GLEDOPTO GL-C-208M

GLEDOPTO GL-C-208M Matter RGBCCT LED Strip Light Controller User Manual

1. INTRODUCTION

This manual provides detailed instructions for the installation, setup, and operation of your GLEDOPTO GL-C-208M Matter RGBCCT LED Strip Light Controller. This device offers advanced control over RGBCCT LED strips, enabling precise color and tunable white light adjustments. It is Matter-certified for broad compatibility with leading smart home platforms.

Image: The GLEDOPTO ACK RGBCCT LED Controller, highlighting its Amazon Zero-Touch Connect feature and Matter over WiFi capability.

2. PRODUCT FEATURES

- **Reliable Connectivity:** Matter-certified for seamless integration with Alexa, Google Assistant, and Apple Home.
- **Professional RGBCCT Control:** Offers precise RGB color and tunable white light adjustment (warm to cool).
- **Power Specifications:** Supports DC 5-24V input with up to 15A per channel and 20A total output.
- **Offline Functionality:** Works even when the internet is offline with Matter-compatible hubs.
- **Amazon Alexa Simple Setup:** Exclusive zero-touch pairing for compatible Echo devices.

- **Remote Control:** Manage lighting via the Alexa app from any location (requires Matter-compatible Echo device at home).
- **Customization:** Access 16 million colors and adjust brightness from 1-100%. Create custom routines.
- **Safe Installation:** Flame-retardant PC housing with tool-free Easy connectors.

Image: The GLEDOPTO Smart LED Controller demonstrating its compatibility with multiple smart home platforms including Apple Home, Amazon Alexa, and Google Home.

ACK-Certified Matter Controller

This product is certified by Amazon to work with Alexa.This product can be controlled with your voice through Alexa-enabled devices such as Amazon Echo and Amazon Tap.

Image: A certificate confirming the GLEDOPTO LED Controller is ACK-Certified Matter, ensuring compatibility with Alexa-enabled devices.

3. PACKAGE CONTENTS

Verify that all items are present in your package:

- 1 x Packaging Box
- 1 x Smart LED Controller (GL-C-208M)
- 1 x User Instruction Manual
- 1 x 3cm Sticker

Image: Visual representation of the package contents, including the controller, packaging box, user manual, and a sticker.

4. PRODUCT OVERVIEW

The GLEDOPTO GL-C-208M controller features a compact design with clearly labeled input and output terminals, an indicator light, and control buttons.

Image: A detailed view of the GLEDOPTO GL-C-208M Smart LED Controller, highlighting its input (V+/V-), output (R, G, B, C, W), indicator light, On/Off and Reset buttons, and Matter QR code.

Product details
Details create quality

1 **Total Output Current**
20A Max

2 **Matter**
High security

3 **Support for push button switch.**

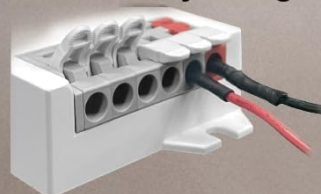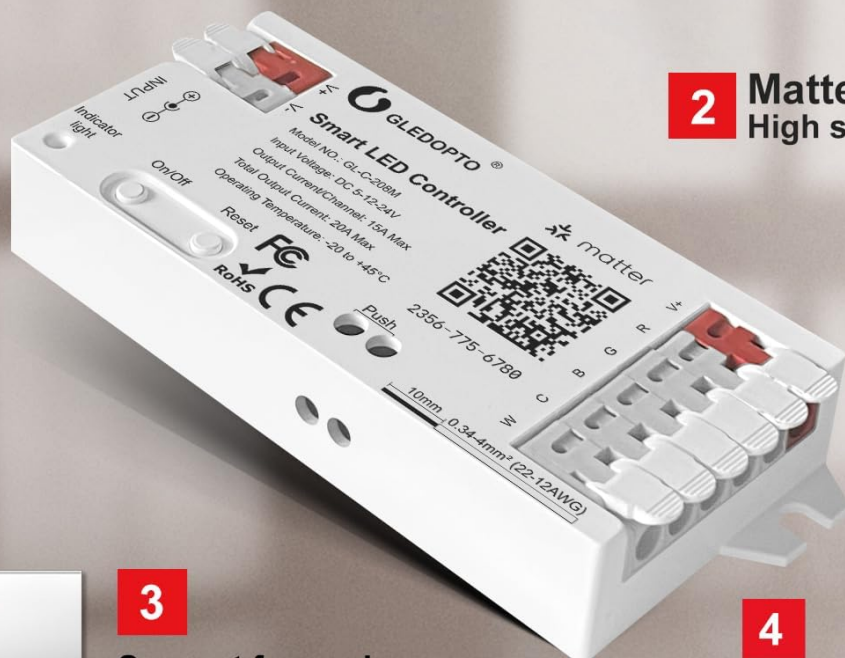**4** **Quick wire connector Easy wiring**

