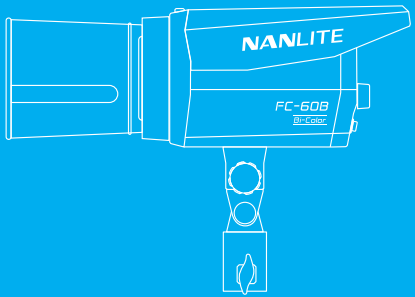
NANLITE

FC-60B LED Bi-color Spot Light



USER MANUAL

Guangdong NanGuang Photo&Video Systems Co., Ltd.

Introduction

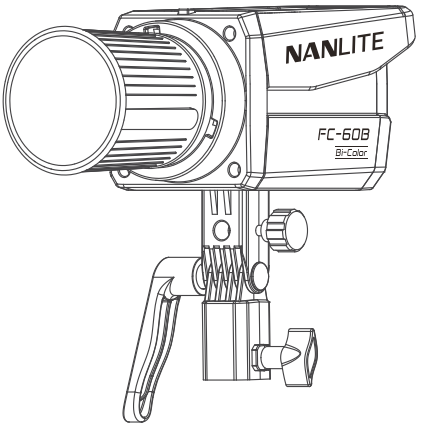
Thank you for purchasing Nanlite product -- FC-60B!
The FC-60B is newly designed LED bi-color spotlight from Nanlite. It is engineered with high color rendering of CRI average 96, TLCI average 98, wide CCT range of 2700K-6500K and 12 adjustable effects in the small and stylish appearances. With DC power socket and type-c port, it supports powered via the power adapter, battery grip or PD charger. The control methods include on-board, remote controller, Nanlink App and DMX/RDM, providing more flexibility for creations. Built with FM mount and umbrella hole, it is compatible with FM mount accessory ecosystem, to achieve more lighting effects.
All in all, the FC-60B combines compactness with professional capabilities, allowing you to capture light anytime and anywhere.

Notice

1. Please do not look directly at the emitter when the fixture is on.
2. Please keep for 10s after settings before turn off the fixture.
3. Please do not place any object on the fixture or allow liquid to flow inside the fixture.
4. Please do not place the fixture near any flammable or volatile substances like alcohol or gasoline.
5. Please do not use strong detergent for cleaning. Please wipe off the dirt by using a cloth with neutral cleanser when cleaning the fixture.
6. Please set up the fixture in a dry and well-ventilated place. Please do not use it in any humid, dusty or overheated environment. Meanwhile, please also check whether the fan and vent are unimpeded.
7. Please do not disassemble the fixture to repair at will. Qualified professionals should conduct maintenance under the condition of strictly following the operating procedures described in this manual.
8. Please do not cover the vents when using, to avoid affecting heat dissipation, and resulting in damage. Please pay attention to anti-scald when using the fixture for a long time, since the surface temperature of fixture will be high.

FC-60B LED Bi-color Spot Light

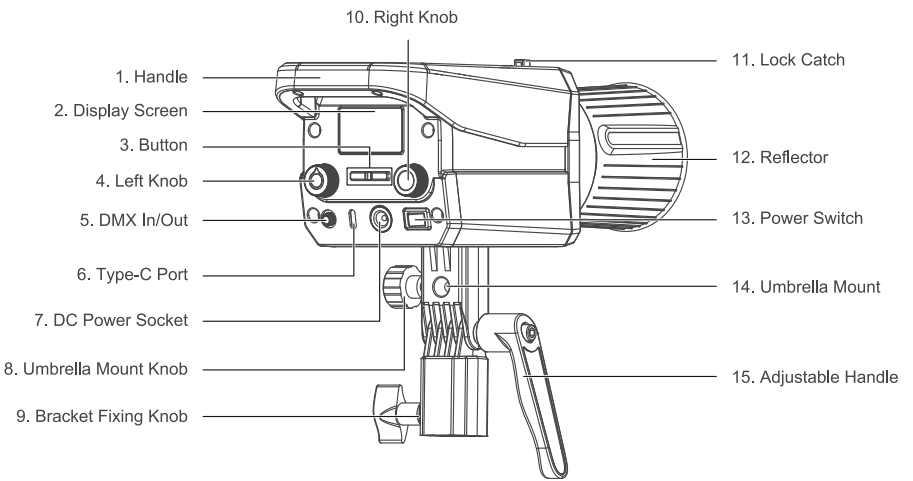
Product Diagram



Technical Data

Rated Power: 78W
Input: DC15V/6A Max
AC100-240V 50/60Hz
PD3.0 (15-20V) 30W Min
Color Temperature: 2700K-6500K
CRI: Average 96
TLCI: Average 98

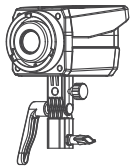
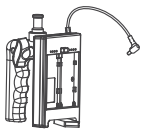
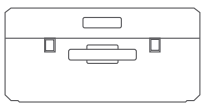
Product Details



Detailed Description

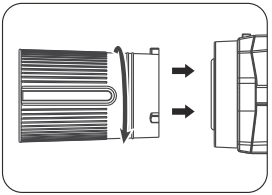
1. Handle: Offer convenient grip for adjusting direction of illumination.
2. Display Screen: For displaying datas.
3. Button: MODE button for switching between CCT mode and EFFECT mode, MENU button for switching to the menu.
4. Left Knob: For adjusting the brightness and adjusting option parameters.
5. DMX In/Out: Connect to a DMX adapter cable for DMX signal input and output. (Note: DMX adapter cable is sold separately).
6. Type-C Port: For firmware updates and serving as a PD charger input.
7. DC Power Socket: DC power input.
8. Umbrella Mount Knob: For locking an umbrella.
9. Bracket Fixing Knob: For securing the light fixture on the stand, and for pan adjustment of fixture.
10. Right Knob: For selecting various options and adjusting the color temperature in the CCT mode.
11. Lock Catch: To lock or release the reflector or other accessories.
12. Reflector: For concentrating light to improve the central illumination.
13. Power Switch: To turn on/off the fixture.
14. Umbrella Mount: For installing an umbrella.
15. Adjustable Handle: For fastening or adjusting the tilt movement of the fixture on the yoke.

Includes

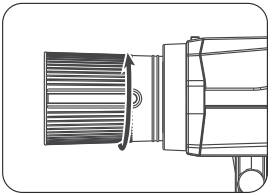
FC-60B × 1	Bowens Adapter x 1	BT-BG-FZ60 x 1	RF-FMM-45-S Reflector × 1
			
Power Adapter × 1	AC Power Cable × 1	Carry Case × 1	User Manual × 1
			

Usage

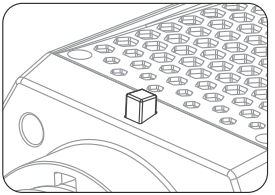
1. Installation and Detachment of Reflector



To install the reflector, align the reflector to the fixture's FM mount, rotate the reflector in the direction shown on the fixture until it clicks into place.

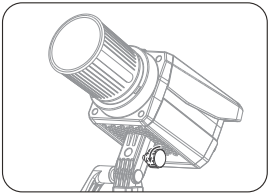


To detach the reflector, push and hold the lock catch and rotate until the reflector is free to be detached from the fixture.

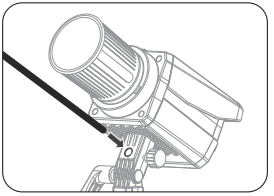


Press the lock catch to detach the reflector.

