

GLEDOPTO GL-C-201W

GLEDOPTO GL-C-201W WiFi 5-in-1 LED Controller

Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the installation, setup, and operation of your GLEDOPTO GL-C-201W WiFi 5-in-1 LED Controller. This versatile controller supports various LED strip types including RGB CCT, RGBW, RGB, and single-color dimmer strips, offering flexible control options via WiFi, Bluetooth, and voice commands.

2. PRODUCT OVERVIEW

The GLEDOPTO GL-C-201W is a multi-functional LED controller designed for smart home integration. It allows for precise control over your LED lighting, including color, color temperature, and brightness adjustments. Key features include:

- **5-in-1 Compatibility:** Supports RGB CCT, RGBW, RGB, and Dimmer LED strips.
- **Multiple Control Modes:** 2.4GHz WiFi RF remote control (remote not included), Tuya/Smart Life APP control, and voice control compatibility with Amazon Alexa Echo.
- **High Current Capacity:** Maximum total output current of 20A, suitable for LED strips from 5 to 20 meters in length.
- **Enhanced Connectivity:** Features improved connection terminals for easier wiring.
- **Power-on State Setting:** Allows users to configure the default behavior of the lights when power is restored.
- **Extensive Color Options:** Offers 16 million colors and adjustable color temperature for

personalized lighting effects.

tuya **WiFi** **Bluetooth**

WiFi 5IN1 LED Controller

Total output current **20A Max**

WORKS WITH amazon alexa WORKS WITH Google Assistant

Model NO.:
GL-C-201W

Input Voltage:
DC12-24V

Wireless Communication:
WiFi+2.4G RF+Bluetooth

Material:
Fireproof PC

Size:
18x45x108mm

N.W.:
58.1g

Output Current/Channel:
15A Max

Total Output Current:
20A Max

IP Rate:
IP20

Output Plug Type:
DC 5.5x2.1mm

Operating Temperature:
-20°C~45°C

G.W.:
68.9g

Quick Connect Port

Image: GLEDOPTO GL-C-201W WiFi 5-in-1 LED Controller showing its design, input/output ports, and key specifications like model number, input voltage, output current, and dimensions.

3. SPECIFICATIONS

Parameter	Value
Model Number	GL-C-201W
Input Voltage	DC 12-24 V
Output Current/Channel	Max. 15 A
Total Output Current	Max. 20 A
Operating Temperature	-20 °C to +45 °C
Wireless Communication	WiFi + 2.4G RF + Bluetooth
Material	Fireproof PC

Size	18x45x108mm
IP Rate	IP20
Output Plug Type	DC 5.5x2.1mm
Product Weight	70 Grams

4. PACKAGE CONTENTS

Please verify that all items are present in the package:

- 1x GLEDOPTO WiFi 5-in-1 LED Controller (GL-C-201W)
- 1x User Manual
- 1x Packaging Box
- 1x 3cm Sticker