Image: Key product details of the controller, including its 20A maximum output current, Matter high security, support for external push button switches, and quick wire connectors for easy wiring.

5. SETUP AND INSTALLATION

5.1 Wiring Instructions

The controller features tool-free quick wire connectors for easy and secure connections. Ensure the power supply is disconnected before wiring.

1. **Open the Connector:** Gently press down on the top of the connector to open the terminal.
2. **Insert Wires:** Insert the appropriate wires (V+, R, G, B, C, W) from your LED strip into the corresponding terminals.
3. **Secure Wires:** Release the connector to secure the wires in place.
4. **Power Input:** Connect your DC 5-24V power supply to the V+/V- input terminals or use the DC 5.5x2.1mm jack.

Product parameters

Craftsman spirit, quality is guaranteed

Model No.: GL–C–208M	**Input voltage:** DC 5–12–24V
Output Current/Channel: 15A Max	**Total Output Current:** 20A Max
Protocol: Matter over WiFi	**Material:** Flame Retardant PC
Wire Type: 0.34–4mm²(22–12AWG)	**Stripping Length:** 10mm
N.W.: 55.1g	**G.W.:** 63.1g
Operating Temperature: −20~45℃	**Size:** 108x45x18mm

Image: A visual guide demonstrating the quick connect port design, showing how to open the connector, insert wires, and complete the wiring.

5.2 Zero-Touch Pairing (Amazon Alexa)

For Amazon Alexa users, the GLEDOPTO controller supports Zero-Touch Pairing for simplified setup.

1. **Prepare Echo Device:** Ensure your Echo device is updated (say "Alexa, check for updates") and registered to your Amazon account.
2. **Power On Controller:** Connect the GLEDOPTO controller to power.
3. **Automatic Pairing:** If purchased with "Link to your Alexa" selected at checkout, the device should automatically appear in the Alexa app.
4. **Complete Setup:** Follow the prompts in the Alexa app to complete the setup.

Note: A Matter-compatible Echo device is required for remote control and zero-touch pairing.

Zero-Touch Pairing Guide

Step1

Pre-save the WiFi SSID and password. Ensure that an Echo device is already registered.

Step2

The user's account used for placing the order must be the same as the Echo device's account.

Step3

Purchase the device on amazon.com.

Step4

☑ Link to your Alexa account and to Sengled to simplify setup. *Sengled's Privacy Policy*

Once FFS support is available, you will see this option on the product's detail page; just check the box.

Step5

After powering on the device, wait for a short period. A pairing device will automatically appear in the Alexa interface, then select it to connect.

Note: A Matter-compatible Echo device is required.

Image: A five-step guide illustrating the Zero-Touch Pairing process for Amazon Alexa, from pre-saving WiFi to automatic device detection in the Alexa app.

ACK Zero-touch
Same network and account, directly connect and use, no need to scan code

No need to scan code

Image: A comparison showing the simplicity of ACK Zero-touch pairing versus traditional pairing methods, emphasizing direct connection without scanning codes.

