

50W RGBW TWINKLE FIBER OPTICS LIGHT

User Manual

Model: QJ-FB50RGBWRFDXMT

Technical Specification

Input voltage: AC86-265V

COLOR: RGBW

Output gray level: 256

Output DMX: 5 channels

Net Weight: 1.0KG

Light source device size: L150xW150xH90mm

Light body material: Aluminum

Remoter dimension: L85xW52xH7mm

Lifetime: 50,000 hours

POWER: 50W

LED: RGBW LED

Input Signal: DMX512/1990

DMX512 socket standard XLR;

Gross Weight: 1.8KG

Fiber head inner diameter: 29mm

Remote: RF

Package Size: L300xW200xH14.5mm

Warranty: 2 years

MODE1: DMX MODE

Attention Light source unit Occupancy 5 bits address.

The first bit is red light, The second bit is green light, the third bit is blue light, the fourth bit is white, and the fifth bit is motor speeds (four levels)

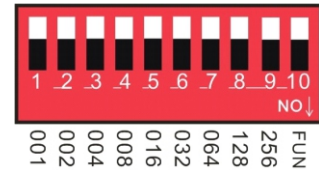
Note: FUN = OFF (the tenth code switch up) means to accept DMX512 signal mode

The first DMX address setting:

The decoder set the address bit by coding switch, of which 1-9 is for setting the start address of the Binary numeric code switch of DMX512, the first one is the lowest position, the ninth one is the highest

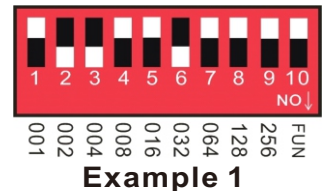
Bit of address code can be set to 512.

DMX512 start address code is the sum of switches 1-9, at the same time turn downside of the code switch (ON set to "1"), then the value of the bit can be gotten; coding switch up (set to "0"), the value of the bit is 0.



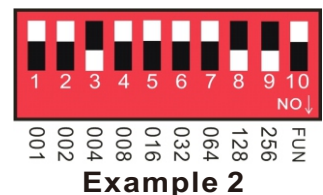
Example 1:

As the following Schematic 1, DMX512 start address is set to 38, encoding the No. 6,3,2 position on switch dial to "1", others set to "0", then the sum of the switch 1-9 code value is 32+4+2, that is the DMX512 start address 38



Example 2:

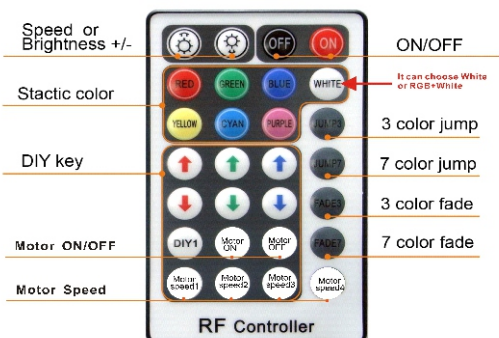
As the schematic 2, DMX512 start address is set to 388, encoding the no. 2,3,6,8 switch dial to "1", others set to "0", then the sum of the switch 1-8 code value is 4 + 128 + 256 = 388, that is the DMX512 start address 388.



MODE2: RF MODE

Note: It will be rf mode when the No. 10 switch is turned down.

Remote instructions:



RF28 key remote control function	Key function details specification
ON/OFF	Turn ON/OFF the controller
Speed/brightness adjust key	Press these two keys to increase/decrease the brightness when in static mode. Press these two keys to increase/decrease the changing speed when in dynamic mode
static color mode	R:10% G:30% B:50% YELLOW:70% CYAN:30% PURPLE:50% W:100% Brightness is adjustable
DIY brightness adjust key	Press the DIY key to address the Green, Red, Blue color brightness to choose the specific color
DIY	DIY mode key
WHITE	white mode
flash	white flash
Jump	white jump
fade	white fade
Jump+fade	white Jump and fade
Motor ON/OFF	Turn ON/OFF the motor
Motor speed	Four kinds of the speed about the motor

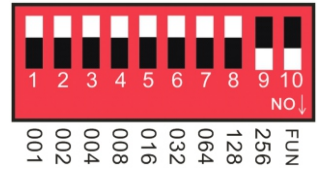
Match Code Function (It is available when leave factory)

1. Power on led engine, it works well when red indicated lights.
2. Press the FADE 3 and FADE 7 at same time in the effective remote distance, the white color of led engine flash. The code matches success.