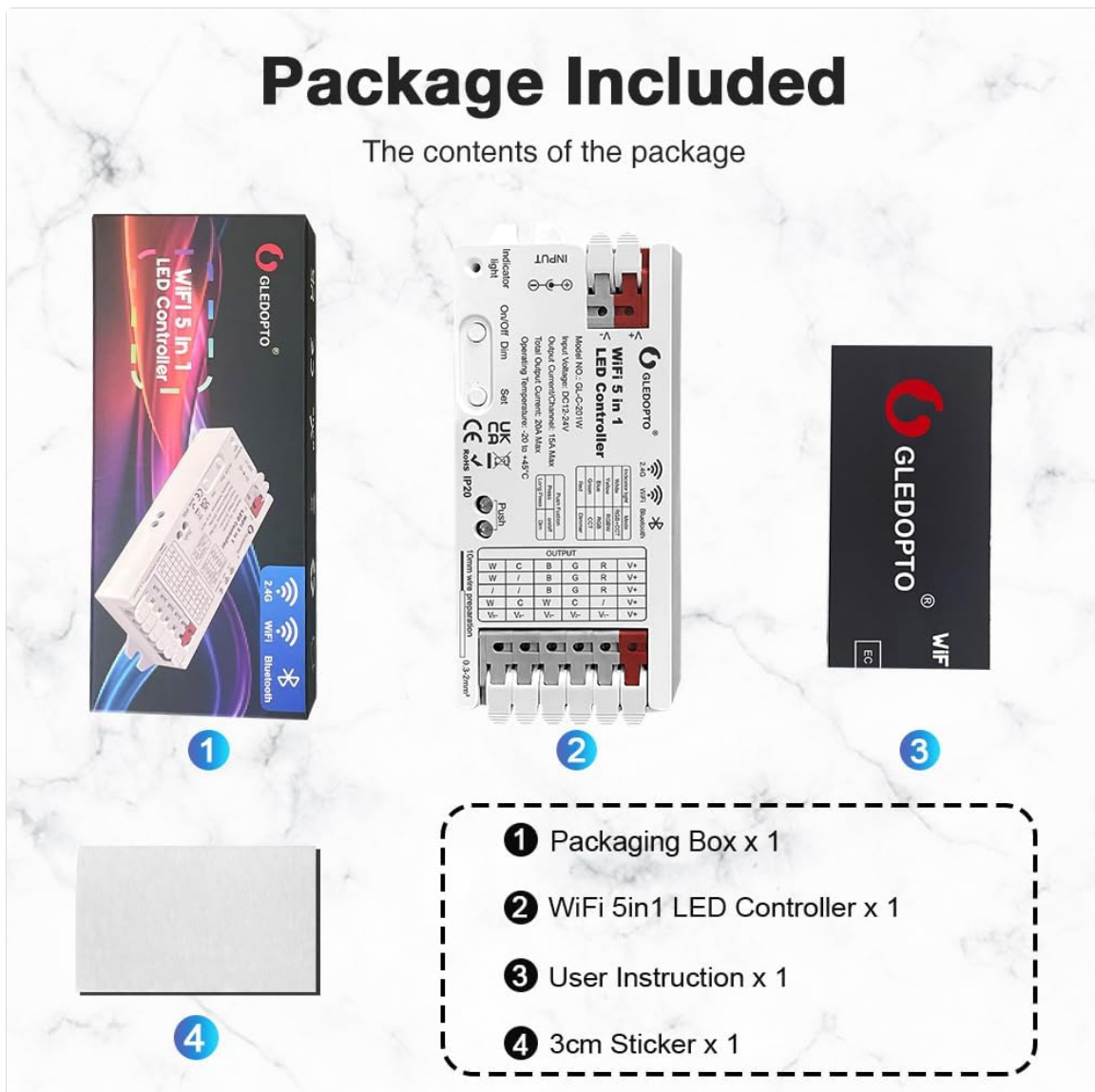


Image: Contents of the GLEDOPTO LED controller package, including the controller unit, user manual, and other

5. SETUP

5.1 Wiring Diagram

The GL-C-201W controller features improved connection terminals for easy wiring. Ensure the power supply is disconnected before making any connections. The wiring configuration depends on the type of LED strip you are using:

- **RGBCCT:** Connect the R, G, B, CW, WW, and V+ terminals.
- **RGBW:** Connect the R, G, B, W, and V+ terminals. No connection to 'N' terminal.
- **RGB:** Connect the R, G, B, and V+ terminals. No connection to 'N' terminal.
- **CCT:** Connect two CCT strips to CW, WW, and V+ terminals. No connection to 'N' terminal.
- **Dimmer:** Connect five single-color strips to the V+, V-, and other terminals as required.