Video: This video demonstrates the GLEDOPTO ACK Matter RGBCCT LED Controller's Zero-Touch Pairing process, showcasing how it simplifies connecting the device to your smart home system compared to traditional methods.

5.3 General Smart Home Connection (Matter)

For other Matter-compatible platforms (Apple Home, Google Home), follow the standard Matter pairing process:

1. **Power On:** Connect the GLEDOPTO controller to power.
2. **Open App:** Open your preferred smart home application (e.g., Apple Home, Google Home, Alexa app).
3. **Add Device:** Navigate to the 'Add Device' or '+' option within the app.
4. **Scan QR Code:** Scan the Matter QR code located on the controller or in the quick start guide.
5. **Follow Prompts:** Complete the pairing process by following the on-screen instructions in your smart home app.
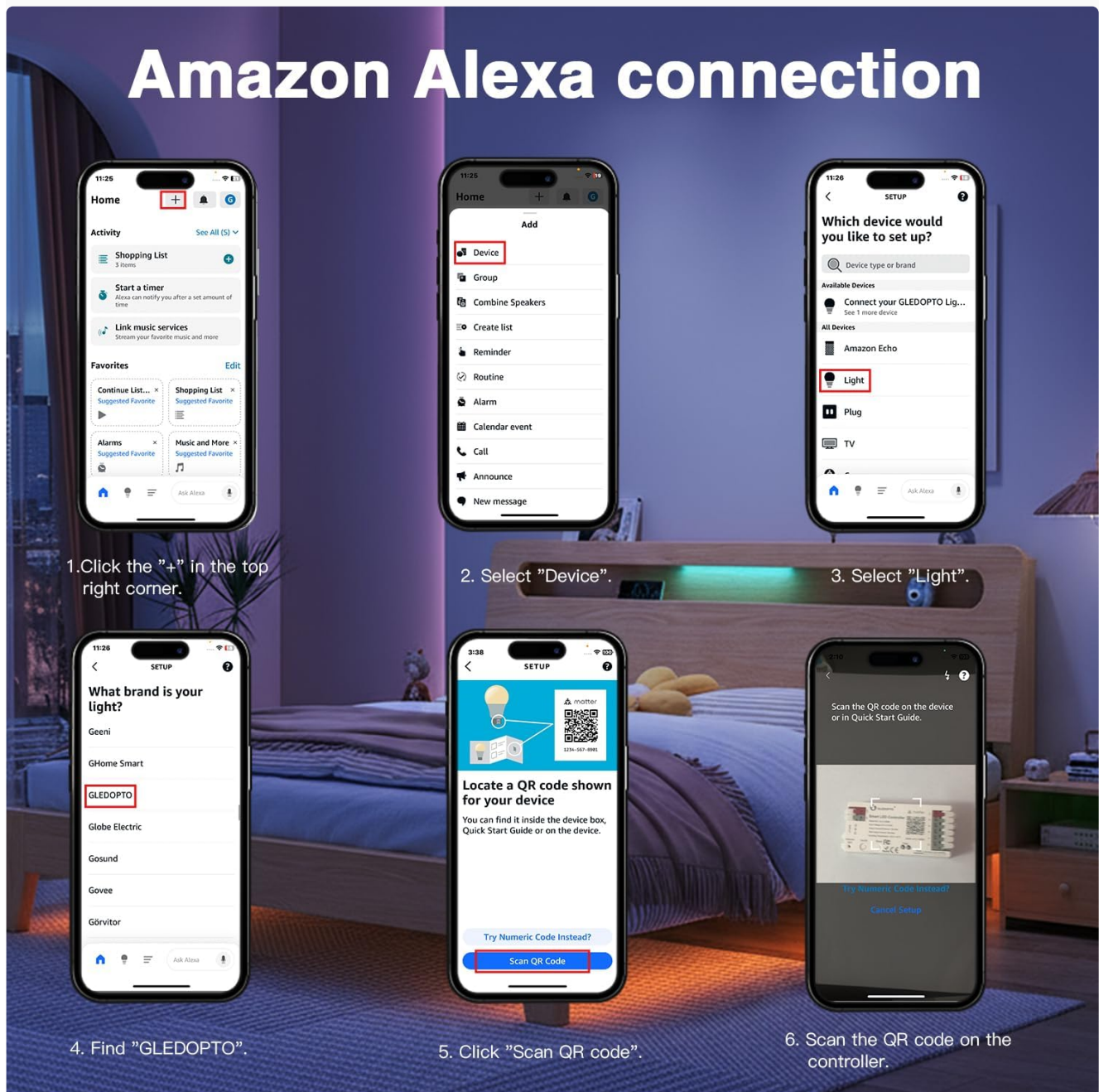

