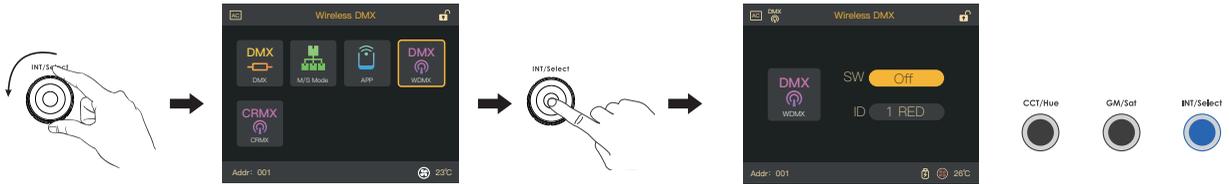


Twist INT/Select button to switch among ON/OFF/Smartconfig, shortly press INT/Select button to confirm your choice; Choose Smartconfig to reset the router.

Done with setting, press MENU to return to the previous screen.

Wireless DMX

Twist INT/Select button to WDMX, and press INT/Select to confirm.



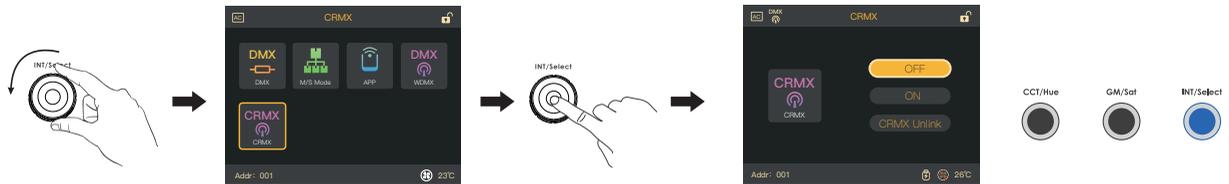
ON/OFF: Twist INT/Select button to “SW”, twist GM/Sat button to switch DMX on or off.

ID: Twist INT/Select button to “ID”, twist GM/Sat button to switch among 1 RED/2 GREEN/3 YELLOW/4 BLUE/5 PURPLE/6 CYAN/7 WHITE.

Done with setting, press MENU to return to the previous screen.

CRMX

Twist INT/Select button to CRMX, press INT/Select to confirm.

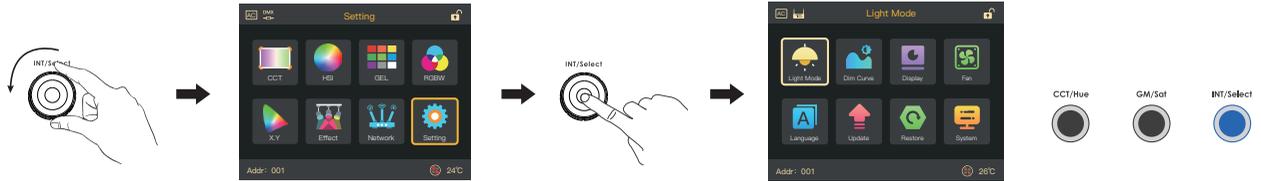


Twist INT/Select to CRMX, shortly press INT/Select to confirm; Choose CRMX UNLINK remove the original pairing, then choose “ON” to re-pair.

Done with setting, press MENU to return to the previous screen.

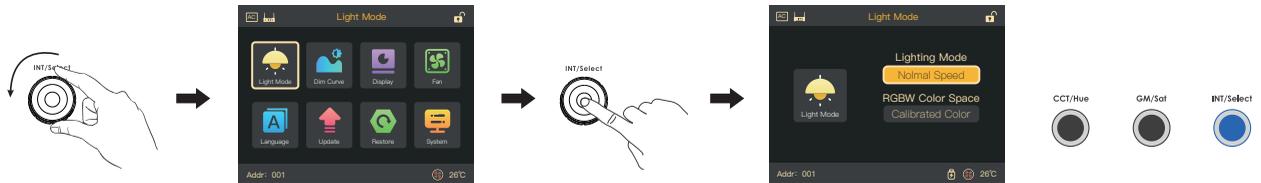
Menu>Setting:

Twist INT/Select to Setting, and press to confirm.