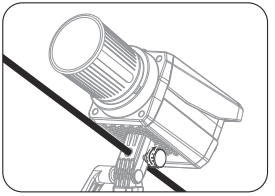
2. Installation of Umbrella



Loosen the umbrella mount knob.



Insert the umbrella into the umbrella mount.



Tighten the umbrella mount knob to lock the umbrella.

Remote Control

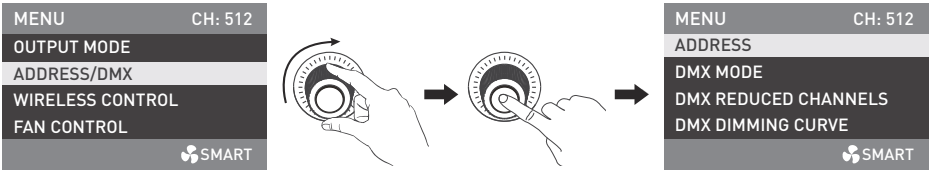
· FC-60B supports DMX/RDM and 2.4G remote control, and it also has built-in Bluetooth module.

▲ The address needs to be set before operating the remote control via DMX/RDM and 2.4G.

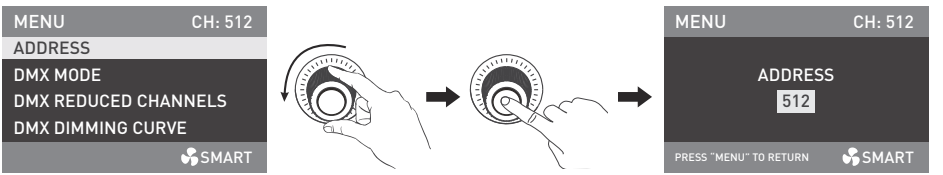
1. ADDRESS/DMX Setting, including ADDRESS, DMX MODE, DMX REDUCED CHANNELS, DMX DIMMING CURVE and DMX SMOOTHING.

1.1. ADDRESS Setting

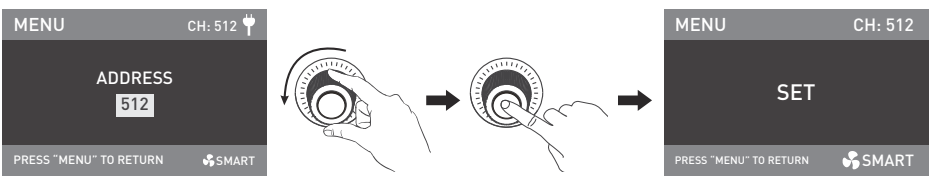
Press the MODE button to enter the menu.



Rotate the right knob to ADDRESS/DMX and press the right knob to enter the sencondary menu.

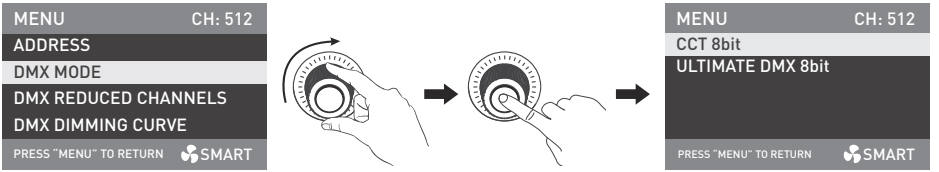


Rotate the right knob to ADDRESS, and press the right knob to enter the tertiary menu.

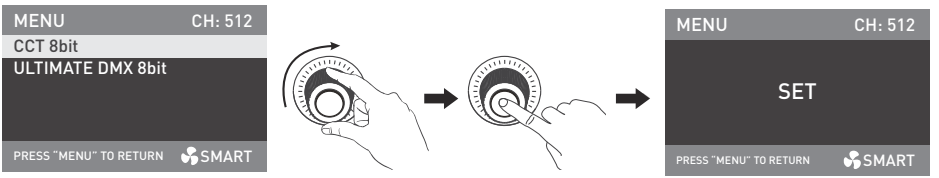


Rotate the right knob to select needed address and press the right knob to set.

1.2. DMX MODE

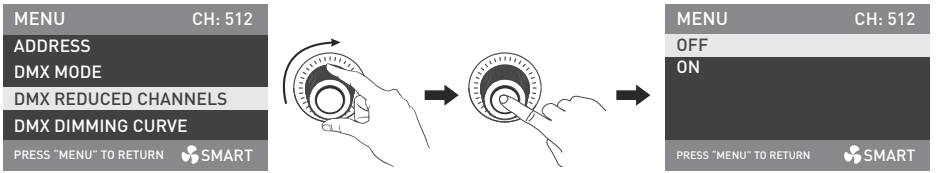


Rotate the right knob to DMX MODE, and press the right knob to enter the tertiary menu.

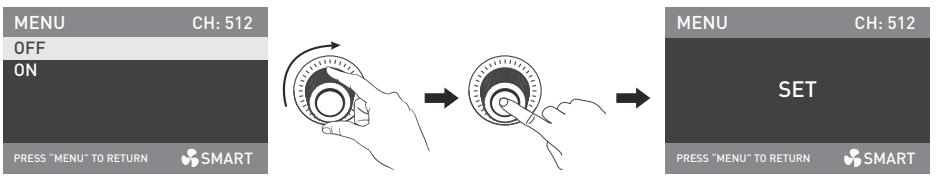


Rotate the right knob to select CCT 8bit or ULTIMATE DMX 8bit, and press the right knob to set.

1.3. DMX REDUCED CHANNELS

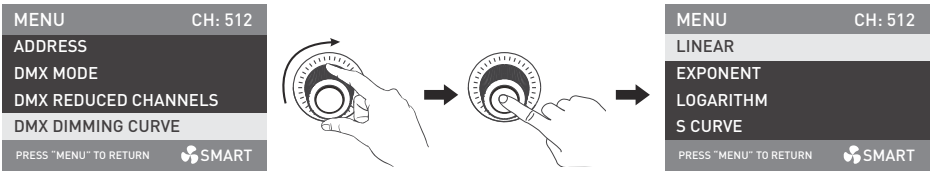


Rotate the right knob to DMX REDUCED CHANNELS, and press the right knob to enter the tertiary menu.

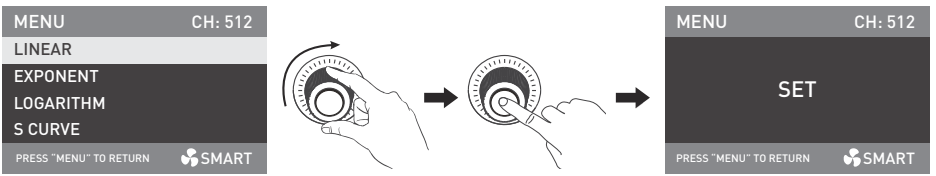


Rotate the right knob to select ON or OFF, and press the right knob to set.

1.4. DMX DIMMING CURVE

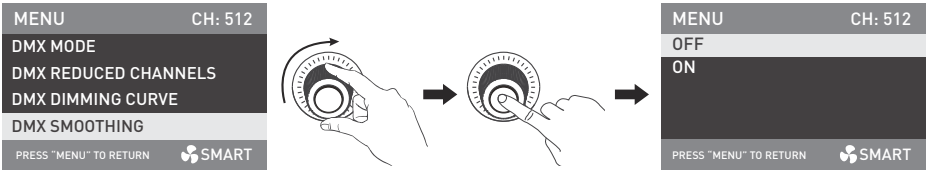


Rotate the right knob to DMX DIMMING CURVE, and press the right knob to enter the tertiary menu.