MODE3:Built-in effects Mode

Attention:

1:1-4bit is mode 2: 5-6 bit is mode's speed
3:7-8 bit is motor speed.



Effect choice (button switch No.1 to No.4):12 kinds

- | | |
|---|-------------------------------------|
| 1. Push No.1: Seven-color gradual cycle changing. | 2. Push No. 2: RGB Fade in and out. |
| 3. Push No.1 & 2: Severn color jumping. | 4. Push No.3: RGB jumping. |
| 5. Push No.1 & 3: RGB flash jumping. | 6. Push No.2 & 3: Static red. |
| 7. Push No. 1 & 2 & 3:Static green. | 8. Push No.4: Static blue. |
| 9. Push No.1 & 4: Static yellow. | 10. Push No.2 & 4: Static purple. |
| 11. Push No.1 & 2 & 3: Static cyan. | 12. Push No.3 & 4: Static white. |

Speed Choices (Button Switch No.5 to No. 6) 4 kinds

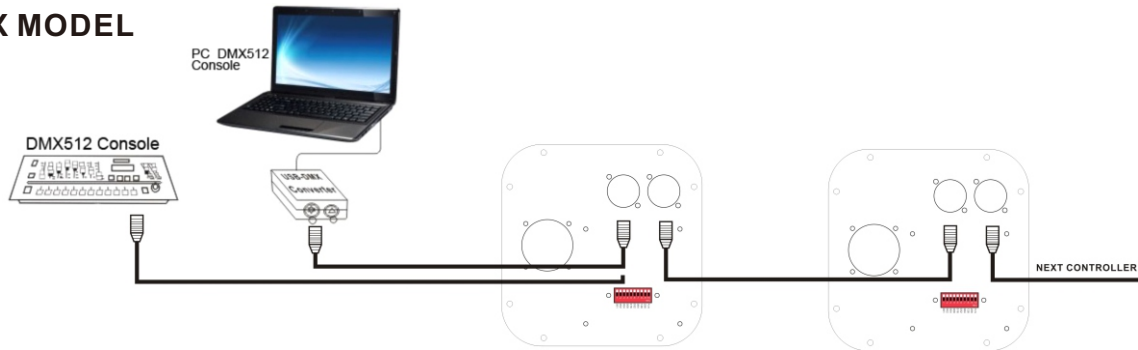
- | | | |
|-----------------------------|-------------------------|---------------------------|
| 1. Push No.OFF: 0.5 second. | 2. Push No.5: 1 second. | 3. Push No.6: 1.5 second. |
| 4. Push No.5,6: 2 second. | | |

Motor Speed Choices (Button Switch No.7 to No. 8) 4 kinds

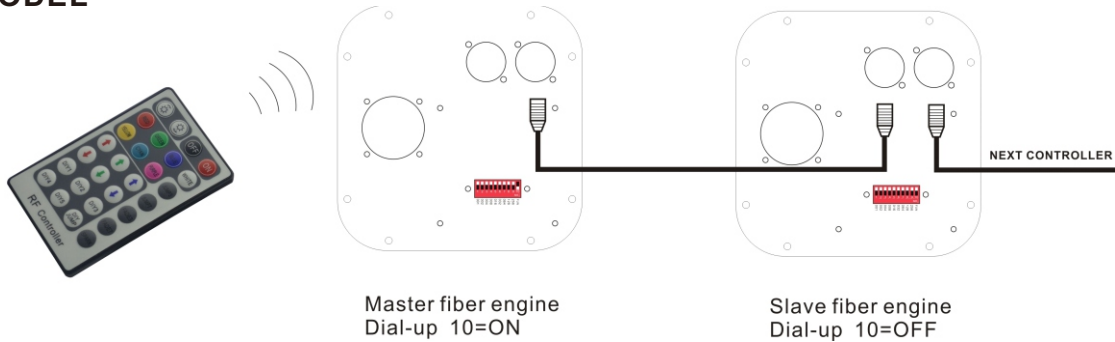
- | | | |
|----------------------------|-----------------------|------------------------|
| 1. Push No. OFF:motor off. | 2. Push No.7:speed 1. | 3. Push No.8: speed 2. |
| 4. Push No.7,8: speed 3. | | |