Setting>Lighting mode

Twist INT/Select to Lighting Mode and press to confirm.



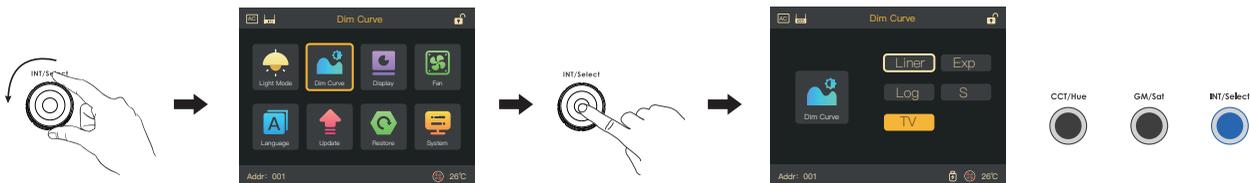
Twist GM/Sat to switch from different options, and twist INT/Select to adjust parameters, the press to confirm.

Lighting Mode options: Lighting modes: Normal/High Speed;

RGBW Color Space: Direct Control/Calibrated Color.

Setting > Dim Curve

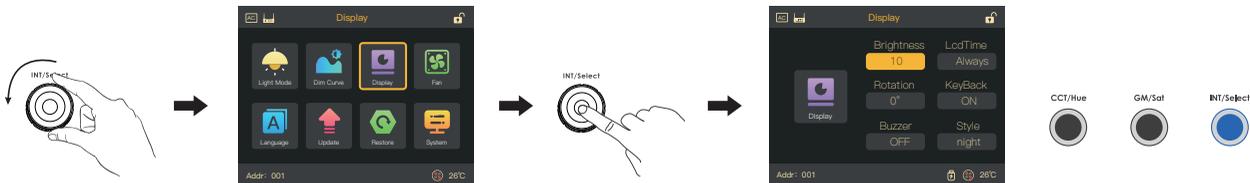
Twist INT/Select to Dim Curve, and press to confirm.



Twist INT/Select to switch from different options, and press INT/Select to confirm.

Setting > Display

Twist INT/Select button to Display, and press to confirm.



Twist GM/Sat button to switch among different options, and twist INT/Select to adjust parameters, then press to confirm.

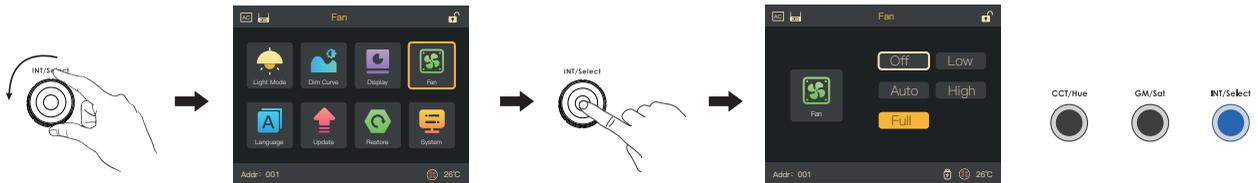
Display brightness: 1-10; Display locked time: Always/10Sec/20Sec/30Sec/40Sec/50Sec/60Sec;

Display rotation: 0°/180° Key backlight: on/off;

Buzzer warning: on/off Style: night/day.

Setting > Fan

Twist INT/Select button to Fan, and press to confirm.