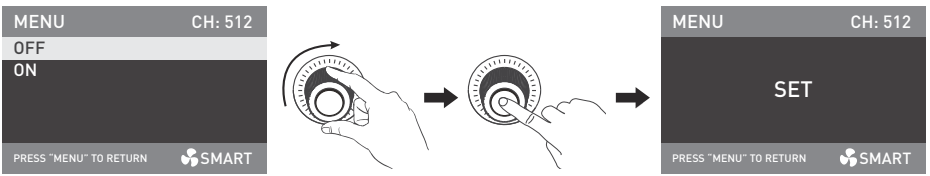


Rotate the right knob to select LINEAR, EXPONENT, LOGARITHM, S CURVE or GAMMA 2.2, and press the right knob to set.

1.5. DMX SMOOTHING



Rotate the right knob to DMX SMOOTHING, and press the right knob to enter the tertiary menu.



Rotate the right knob to select ON or OFF, and press the right knob to set.

2. DMX Control

2.1. Connect the fixture to the DMX/RDM consoles via DMX cable as shown below:

· 5-pin shielded cable with a diameter not less than 0.3mm must be used for connection between light fixture and DMX/RDM console, or between light fixture and light fixture. XLR plug/socket and the cable should be connected as shown above.

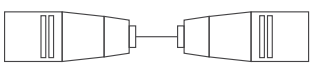
· Pin1, Pin2, Pin3 for connecting DMX signal. Pin4, Pin5 have no connection.

▲NOTE: When connecting DMX, make sure the internal pin is not in contact with the inner case, and pins should not be in contact with each other. The fixture can match the DMX512 (1990) control signal.

· 5-pin and 3-pin XLR plug/socket conversion

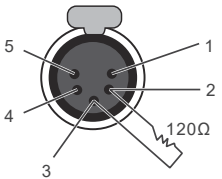
· The fixture comes with 5-pin XLR plug/socket. If a 3-pin XLR plug is used, please follow the instruction below.

Five Pin	Three Pin
Pin 1:GND(SCREEN)	Pin 1:GND(SCREEN)
Pin 2:Signal(-)	Pin 2:Signal(-)
Pin 3:Signal(+)	Pin 3:Signal(+)
Pin 4:N/C	
Pin 5:N/C	

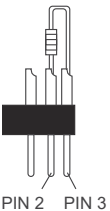


2.2. DMX Terminator

In DMX control mode, the DMX output of the last light fixture should be connected with a DMX terminator (not included). The terminator is connected with a 120Ω(OHM) resistor across Pin 2 and Pin 3 (As shown below). This prevents interference caused by DMX signals in the transmitting process.



DMX Terminator Connection
Connect a 120Ω(OHM) resistor across Pin 2 and Pin 3 in an XLR plug and insert into the DMX OUT socket on the last unit.



2.3. Address Setting of the Light Fixtutre.

2.4. Refer to the DMX reference guide and control the fixture via DMX/RDM console. (For detailed operation please refer to the DMX/RDM console operation manual.)

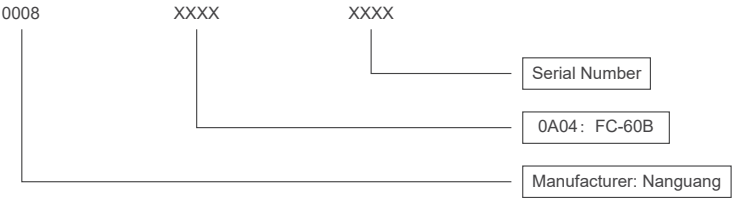
2.5. Download the latest technical data from www.nanlite.com.

3. RDM Control

3.1. Connect the light fixture to the console with RDM function by using a connection cable, the connecting method is the same as that of DMX/RDM console.

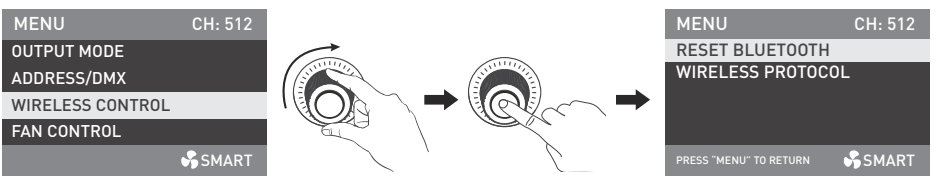
3.2. Control the fixture via a console with RDM function. (For specific operation methods, please refer to the RDM console operation manual.)

Note: The UID format of the fixture is as follow:

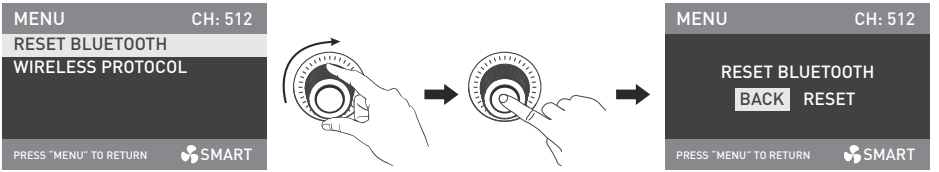


4. WIRELESS CONTROL

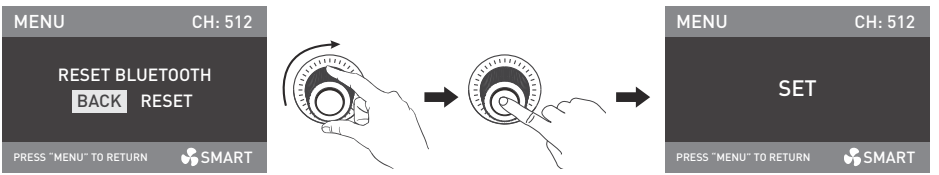
4.1. FC-60B has built-in Bluetooth function for connection via Bluetooth.



Rotate the right knob to WIRELESS CONTROL, and press the right knob to enter the secondary menu.



Rotate the right knob to RESET BLUETOOTH, and press the right knob to enter the interface of RESET.



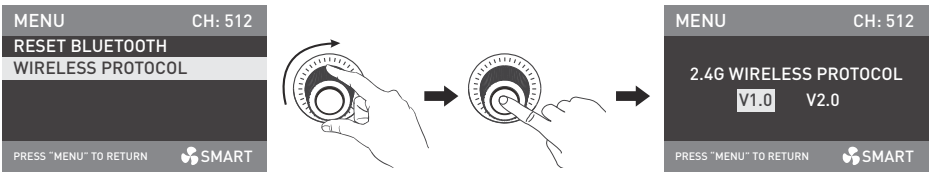
Rotate the right knob to RESET, and press the right knob to set.

4.2. 2.4G Setting

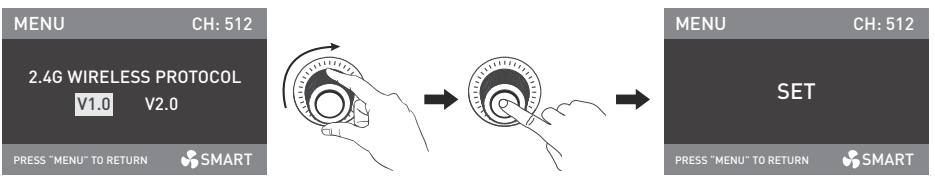
FC-60B can be remotely controlled by 2.4G remote controller and by Nanlink App via the WS-TB-1 transmitter box.