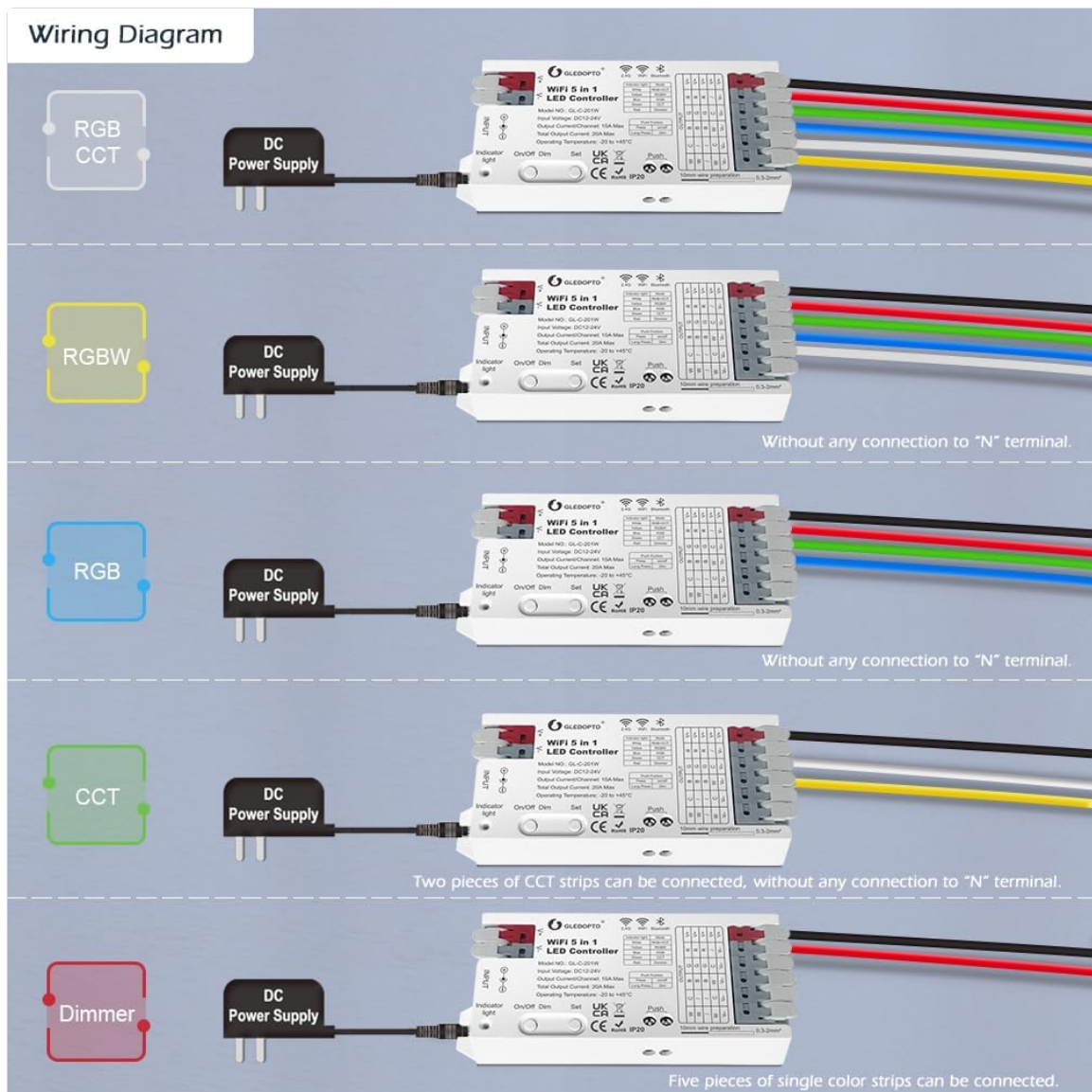


Image: Detailed wiring diagrams illustrating how to connect different types of LED strips (RGBCCT, RGBW, RGB, CCT, Dimmer) to the GLEDOPTO controller.