Twist INT/Select button to switch among different options: OFF, close the fan

Low, Fan rotates at low speed

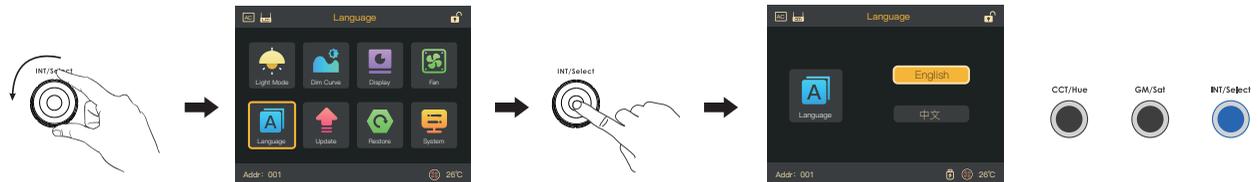
Auto, Fan rotates by auto speed

High, Fan rotates at high speed

Full, Fan rotates at full speed

Setting > Language

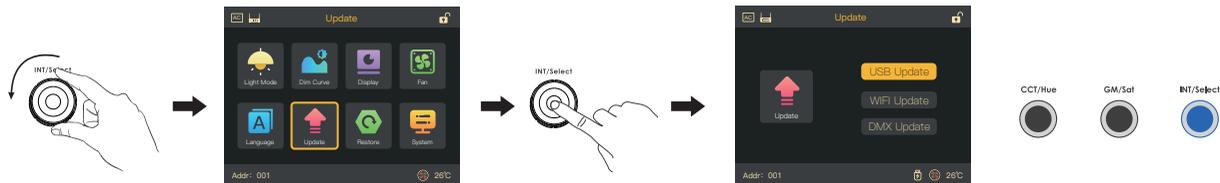
Twist INT/Select button to Language, and press it to confirm.



Twist INT/Select button to "English/中文", shortly press INT/Select to confirm.

Setting > Upgrade

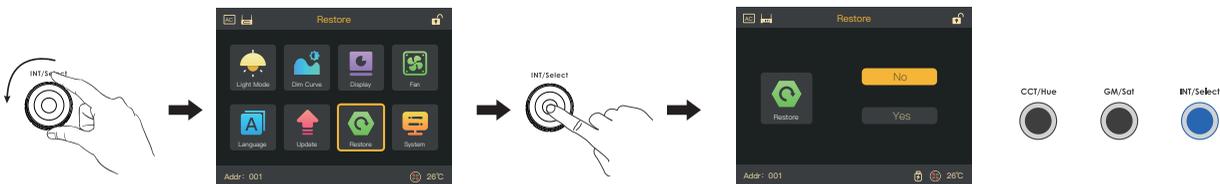
Twist INT/Select button to Upgrade, and press it to confirm.



Twist INT/Select button to choose system upgrading methods: USB drive/ WIFI/ DMX, shortly press INT/Select to confirm. By USB upgrade, please remember to download the latest firmware first.

Setting > Restore

Twist INT/Select to Restore, and press INT/Select to confirm.



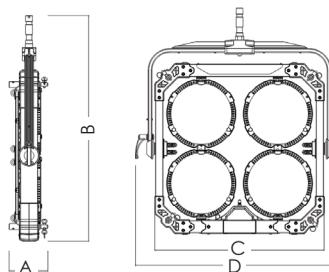
Twist INT/Select to switch from No/Yes, shortly press INT/Select to confirm.

Note: Confirming Restore will clear user data, please proceed with caution!

DMX mode

8 bit 1 channel per function	16 bit 2 channels per function
DMX mode 1 CCT&rgbw	DMX mode 6 CCT&rgbw
DMX mode 2 CCT	DMX mode 7 CCT
DMX mode 3 CCT&HSI	DMX mode 8 CCT&HSI
DMX mode 4 rgbw	DMX mode 9 rgbw
DMX mode 5 HSI	DMX mode 10 HSI
DMX mode 16 GEL V2	DMX mode 17 GEL V2
DMX mode 18 x.y	DMX mode 19 x.y
DMX mode 22 Effect	DMX mode 23 Effect
DMX mode 24 LE CCT & rgbw	
DMX mode 26 LE HSI	
DMX mode 30 Ultimate DMX	