Note: ①2.4G remote controller and WS-TB-1 transmitter box are sold separately.

②FC-60B supports the 2.4G wireless protocol V1.0 and V2.0. The fixture should be set in V2.0 while using WS-RC-C2 remote controller, set in V1.0 while using other remote controllers.



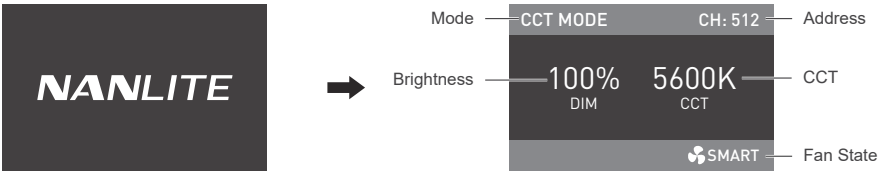
Rotate the right knob to WIRELESS PROTOCOL, and press the right knob to enter the next menu.



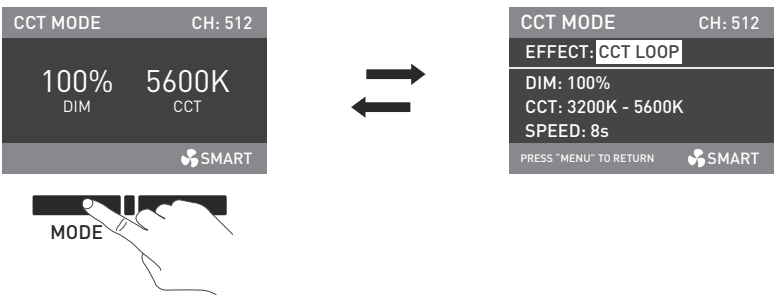
Rotate the right knob to select V1.0 or V2.0, and press the right knob to set.

Operating Instructions

1. Make sure the fixture is off, connect the fixture with the power adapter, and connect the power cable, turn on the power switch, the screen will display "NANLITE".

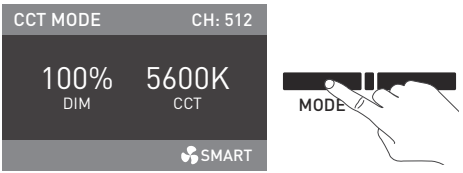


2. MODE Button: Press the MODE button to switch between CCT mode and EFFECT mode.

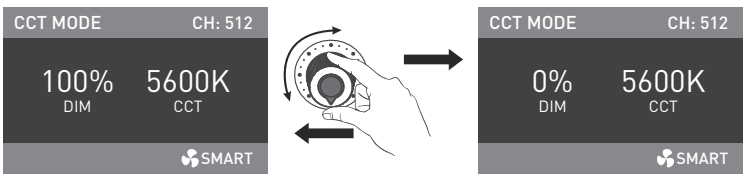


2.1. CCT Mode

Press the MODE button to switch to CCT mode.

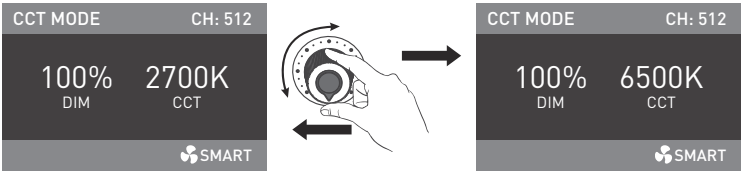


①DIM Setting, Rotate the left knob clockwise to increase the brightness, rotate anticlockwise to decrease, the percentage will be shown on the screen, DIM range: 0% -- 100%.



Note: In other modes, the DIM range is the same as that in CCT MODE. In any mode, press the left knob to turn off the light, and the DIM percentage on the screen will be 0%. Press again to restore the fixture to its previous state. Press continuously to switch the light betweeen on and off.

②CCT Setting, Rotate the right knob clockwise to increase the color temperature, rotate anticlockwise to decrease, the CCT value will be shown on the screen, CCT range: 2700K -- 6500K.



Note: In other modes, the CCT range is the same as that in CCT MODE. Presss the right knob to promptly toggle among: 2700K, 3200K, 4300K, 5600K and 6500K, which can be selected in a loop.

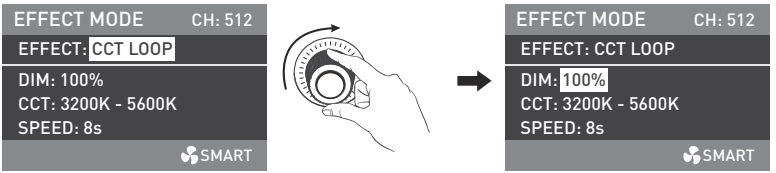
2.2. EFFECT Mode

FC-60B has built-in effects including CCT LOOP, INT LOOP, FLASH, PULSE, STORM AUTO, STORM MANUAL, TV, PAPARAZZI, CANDLE/FIRE, BAD BULB, FIREWORK, EXPLOSION AUTO, EXPLOSION MANUAL and WELDING.

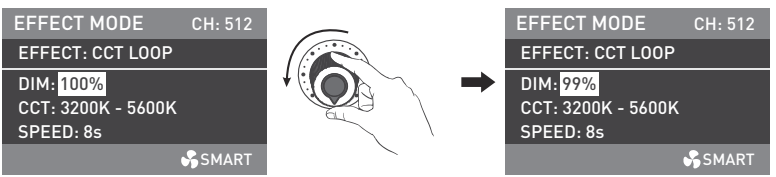
Rotate the left knob to select the needed effect, which can be selected in a loop.

①CCT LOOP

Rotate the right knob to select DIM, CCT or SPEED (range: 2s-30s), and rotate the left knob to set the corresponding parameters.



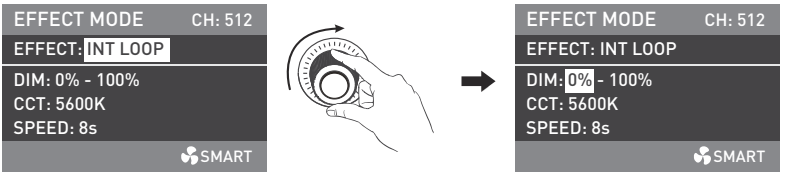
Rotate the right knob to select DIM, CCT or SPEED.



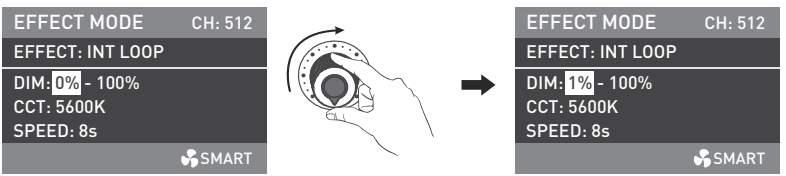
Rotate the left knob to set the corresponding parameters.

②INT LOOP

Rotate the right knob to select DIM, CCT or SPEED (range: 2s-30s), and rotate the left knob to set the corresponding parameters.