5.2 App Connection (Tuya / Smart Life)

The controller can be managed via the Tuya or Smart Life smartphone application. Follow these general steps to connect:

1. Download the Tuya Smart or Smart Life app from your device's app store.
2. Register or log in to your account.
3. Ensure your controller is powered on and in pairing mode (indicator light may flash).
4. In the app, tap '+' to add a new device. Select 'Lighting' or 'LED Controller'.
5. Follow the on-screen instructions to connect the controller to your 2.4GHz WiFi network.



Image: Illustration of a smartphone app controlling smart lighting in a home environment via 2.4GHz WiFi, demonstrating remote control capabilities.

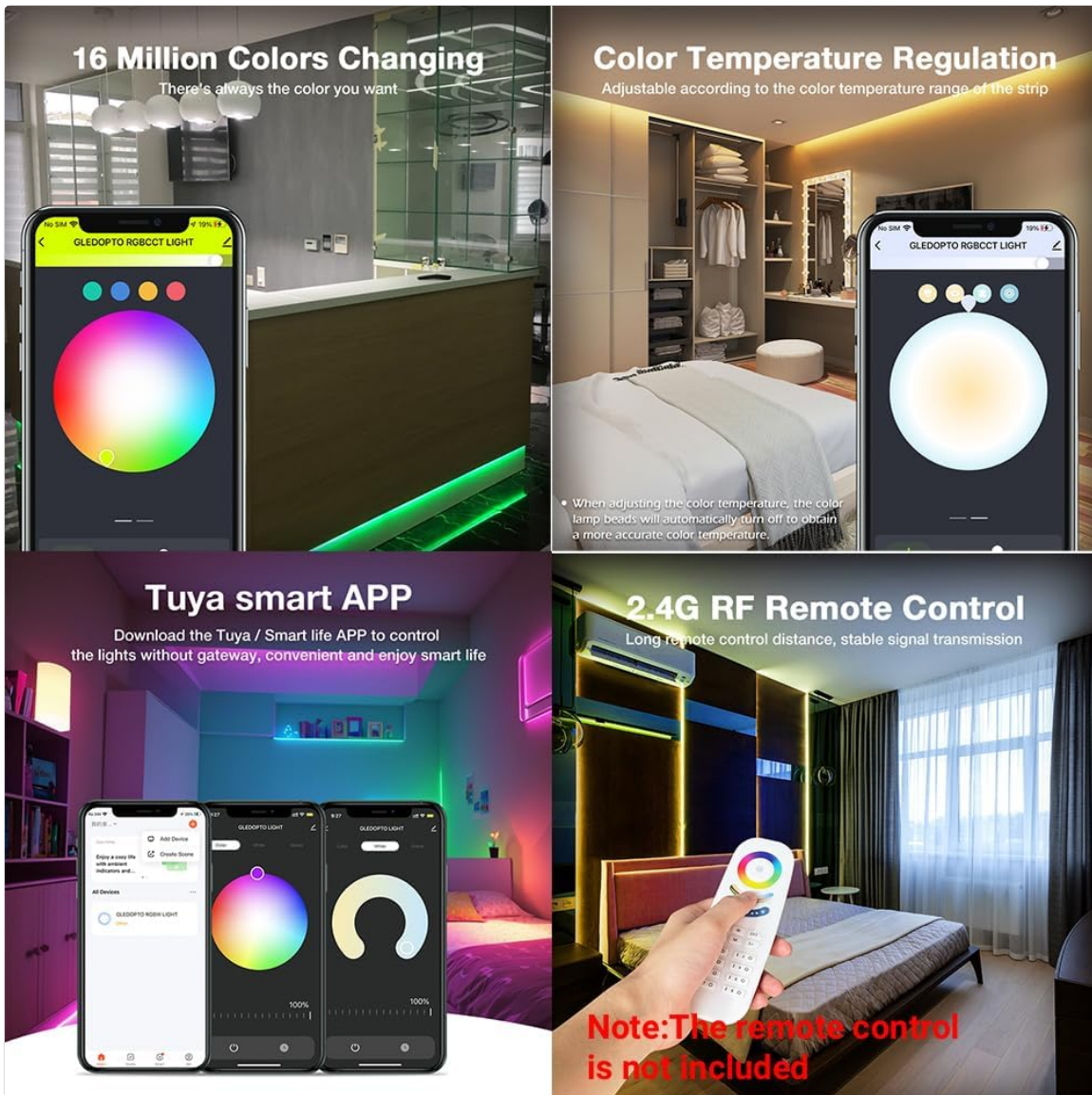


Image: Screenshots of the Tuya/Smart Life app interface, displaying options for 16 million color changes and color temperature regulation, alongside a 2.4G RF remote control (note: remote not included with controller).

5.3 Voice Control Setup (Amazon Alexa)

To enable voice control with Amazon Alexa, ensure your controller is successfully connected to the Tuya/Smart Life app. Then, link your Tuya/Smart Life account to your Amazon Alexa account through the Alexa app. Once linked, you can use voice commands to control your lights.

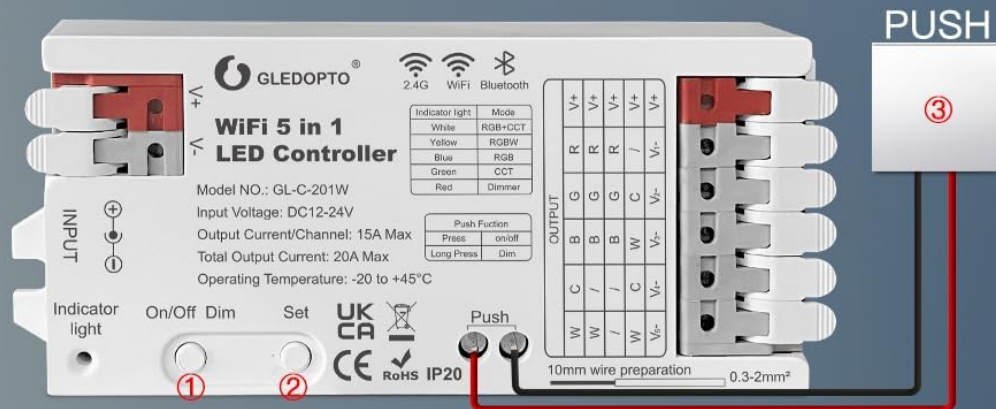
6. OPERATING INSTRUCTIONS

6.1 Button Functions

The controller features physical buttons for basic operation:

Key function

Easy to operate, easy to use



1 On/Off Dim

Short press: On/off.

Long press: Adjust brightness (Assuming: Long press increases brightness, release and long press again decreases brightness).

2 Set

Short press: Switch the current device function; Short press twice: Switch frequency.

Long press for 3 seconds: Reset the controller (Default back to RGBCCT mode)

Short press the times: Turn on/off memory function. The light strip will flash 3 times to indicate successful activation/deactivation of memory function (Default is off. Memory function determines whether to remember the switch status before power off).

3 Push

Short press: Power On/Off;

Long press: Adjust brightness (Assuming: Long press increases brightness, release and long press again decreases brightness).

Image: Close-up view of the GLEDOPTO controller's buttons and their corresponding functions for operation and settings.

• 1. On/Off Dim Button:

- Short press: Turns the light On/Off.
- Long press: Adjusts brightness. (Long press increases brightness, release and long press again decreases brightness).

• 2. Set Button:

- Short press: Switches the current device function (e.g., between RGB, CCT, Dimmer modes).
- Short press twice: Switches frequency.
- Long press for 3 seconds: Resets the controller (defaults back to RGBCCT mode).
- Short press multiple times: Sets the power-on memory function. The light strip will flash 3 times to indicate successful activation/deactivation of memory function.