Technical Data

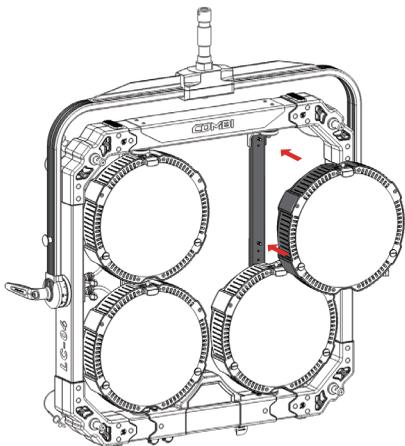


Model No.	LC-01	LC-02	LC-04	
Max. Power	160W	320W	640W	
Input Voltage	22-36V DC	95-265V AC	95-265V AC	
Input Current	6.7A@24V DC	1.5A@220V AC	3.0A@220V AC	
CCT	2700K-10000K	2700K-10000K	2700K-10000K	
Led Mixing	RGBW Mixing	RGBW Mixing	RGBW Mixing	
CRI	>95	>95	>95	
TLCI	>97	>97	>97	
Dimming Range	0-100% continuous	0-100% continuous	0-100% continuous	
Dimming modes	Linear/S-curve/Exponential/Logarithmic/TV	Linear/S-curve/Exponential/Logarithmic/TV	Linear/S-curve/Exponential/Logarithmic/TV	
Control	CRMX, APP, wired DMX, wireless DMX	CRMX, APP, wired DMX, wireless DMX	CRMX, APP, wired DMX, wireless DMX	
Tilt angle	360° overall rotation, light head can rotate 24° left and right	360° overall rotation, light head can rotate 24° left and right	360° overall rotation, light head can rotate 24° left and right	
IP rating	IP54	IP54	IP54	
Weight	5kg	15.5kg	24.5kg	
Dimensions (mm)	A	150	156	156
	B	500	650	930
	C	310	700	700
	D	375	810	810

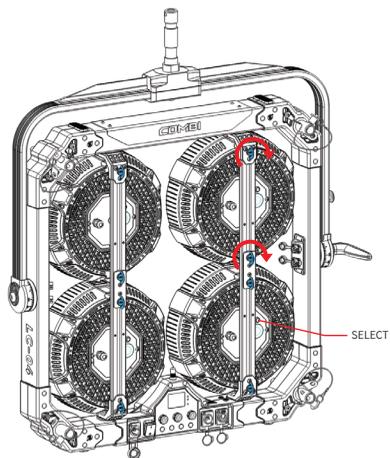
Model No.	LC-09	LC-12H	LC-12V
Max. Power	1440W	1920W	1920W
Input Voltage	95-265V AC	95-265V AC	95-265V AC
Input Current	6.6A@220V AC	8.7A@220V AC	8.7A@220V AC
CCT	2700K-10000K	2700K-10000K	2700K-10000K
Led Mixing	RGBW Mixing	RGBW Mixing	RGBW Mixing
CRI	>95	>95	>95
TLCI	>97	>97	>97
Dimming Range	0-100% continuous	0-100% continuous	0-100% continuous
Dimming modes	Linear/S-curve/Exponential/ Logarithmic/TV	Linear/S-curve/Exponential/ Logarithmic/TV	Linear/S-curve/Exponential/ Logarithmic/TV
Control	CRMX, APP, wired DMX, wireless DMX	CRMX, APP, wired DMX, wireless DMX	CRMX, APP, wired DMX, wireless DMX
Tilt angle	360° overall rotation, light head can rotate 24° left and right	360° overall rotation, light head can rotate 24° left and right	360° overall rotation, light head can rotate 24° left and right
IP rating	IP54	IP54	IP54
Weight	50.7kg	65kg	64kg
Dimensions (mm)	A	200	200
	B	1250	1250
	C	1010	1380
	D	1270	1540

Installation - Lamp Head

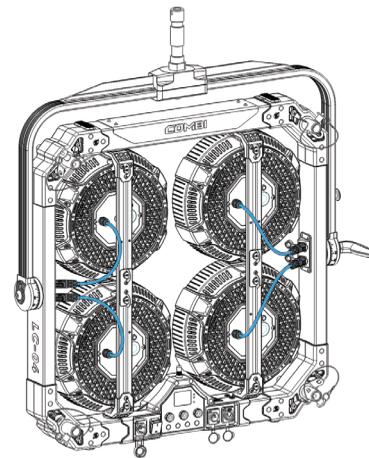
1. Align the bottom holes of the lamp heads with the connecting rod bolts on the frame.