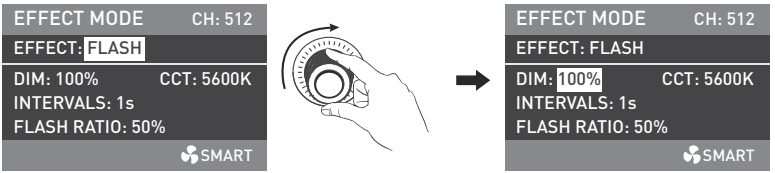
Rotate the right knob to select DIM, CCT or SPEED.



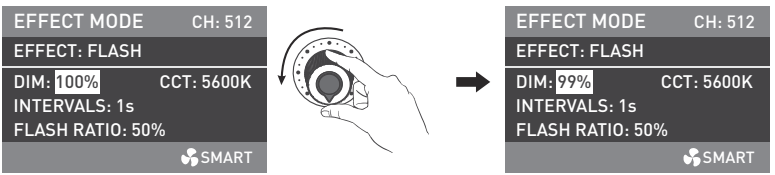
Rotate the left knob to set the corresponding parameters.

③FLASH

Rotate the right knob to select DIM, CCT, INTERVALS (range: 0.1s-10.0s) or FLASH RATIO (range: 0% -100%), and rotate the left knob to set the corresponding parameters.



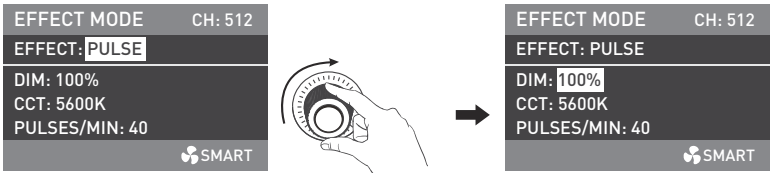
Rotate the right knob to select DIM, CCT, INTERVALS or FLASH RATIO.



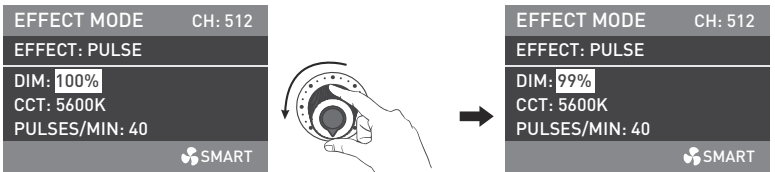
Rotate the left knob to set the corresponding parameters.

④PULSE

Rotate the right knob to select DIM, CCT or PULSES/MIN (range: 1-240), and rotate the left knob to set the corresponding parameters.



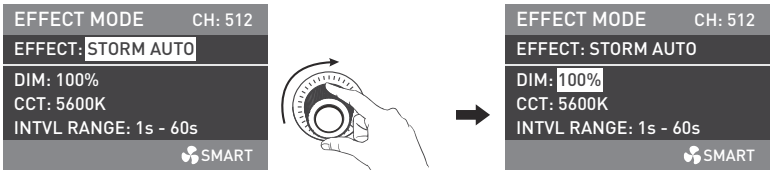
Rotate the right knob to select DIM, CCT or PULSES/MIN.



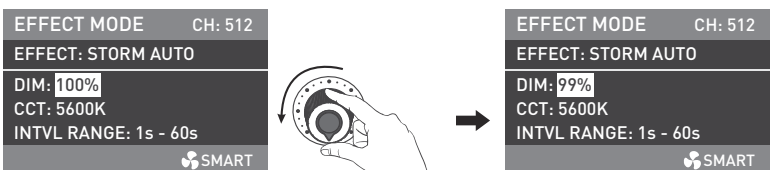
Rotate the left knob to set the corresponding parameters.

⑤STORM AUTO

Rotate the right knob to select DIM, CCT or INTERVAL RANGE (range: 1s-60s) , and rotate the left knob to set the corresponding parameters.



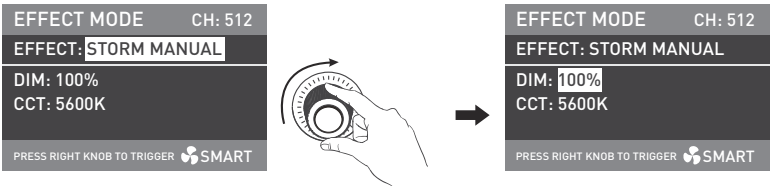
Rotate the right knob to select DIM, CCT or INTERVAL RANGE.



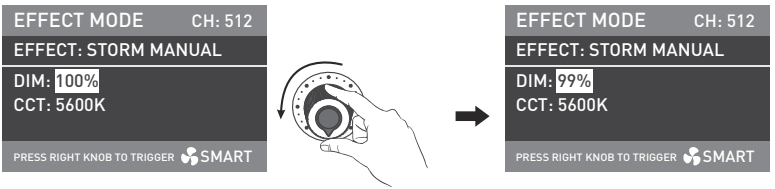
Rotate the left knob to set the corresponding parameters.

⑥STORM MANUAL

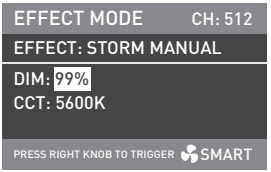
Rotate the right knob to select DIM or CCT, and rotate the left knob to set the corresponding parameters, press the right knob to trigger the storm effect.

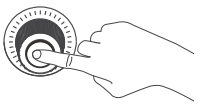


Rotate the right knob to select DIM or CCT.



Rotate the left knob to set the corresponding parameters.

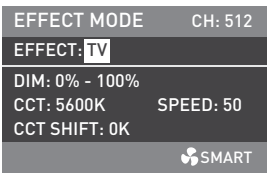


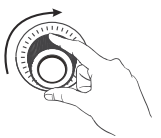


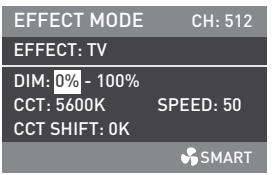
Press the right knob to trigger the storm effect.

⑦TV

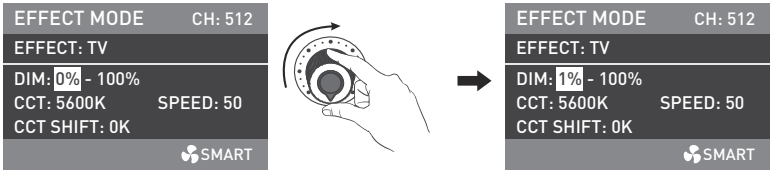
Rotate the right knob to select DIM, CCT, SPEED (range: 1-100) or CCT SHIFT(range: 0K-3000K), and rotate the left knob to set the corresponding parameters.







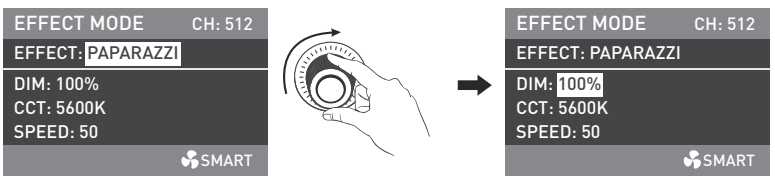
Rotate the right knob to select DIM, CCT, SPEED or CCT SHIFT.