Image: A six-step visual guide detailing how to connect the GLEDOPTO controller to Amazon Alexa, including navigating the app, selecting the device type, and scanning the QR code.

6. OPERATION

6.1 App Control

Once paired, use your smart home app (Alexa, Google Home, Apple Home) to control your LED strip lights.

- **Color Selection:** Choose from 16 million colors to set the ambiance.
- **Brightness Adjustment:** Adjust the light intensity from 1% to 100%.
- **Color Temperature:** Tune white light from warm to cool tones.
- **Scenes and Routines:** Create custom scenes or schedule routines for automated lighting.

Note: RGB and white LEDs cannot illuminate simultaneously for accurate color control.

Image: The smart home app interface demonstrating the ability to select from 16 million colors, adjust color temperature, and control brightness from 1% to 100%.

Image: A smartphone displaying the app interface for controlling LED lighting, showing color and brightness adjustments.

6.2 Voice Control

Utilize voice commands through your Matter-compatible smart speaker (e.g., Amazon Echo, Google Nest, Apple HomePod) for hands-free control.

- **Turn On/Off:** "Alexa, turn on the living room light."
- **Adjust Brightness:** "Hey Siri, brightness increased to 70%."
- **Change Color:** "Ok Google, change the light to blue."

Note: The controller and your smart speaker must be on the same network for voice control functionality.
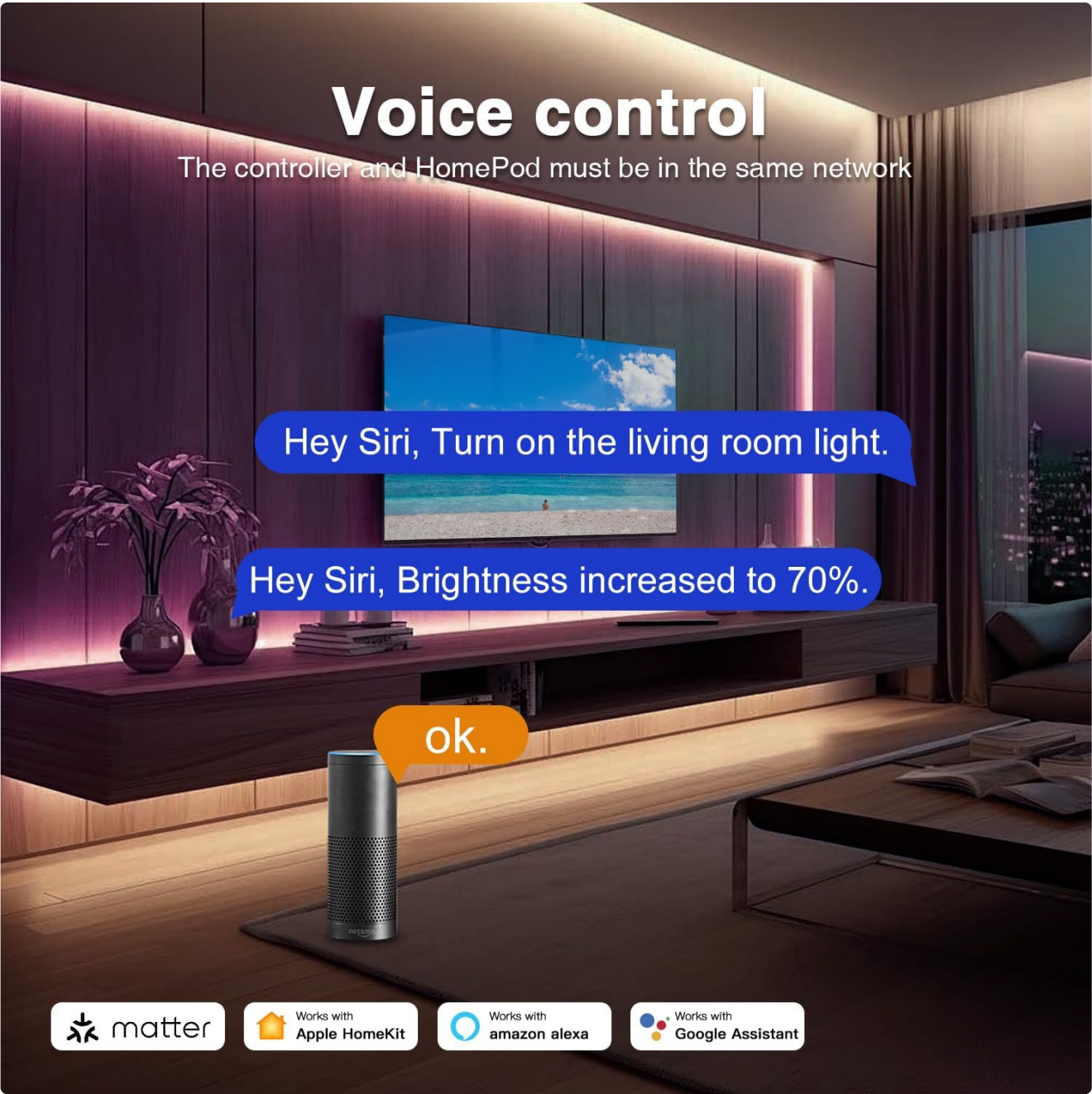
Image: A living room setting demonstrating voice control of LED lighting using a smart speaker, with examples of commands for Siri and Google Assistant.

7. SPECIFICATIONS

Parameter	Value
Model No.	GL-C-208M
Input Voltage	DC 5-12-24V
Output Current/Channel	15A Max