2. Tighten the butterfly screws clockwise to secure the lamp heads.



3. Connect the wires.



Lamp Head Address

1. Turn on the light, long press the SELECT button for 5 seconds to enter the setting mode.
2. Short press to select the address (address numbers refer to the next page).
3. After selecting the address, long press for 5 seconds to save the address.

Lamp Head Address Numbers

In every model, the corresponding positions of the lamp head have fixed addresses, supporting DMX control to individual lamp heads. (Direction: Front)

1

LC-01

1	2
---	---

LC-02

1	2
3	4

LC-04

1	2	3
4	5	6
7	8	9

LC-09

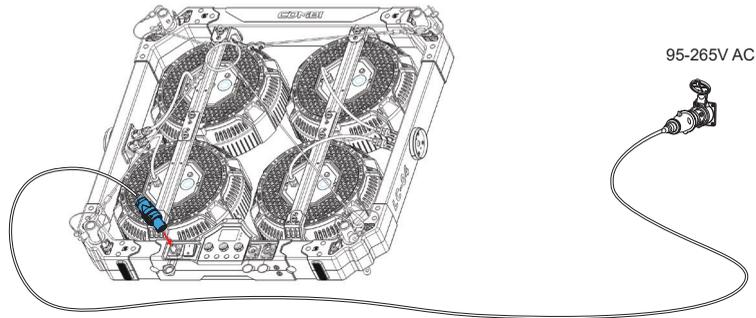
1	2	3
4	5	6
7	8	9
10	11	12

LC-12V

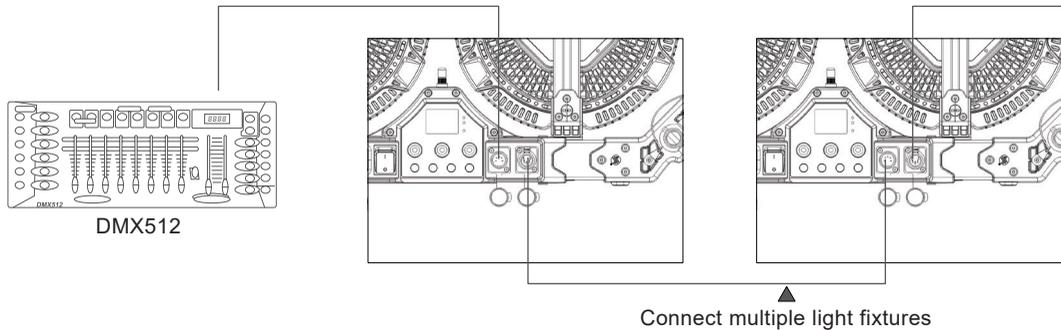
1	2	3	4
4	5	7	8
9	10	11	12

LC-12H

Operation - Cable Connection

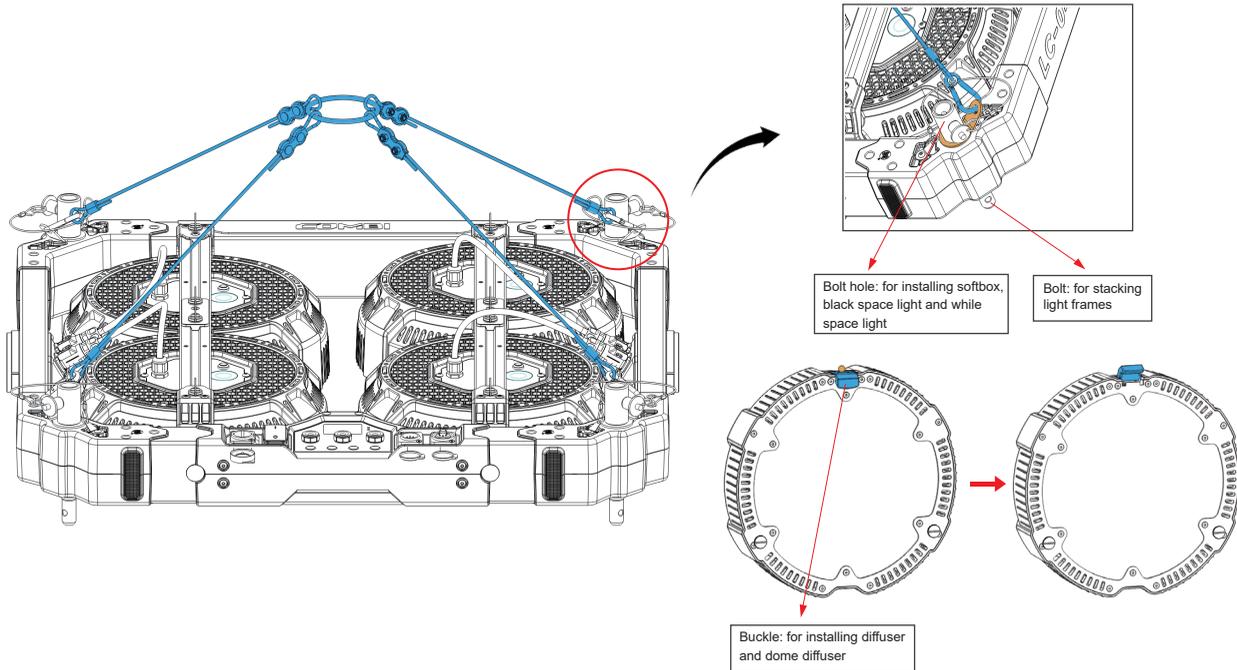


Operation - DMX Connection



Installation - Accessories

Wire rope/Softbox/Black&White space light/diffuser



Cleaning and Maintenance

To optimize the performance of the LED CASTER, please keep it clean, dry and no dust. Clean the fans and frame regularly to ensure effective ventilation. The frequency of cleaning depends on actual environment. It is necessary to arrange regularly clean if the environment is dusty and humid.

Precaution

Always unplug the lighting fixture from the electrical outlet before cleaning and maintenance. Do not touch the LED module during the cleaning and maintenance.

Repairment

We recommended only technicians could repair the LED lighting fixture according to the page 30 “Fault Handling Guide”. For any assistance, please contact your local dealer or Sunnyxiao.