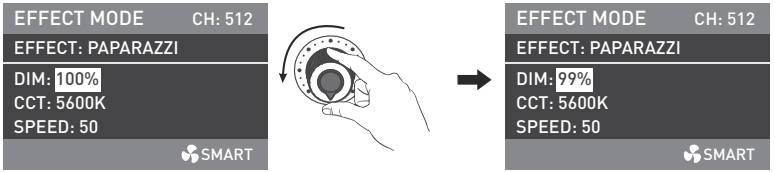
Rotate the left knob to set the corresponding parameters.

⑧PAPARAZZI

Rotate the right knob to select DIM, CCT or SPEED (range:1-100), and rotate the left knob to set the corresponding parameters.



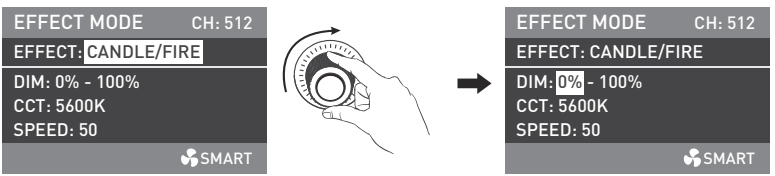
Rotate the right knob to select DIM, CCT or SPEED.



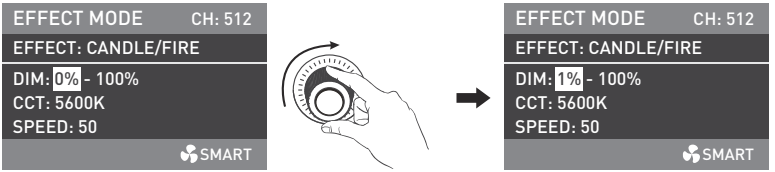
Rotate the left knob to set the corresponding parameters.

⑨CANDLE/FIRE

Rotate the right knob to select DIM, CCT or SPEED (range: 1-100), and rotate the left knob to set the corresponding parameters.



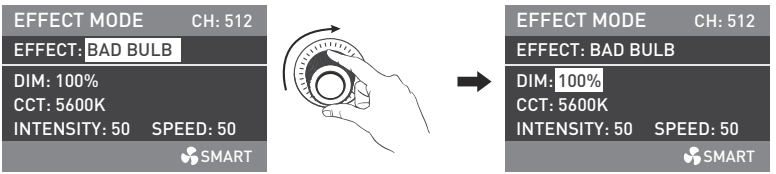
Rotate the right knob to select DIM, CCT or SPEED.



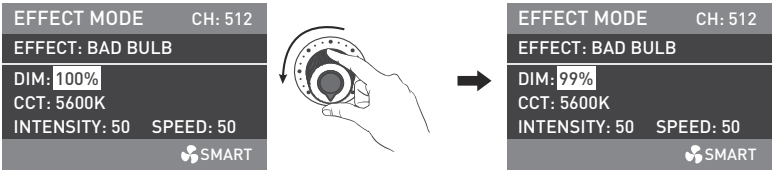
Rotate the left knob to set the corresponding parameters.

⑩BAD BULB

Rotate the right knob to select DIM, CCT, INTENSITY (range: 1-100) or SPEED (range: 1-100), and rotate the left knob to set the corresponding parameters.



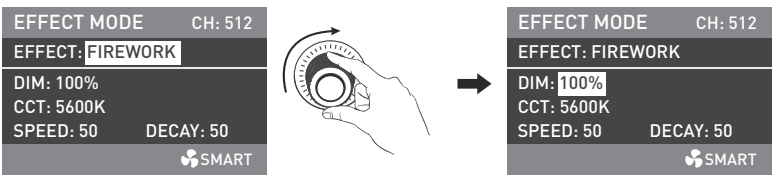
Rotate the right knob to select DIM, CCT, INTENSITY or SPEED.



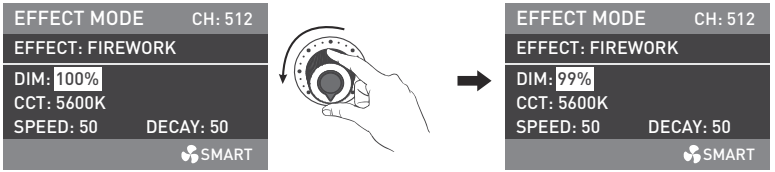
Rotate the left knob to set the corresponding parameters.

⑪FIREWORK

Rotate the right knob to select DIM, CCT, SPEED (range: 1-100) or DECAY (range: 1-100), and rotate the left knob to set the corresponding parameters.



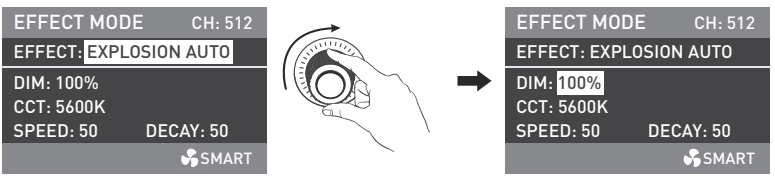
Rotate the right knob to select DIM, CCT, SPEED or DECAY.



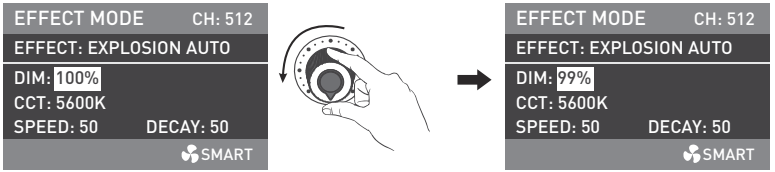
Rotate the left knob to set the corresponding parameters.

⑫EXPLOSION AUTO

Rotate the right knob to select DIM, CCT, SPEED (range: 1-100) or DECAY (range: 1-100), and rotate the left knob to set the corresponding parameters.



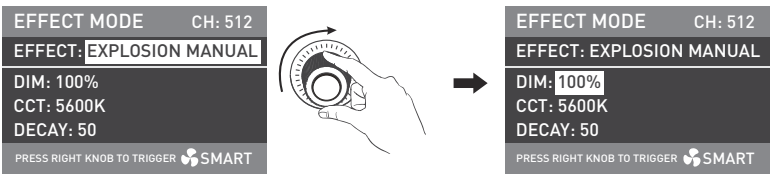
Rotate the right knob to select DIM, CCT, SPEED or DECAY.



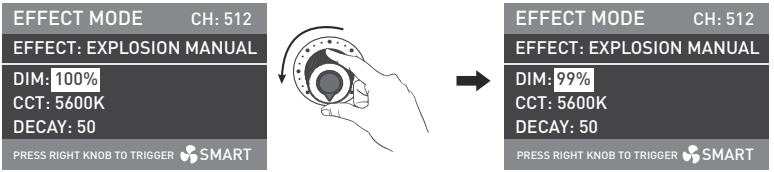
Rotate the left knob to set the corresponding parameters.

⑬ EXPLOSION MANUAL

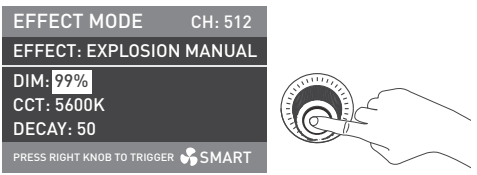
Rotate the right knob to select DIM, CCT or DECAY (range 1-100), and rotate the left knob to set the corresponding parameters, press the right knob to trigger the explosion effect.



Rotate the right knob to select DIM, CCT or DECAY.