Application Connection Diagram

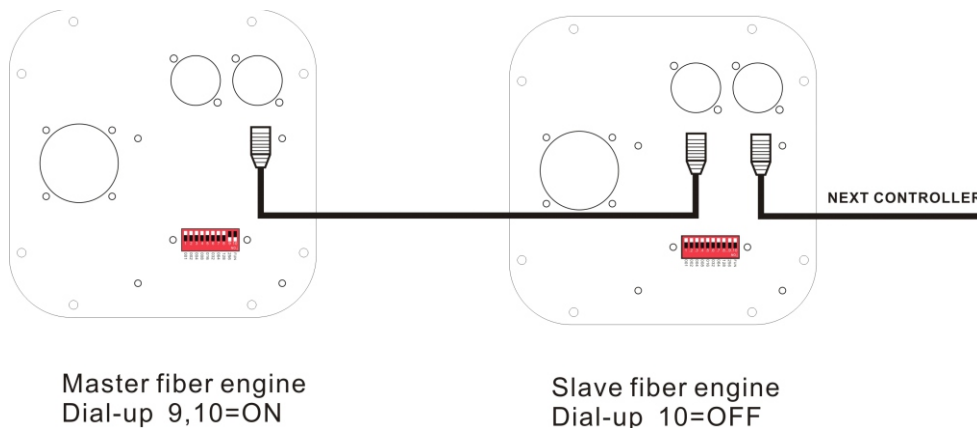
1.DMX MODEL



2.RF MODEL



3.BUILT_IN MODEL



Maximum fiber connection formula:

Fiber head's radius: R

Fiber Diameter: D1,D2,D3.....

Fiber quantity:N1,N2,N3.....

Result: $\pi \times R \times R \geq N1 \times D1 \times D1 + N2 \times D2 \times D2 + N3 \times D3 \times D3 \dots$

Example:

fiber head's radius(Diameter 20mm)

Fiber Diameter:0.75mm, 1.0mm, 1.5mm

Fiber Quantity:150mm 50mm,10mm.....

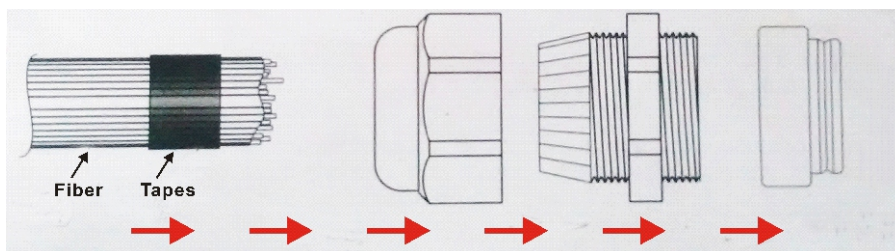
Result: $3.14 \times 10 \times 10 \geq 150 \times 0.75 \times 0.75 + 50 \times 1 \times 1 + 10 \times 1.5 \times 1.5$

fiber head inner diameter : 16-20mm

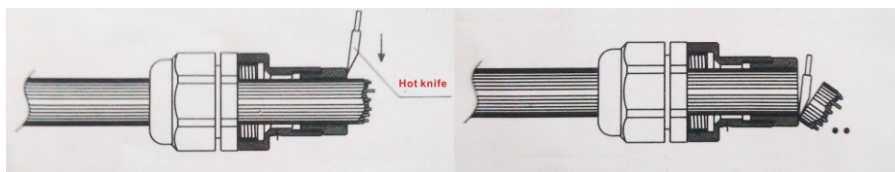
PGConnector inner diameter(mm)	Fiber diameter(mm)	Max fiber number
29	0.75	1100
29	1	660
29	1.5	290
29	2	160

Connection method between Fiber and Led engine:

- 1.Align all the fiber head, fasten with tapes which can resistance temperature over 130°C
- 2.Pass through the fiber to connector, fastening rotary tensioner. To make sure the fiber bunch could not move and each fiber must be in the same plane.



- 1.Cut the fiber bunch to flat surface by heat-knife or blade.



- 4.Make sure the fiber bunch head is smooth and clean. Thus each fiber's light will be evenly.
- 5.Put through the whole fiber connector to fix ring of Led engine. Fasten screw on the top of the fix ring.

Application installation diagram:

Attention:

- 1.Make sure the input voltage is correct.
- 2.Put led engine in the rain or moist place is prohibited
- 3.Please don't open led engine for inspection or change the electronic circuits if you are not professionor.
- 4.Led engine has to be good ventilation, please don't put at sealed place.
- 5.Put debris on top of led engine or around it will be caused poor heat dissipation.