• 3. Push Button:

- Short press: Power On/Off.
- Long press: Adjusts brightness (similar to On/Off Dim button).

6.2 App Control

Once connected to the Tuya/Smart Life app, you can:

- Select from 16 million colors.
- Adjust color temperature (warm white to cool white).
- Control brightness levels.
- Set schedules and timers.
- Create custom scenes.

6.3 Voice Control

With Amazon Alexa integration, you can use voice commands for hands-free control. Examples include:

- "Alexa, turn on the [Light Name]."
- "Alexa, turn off the [Light Name]."
- "Alexa, set [Light Name] to warm white."
- "Alexa, set [Light Name] to 70% brightness."
- "Alexa, change [Light Name] to blue."

Works With Amazon Echo Plus

You can adjust on/off, brightness, through voice command, which can free your hands

Alexa, Turn on the Living Room light.

ok.

Color temperature adjustment 
You can say:
"Alexa, set to warm white."
"Alexa, set to warm yellow."

ON/OFF 
You can say:
"Alexa, turn off the light."
"Alexa, turn on the light."

Adjust brightness 
You can say:
"Alexa, increase to 70%."
"Alexa, increase to 20%."

Image: An Amazon Echo Plus device illustrating how voice commands can be used to adjust lighting, including turning lights on/off, changing color temperature, and setting brightness levels.

7. POWER-ON STATE SETTING

The controller allows you to configure its behavior when power is restored after an outage. You can choose between two modes:

- **Remember Last State:** The lights will return to their state (on/off, color, brightness) before the power failure.
- **Lights Up by Default:** The lights will turn on to a default setting (e.g., full brightness white) when powered on.

To set the power-on state, long press the "Set" key for more than 5 seconds. The indicator light will flash 3 times to confirm the setting has been saved. Repeat the process to toggle between the two modes.



Image: Visual representation of the two power-on state options for the GLEDOPTO controller, allowing users to choose whether the device remembers its last state or defaults to 'on' after a power cycle.

8. MAINTENANCE

The GLEDOPTO GL-C-201W LED Controller requires minimal maintenance. Keep the device clean and free from dust. Do not expose it to moisture or extreme temperatures outside its operating range (-20 °C to +45 °C). Do not attempt to open or repair the device yourself, as this will void any warranty.

9. TROUBLESHOOTING

- **Lights not turning on:**

- Check if the power supply is correctly connected and providing the correct voltage (DC 12-24V).
- Ensure the LED strip is properly wired to the controller's output terminals.
- Verify that the controller is receiving power (indicator light should be on).

- **Cannot connect to App:**

- Ensure your smartphone is connected to a 2.4GHz WiFi network (5GHz networks are not supported for initial pairing).
- Make sure the controller is in pairing mode (refer to app instructions for specific pairing steps).
- Restart your router, controller, and smartphone, then try pairing again.
- Reset the controller by long pressing the 'Set' button for 3 seconds and attempt pairing again.

- **Voice control not working:**

- Confirm that the controller is successfully connected and controllable via the Tuya/Smart Life app.
- Ensure your Tuya/Smart Life account is correctly linked to your Amazon Alexa account.
- Check your internet connection.
- Use the exact device names configured in your app when giving voice commands.

- **Incorrect colors or modes:**

- Verify that the correct LED strip type is selected in the app or by using the 'Set' button on the controller.
- Check the wiring connections for your specific LED strip type.

10. WARRANTY AND SUPPORT

GLEDOPTO products are designed for reliability and performance. For warranty information, please refer to the terms and conditions provided at the point of purchase or contact your retailer. If you encounter any issues or require technical assistance, please contact GLEDOPTO customer support through their official website or the contact information provided with your product. Please have your model number (GL-C-201W) and purchase details ready when contacting support.