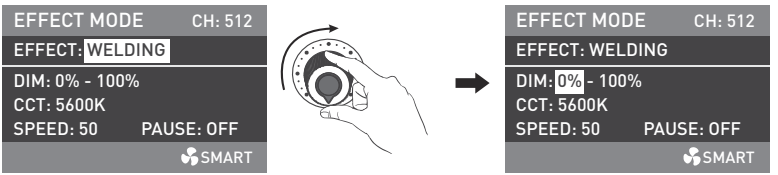
Rotate the left knob to set the corresponding parameters.



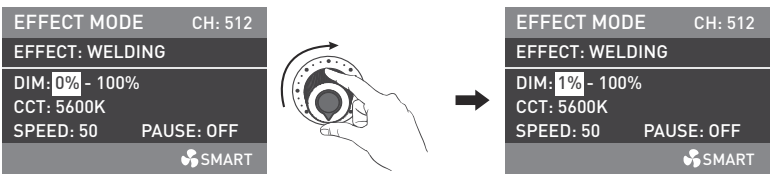
Press the right knob to trigger the explosion effect.

⑭WELDING

Rotate the right knob to select DIM, CCT, SPEED (range: 1-100) or PAUSE, and rotate the left knob to set the corresponding parameters.



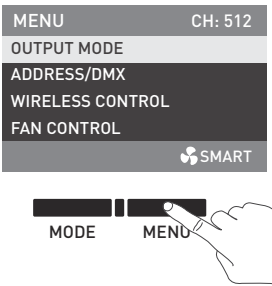
Rotate the right knob to select DIM, CCT, SPEED or PAUSE.



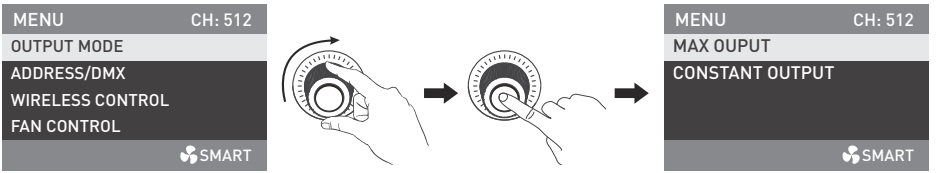
Press the right knob to trigger the explosion effect.

NOTE: The PAUSE can be set on/off. When the PAUSE is on, the welding effect will pause.
Lighting effects and additional functionality will be probably updated with later firmware version.
Detailed information is subject to the instruction of firmware function.

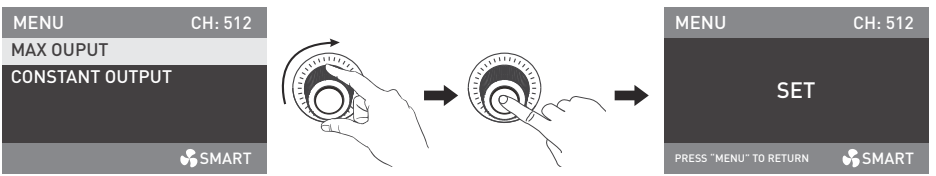
3. MENU Button: Press the MENU button to enter the interface of menu.
   Rotate the right knob to select the options, press the right knob to enter the secondary menu, and rotate the right knob to select the corresponding parameters, then press the right knob to set. Press the MENU button to return to the previous menu.



3.1. OUTPUT MODE



Rotate the right knob to OUTPUT MODE, and press the right knob to enter the secondary menu.



Rotate the right knob to select MAX OUTPUT or CONSTANT OUTPUT, and press the right knob to set.

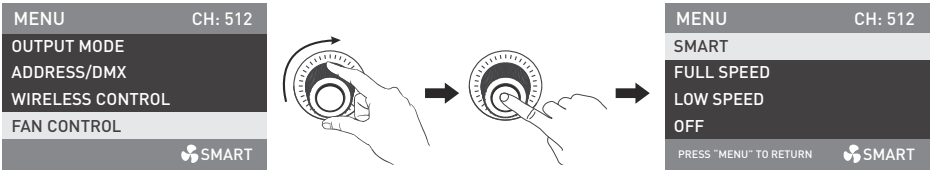
3.2. ADDRESS/DMX

For detailed operations please refer to P7.

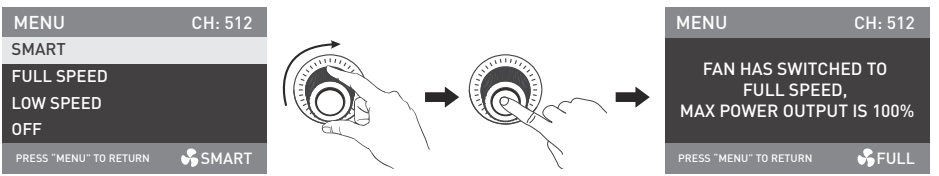
3.3. WIRELESS CONTROL

For detailed operations please refer to P15.

3.4. FAN CONTROL



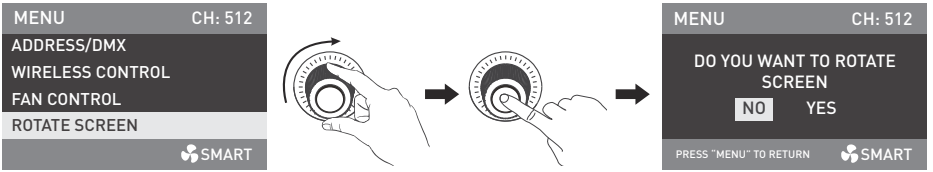
Rotate the right knob to FAN CONTROL, and press the right knob to enter the secondary menu.



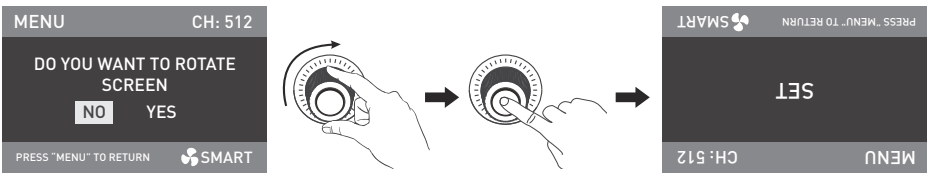
Rotate the right knob to select SMART, FULL SPEED, LOW SPEED or OFF, and press the right knob to set.

Note: When the fan is in off state, the fan will stop working, at this moment the maximum power output of the fixture is 15%.
When the fan is in LOW SPEED state, the maximum power output of the fixture is 50%.
When the fan is in SMART or FULL SPEED state, the maximum power output of the fixture is 100%.

3.5. ROTATE SCREEN

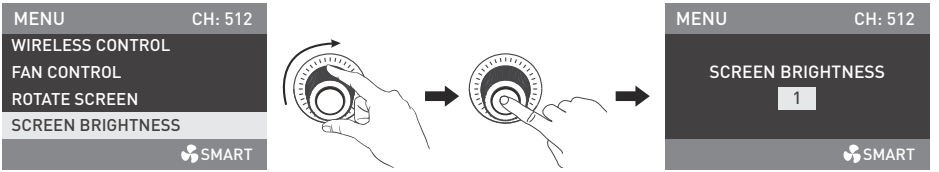


Rotate the right knob to ROTATE SCREEN, and press the right knob to enter the secondary menu.

