RGB LED MUSIC CONTROLLER WITH RF REMOTE

DESCRIPTION:

The RGB LED Music Controller with RF Remote is a high-performance lighting controller utilizing advanced PWM (Pulse Width Modulation) digital technology. It features three output channels for constant voltage LED lighting and operates on a DC12V-24V power supply. Designed with cutting-edge audio analysis technology, it delivers seamless synchronization between LED lighting effects and music. The RF 18-key remote provides an intuitive and user-friendly control interface for customized lighting experiences.

FEATURES:

• Constant voltage controller compatible with DC12V-24V power supplies.
• Utilizes PWM digital technology with five dimming levels and a flicker-free experience.
• RF 18-key wireless remote control for convenient operation.
• 13 RGB lighting modes, including:
    • 8 static colors with adjustable brightness.
    • 3 dynamic transition modes with adjustable speed.
    • 3 audio-responsive modes: ♫ DJ (fast track), ♫ Dynamic (universal rhythm), and ♫ Tenderness (slow-paced).
• Adjustable sensitivity for audio mode using a black gear knob.
• Designed for LED constant voltage products, including RGB strip lights, single-color light bars, and running light effects.
• Two-year limited warranty (excludes damage due to misuse, transit, overload, or natural causes).
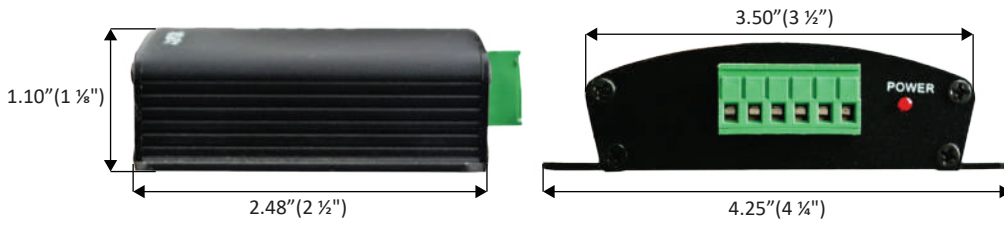
APPLICATIONS:

• LED RGB strip lights and single-color LED bars.
• Accent and ambient lighting for homes, commercial spaces, and entertainment venues.
• Music-synchronized lighting for parties, clubs, and stage performances.
• Interactive LED installations requiring real-time audio-reactive effects.
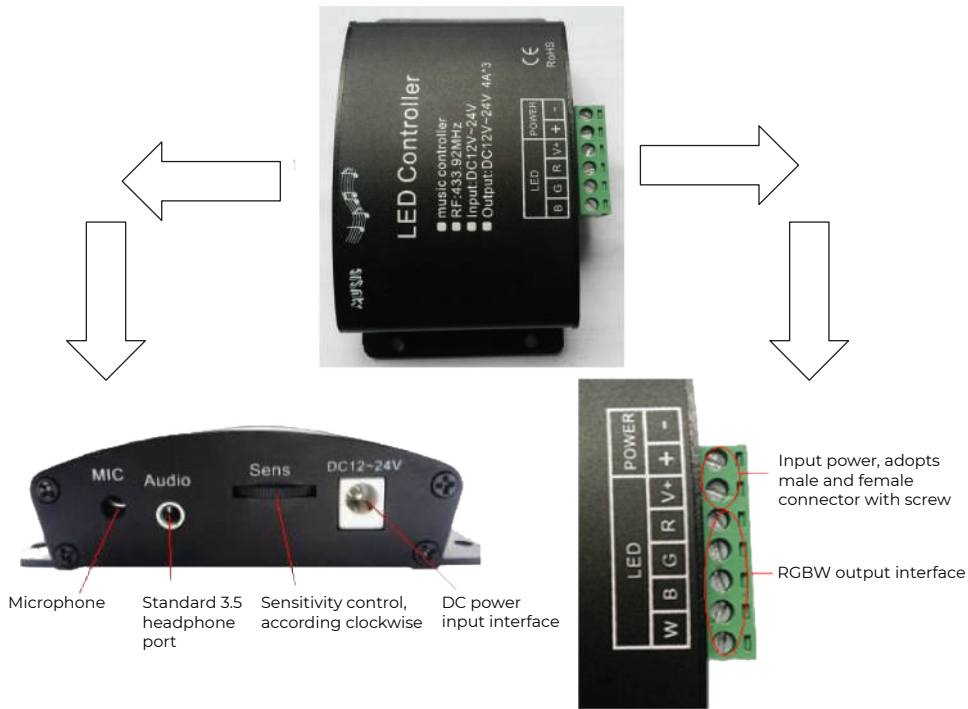
TECHNICAL SPECIFICATIONS:

|	
Supply Voltage	DC12V~24V
Output Channels	3 channels
Dimming Levels	5 levels, flicker-free
Signal Frequency	400Hz
Output Gray Scale	256 levels (continuous reception)
Output Current	4A per channel
Wattage	12V: 144W / 24V: 288W
RF Frequency	433.9MHz
Working Temperature	-4°F to 140°F
Connection Type	Common Anode
Controller Dimensions	4.25" x 2.48" x 1.10"
Net Weight	0.33 lbs
Gross Weight	0.40 lbs

DIMENSIONS:

1.10"(1 ⅛")
2.48"(2 ½")

3.50"(3 ½")
POWER
4.25"(4 ¼")

INTERFACE SPECIFICATIONS:

Power and Load Interface:

Microphone

Standard 3.5 headphone port

Sensitivity control, according clockwise

DC power input interface

Input power, adopts male and female connector with screw

RGBW output interface

DIRECTION FOR USE:

| Static white			on/off
Static red	Static green	Static blue	Static sunlight
Static orange	Static yellow	Static cyan	Static purple
seven base color jumping	Three color gradually change	seven color gradually change	Speed/Sensitivity+
DJ Audio	Dynamic Audio	Tenderness Audio	Speed/Sensitivity

RF Remote Control
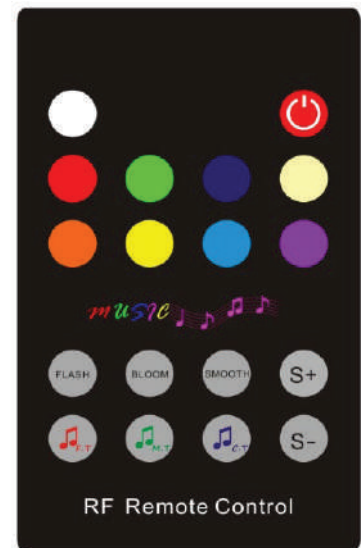
MARK:

1. S+/S−: These buttons adjust the speed in dynamic mode and the sensitivity in audio mode. Adjusting sensitivity based on different music types and sound levels enhances lighting synchronization, making the effects more dynamic and rhythmic.

2. Music Mode: Features three rhythmic patterns—Fast (DJ), Medium (Dynamic), and Slow (Tenderness). Each mode responds to different music styles, creating a more immersive atmosphere.

3. Static Modes: The brightness of static colors is adjustable in five levels (100%, 50%, 25%, 12%, and 6%). Pressing the color button once changes the brightness to the next level in sequence.

REMOTE PAIRING INSTRUCTIONS:

1. Turn off the power and press the "FLASH" button.
2. Turn on the controller; the LEDs will display white at 50% brightness.
3. Press the "FLASH" button three times in succession—the LED brightness will shift from 25% to 10%.
4. If the pairing is successful, the controller will return to its previous state before powering off.
5. If unsuccessful, repeat steps 1-4.

APPLICATION CIRCUIT:
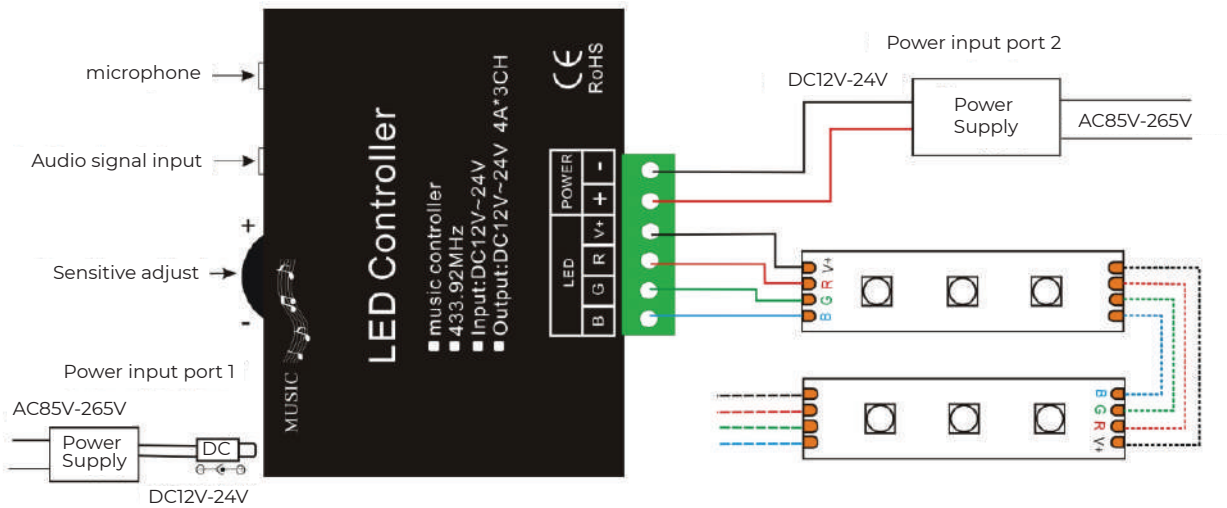
NOTES:

1. This product operates on a DC12V~24V power supply. Do not connect it to any other voltage or AC220V.
2. Ensure proper wiring connections as per the provided wiring diagram.
3. Do not exceed the recommended load capacity.
4. This product comes with a two-year warranty, excluding damage caused by misuse, overloading, or external factors.

COMMON PROBLEMS

Problems	Possible cause	Solution
1. Lamp does not turn on after powering up.	The power cord is not properly connected, or the power supply has no output.	Properly connect the power cord or reset the power supply.
	The lamp's power cord is either disconnected or has a short circuit.	Ensure the lighting power cord is securely connected.
2. The controller stops working after connecting a load.	The connected load is too high, potentially damaging internal components of the controller.	Replace damaged components or the controller if necessary.

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