V 1.0

Product Specification

LED Controller

XD-RF20W

For More Information

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Summary

- Waterproofgrade IP20
- Input port uses a Type-c head, and the output port uses an SM plug to dock the light strip
- Output two lighting effects, the controller is uniformly controlled
- Product is CE ROHS compliant

Application characteristics

- RF remote control is standard, and the remote control is suitable for pairing
- DC5V input voltage is suitable for most PC and mobile phone chargers on the market
- Built-in 21 dynamic effects, adjustable brightness, adjustable speed

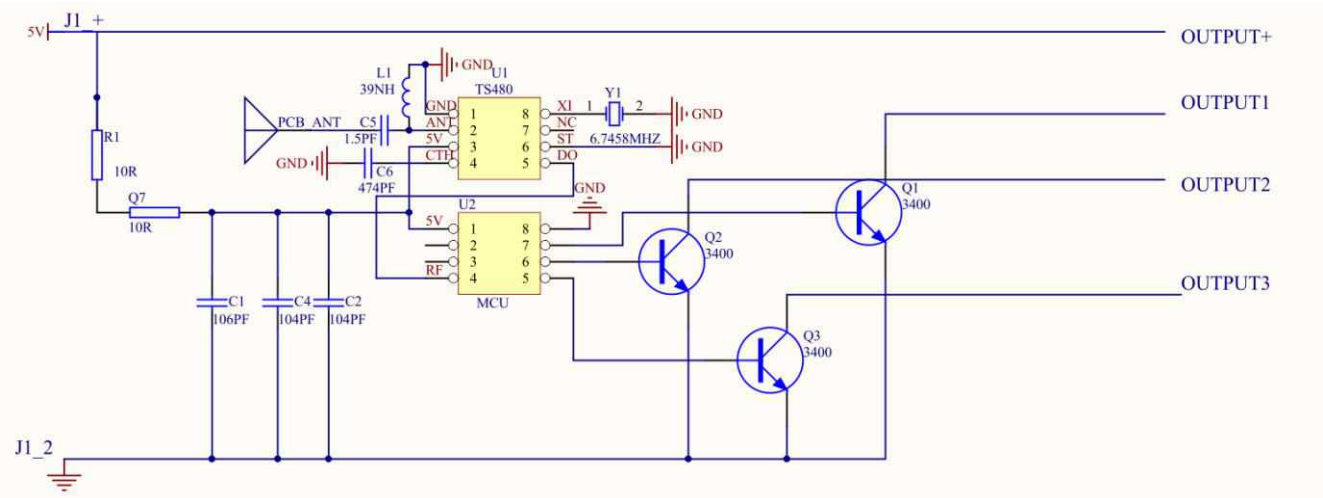
Product technical parameters

Working Voltage	5V DC
Light Angle	
Strip Power	10W×2
Lighting Color	R B G
Static Power	<0.5W
LED Type	SMD 5050
Controller Iout	4A
Remote control mode	433 RF
Remote control firing distance	8M
IP Rating	IP20
Working temperature	-20~70°C
LED Qty	56LED
Min Cutting Unit	1 LED
Strip size	L=466.6mm*W=10mm*H=1.8mm
Remote control size	L=50mm*W28mm*H12.2mm

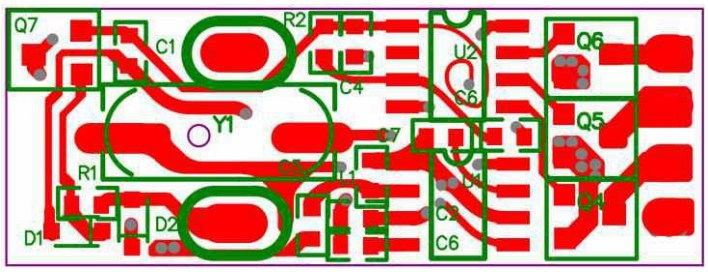
Color technical specifications available

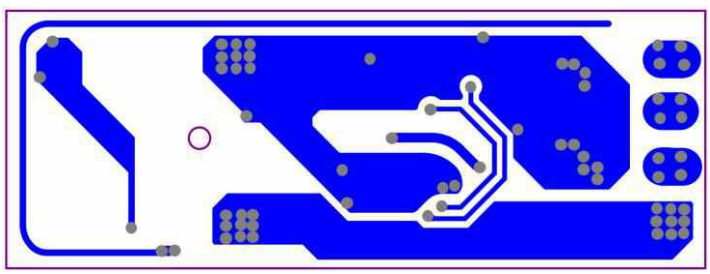
Color	Color temperature & wavelength	Power
R **Red**	620-630nm	4.3W/m
G Green	520-530nm	3.3W/m
B **Blue**	480–490nm	3.1W/m
W **White**	\	8.9W/m

Controller Schemati



PCB Layout





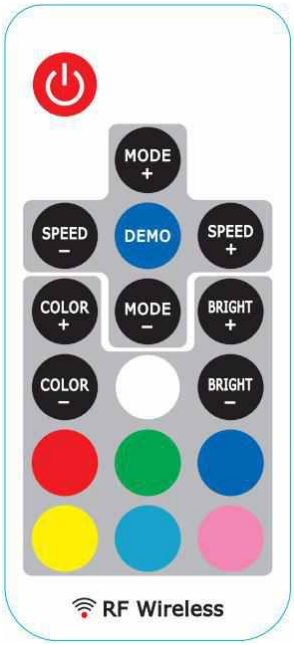
RF RGB Remote control specification

1、Pair the controller with the remote

- Within 4 seconds of powering on the controller, press the COLOR- and BRIGHT- buttons at the same time to achieve code matching.Only one code check is allowed each time you power on, and you need to power on again to check the code again. If you don't have the same time within 4 secondsPress the COLOR- and BRIGHHT- buttons, and the controller defaults to the passcode. It will automatically resume every time it is powered onReturn to the state before the last power outage. 60 lights per meter.