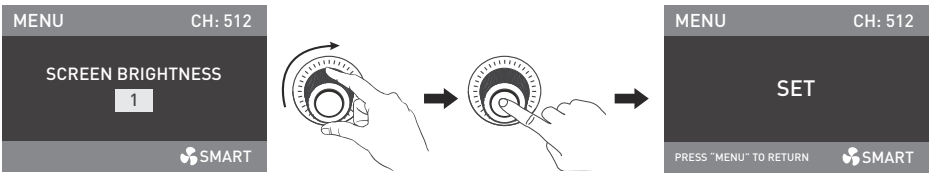


Rotate the right knob to select YES or NO, and press the right knob to set.

3.6. SCREEN BRIGHTNESS

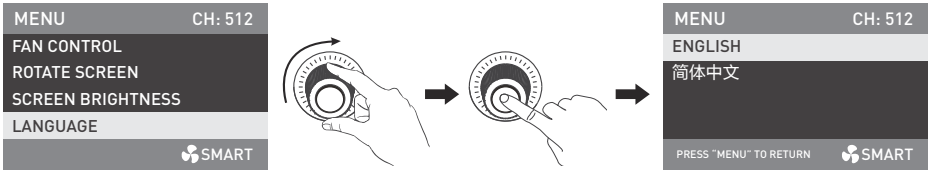


Rotate the right knob to SCREEN BRIGHTNESS, and press the right knob to enter the secondary menu.

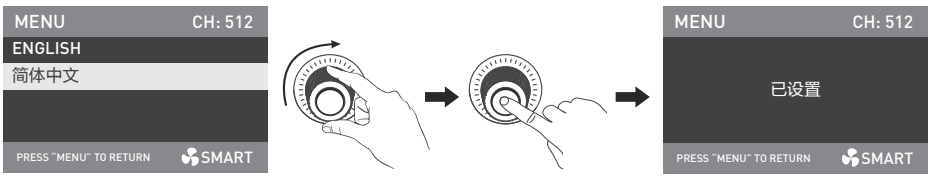


Rotate the right knob to select the screen brightness, and press the right knob to set.

3.7. LANGUAGE



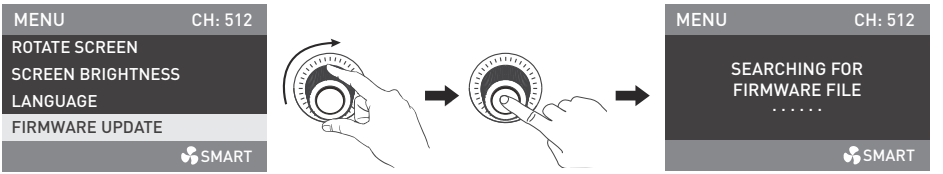
Rotate the right knob to the LANGUAGE, and press the right knob to enter the secondary menu.



Rotate the right knob to ENGLISH or 简体中文, and press the right knob to set.

3.8. FIRMWARE UPDATE

· Download the firmware file and put into the root directory of the USB drive, and insert the USB drive to the USB port.



Rotate the right knob to FIRMWARE UPDATE, press the right knob to enter the interface to search for the firmware files.

Note:

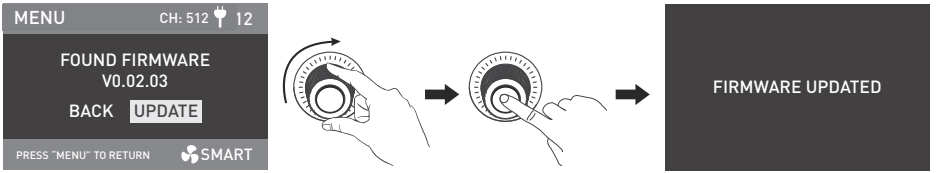
① Please do not rename the firmware file.

② Ensure the USB drive is formatted to FAT, FAT32 or exFAT.

③ If prompted that "NO FIRMWARE FOUND", please check whether the firmware file is correct, whether the firmware file is stored in the root directory of the USB drive, or whether the USB drive format is FAT, FAT32 or exFAT.

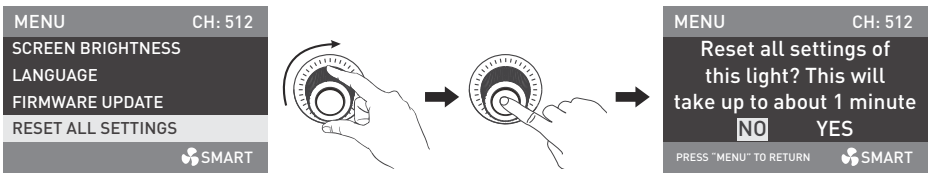
④ If all the above steps are done and the firmware file still cannot be found, please try to format the USB drive again.

⑤ If the light fixture still cannot identify the USB drive, please replace the USB drive.

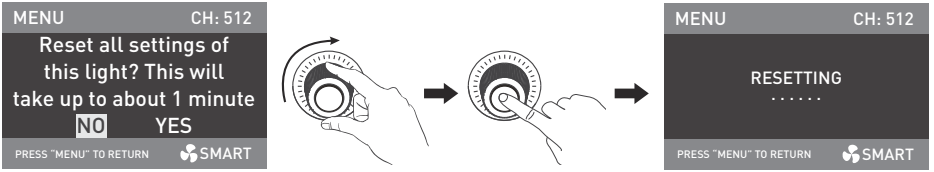


After firmware file is found, enter the firmware update interface, rotate the right knob to select UPDATE, and press the right knob to make update. After update, the light fixture will automatically restart.

3.9. RESET ALL SETTINGS

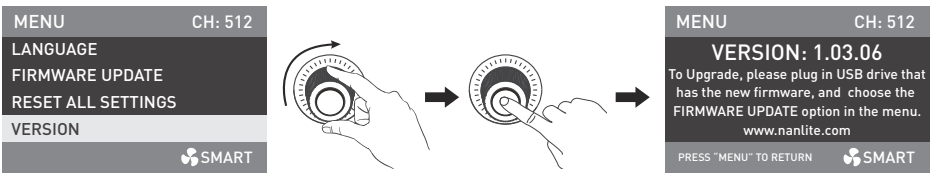


Rotate the right knob to RESET ALL SETTINGS, and press the right knob to enter the secondary menu.



Rotate the right knob to select YES or NO, and press the right knob to set.

3.10. VERSION



Rotate the right knob to VERSION, and press the right knob to check the current version.

4. When the fixture is not in use, please turn off the power switch.

General Fault Detection and Diagnosis

Fault Detection	Diagnosis
The light won't boot up properly.	1. Please check whether the connection between power adapter and cable or fixture are loose. 2. Please check whether the voltage value of power adapter is within the specified range.
The fixture can be operated manually, but DMX control is not working.	1. Please check whether the DMX address setting is correct. 2. Please check whether the DMX adapter cable is connected correctly and without damaged.
The fan doesn't work.	1. Please check if the fan is off. 2. Please contact the place of purchase or dealer for repair if the fan is faulty.

Please scan the QR code for more details.

DMX Reference Guide

Detailed User Manual

Nanlite Website

Nanlink App

This manual has been compiled according to the rigorous testing for Nanlite products. Product designs are subject to change without prior notice. The latest version of the manual for this product is downloadable at www.nanlite.com.

Certification

RoHS FC UK CA

R210-158897
R210-159266 CE

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