Total Output Current	20A Max
Protocol	Matter over WiFi
Wire Type	0.34-4mm² (22-12AWG)

Stripping Length	10mm
Material	Flame Retardant PC
Operating Temperature	-20 to +45°C
Item Weight	1.76 ounces (50g approx)
Dimensions	4.29 x 1.89 x 0.82 inches (108x45x18mm)

Image: A visual representation of the product parameters, including model number, input voltage, output current, protocol, and physical dimensions.

8. TROUBLESHOOTING

- **Device Not Pairing:**

  - Ensure your smart home hub (e.g., Echo device) is Matter-compatible and updated.
  - Verify the controller is powered on and within range of your Wi-Fi network.
  - Confirm your smart home app is updated to the latest version.
  - Try resetting the controller by pressing the 'Reset' button.

- **Lights Not Responding:**

  - Check all wiring connections to ensure they are secure and correct.
  - Verify the power supply is functioning correctly and providing the correct voltage.
  - Ensure the controller and your smart speaker/app are on the same Wi-Fi network.

- **Inconsistent Color/Brightness:**

  - Confirm that your LED strip is RGBCCT compatible.
  - Note that RGB and white LEDs cannot be active simultaneously for accurate color mixing.

- **Loss of Settings After Power Off:**

  - Some smart home systems may not retain settings if the controller loses power completely. This is a system-level behavior rather than a device fault.

9. WARRANTY AND SUPPORT

The GLEDOPTO GL-C-208M Matter RGBCCT LED Strip Light Controller comes with a **2-year manufacturer's warranty**.

For technical support, troubleshooting assistance, or warranty claims, please contact GLEDOPTO customer service through the platform where you purchased the product or visit the official GLEDOPTO website for contact information.