Fault Handling Guide

Note

- We recommended only technicians could repair the LED lighting fixture.
- Please contact your local dealer or Sunnyxiao.

Fault	Fault isolation
Unable to start	<ul style="list-style-type: none"> • Check the power button is on • Check all cables are properly connected • Check the damage for cables
Knob malfunction	<ul style="list-style-type: none"> • Please contact Sunnyxiao.
Deformed or damaged aluminum housing	<ul style="list-style-type: none"> • Please contact Sunnyxiao.
Screw loose	<ul style="list-style-type: none"> • Secure with a suitable screwdriver • If the screw is damaged, please contact Sunnyxiao.
Discolored or damaged connector	<ul style="list-style-type: none"> • Please contact Sunnyxiao.
Monitor no display	<ul style="list-style-type: none"> • Check the power • Check overheating protection • Check the connection for cables
Unable to control LED lamps by DMX controller	<ul style="list-style-type: none"> • Check the digital signal • Check the cable and connector • Check the DMX address
Unable to set DMX address	<ul style="list-style-type: none"> • Ensure the address's validity, range: 1-512 (note: The ID address cannot be set to "0" or more than "512".)
Lamps can not be operated manually when DMX cable is connected	<ul style="list-style-type: none"> • Set the DMX address to "0" • Disconnect the DMX cable and power off the lamps, then restart the lighting fixture.

V1.0.2023



Official website

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