2、Operating Instruction for Remote Control

1. ⏻ ON/OFF Button
2. **SPEED+/SPEED– Button**
   Press **SPEED+/SPEED–** button to increase/decrease flashing speed.
3. **DEMO Button**
   Press to switch to Red/Green/Blue light mode.
4. **COLOR+/COLOR– Button**
   Press **COLOR+/COLOR–** button to switch between different light colour modes.
5. **Colour Button**
   Press different button to switch the LED light in the corresponding colour.
6. **Mode+/Mode– Button**
   Press **Mode+/Mode–** button to switch between different lighting modes.
7. **Bright+/Bright– Button**
   Press **Bright+/Bright–** button to increase/decrease the brightness of the LED light.

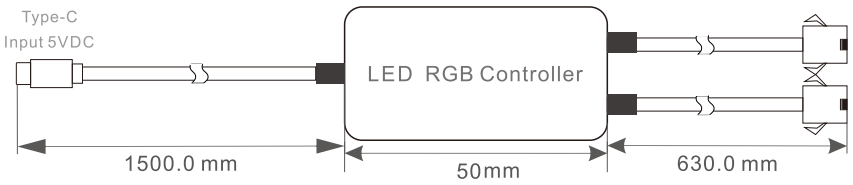


3、Table of Changing Modes

No.	Modes	No.	Modes	No.	Modes
1	Static Red	12	Green Strobe	23	Green Fade out and Fade in
2	Static Green	13	Blue Strobe	24	Blue Fade out and Fade in
3	Static Blue	14	Yellow Strobe	25	Yellow Fade out and Fade in
4	Static Yellow	15	Purple Strobe	26	Purple Fade out and Fade in
5	Static Purple	16	Cyan Strobe	27	Cyan Fade out and Fade in
6	Static Cyan	17	White Strobe	28	White Fade out and Fade in
7	Static White	18	RGB Color Smooth		
8	RGB Strobe	19	7 Colors Smooth		
9	RGB Skipping	20	RGB Fade out and Fade in		
10	7 Colors Skipping	21	7 Colors Fade out and Fade in		
11	Red Strobe	22	Red Fade out and Fade in		

Note: Brightness is adjustable for static effect, brightness/speed are adjustable for changing effect.

LED Strip Light Loading Chart



Disclaimer

- Use 5VDC isolation power supply to drive LED lamp bar, and the ripple of constant voltage source is less than 5%. Can not use resistance-capacitance buck, non-isolation, etc.Type power drive LED lamp bar.
- In order to ensure the lifetime and reliability of the lamp belt, please do not bend in the radian below 60 mm in diameter. Please fold in half so as not to damage the LED lamp.
- In the process of installation, pay attention to the positive and negative poles of the power cord, do not connect wrong, whe ther the voltage of the power supply and the product is the same, in order to avoid damage to the product.
- The LED lamp belt should be stored in the environment of dry sealing ring. It is suggested that the storage period should not be too long. Please unpack it before use. The working environment temperature should be - 30 - 55℃, the storage temperature should be -20- 70℃, and the non-waterproof lamp should be used indoors. The relative temperature should not be higher than 70.
- Please be careful to operate. Do not touch the AC power supply when the power is connected to prevent electric shock.
- In practical applications, the power supply should retain a 20% margin (recommended to use only 80% of the power) in order to ensure a sufficient amount of voltage-driven products.
- It is strictly forbidden to use any acidic or alkaline adhesives to fix products (including not limited to glass glue, etc.).

Matters needing attention

- Connection head should be welded with electric soldering iron and tin, and sealed with heat shrinkable sleeve, then waterproofed with 3M waterproof electrical tape.
- The length of the main line between the output end of the power supply and the module is controlled within 3 meters.
- Do not twist the lamp strip continually. Multiple twists can easily cause fatigue damage to the internal power supply lines. The twist angle should not be less than 45 degrees. Do not bend the lamp strip in an arc of more than 60 mm in diameter. Soft lamp should be taken outdoors, indoor use should do a good job of safety precautions, in order to avoid reducing fire, electric shock and personal injury.
- If custom length is required, it should be sheared at the welding position of the unit group, not less than the minimum unit length or within the unit group. After shearing, it should be noted that the cut should be sealed with waterproof insulating glue so as to avoid burning down the product or safety accident (the product supplier is not responsible for the loss caused by this). Our company does not recommend that customers tailor their own length. If you need non-standard length products, please contact our staff.

FCC Statement

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interferenceby one or more of the following measures:

--Reorient or relocate the receiving antenna.

--Increase the separation between the equipment and receiver.

--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

--Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user ’ s authority to operate the equipment.

Radiation Exposure Statement

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.