
TECHNICAL DOCUMENT

GLEDOPTO WLED WiFi Remote Control for ESP32/ESP8266 Controllers GL-RC-001WL

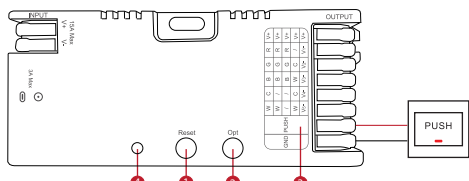
Product reference: GL-RC-001WL

Brand: GLEDOPTO

Original Brand document

The original technical pages follow this distributor cover and are preserved without changes to Brand identity, specifications, diagrams, certifications or claims.

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① Reset

Short press: Switch the frequency.
Long press for 5 seconds: Reset the controller.
(After reset, it defaults back to RGB CCT).

② OPT

Short press: Switch the current device function.
Long press for 5 seconds: Power-on status settings.
(power-on status settings is disabled by default.)

③ Push

Short press: Power On/Off
Long press: Adjust brightness (Assuming: Long press increases brightness, release and long press again decreases brightness).

SPECIFICATION

Model No.:	GL-C-601P
Input Voltage	DC 5-12-24V
Input Current	15A Max
Output Current/Channel	10A Max
Type-C Power	DC 5V, 3A Max
Protocol	ZigBee, 2.4G RF
Housing Material	Flame Retardant PC
Work Temperature	-20~45°C
IP Rate	IP20
Size	129x50x23mm

④ Indicator light

Different color indicators correspond to different functions.

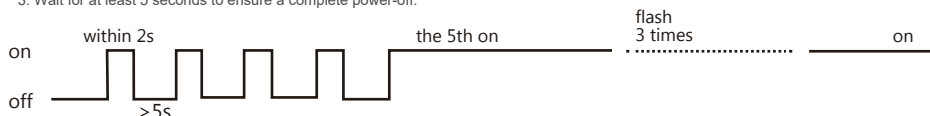
Functions of different indicator colors shown as following table:

	RGB CCT	RGBW	RGB	CCT	Dimmer	Frequency switching	Enable/disable memory function
Indicator Color	White	Yellow	Blue	Green	Red	Purple	Light blue

Note: When the Zigbee device is not paired into a network, the indicator light will blink.

Reset method

- Button reset:** Long press the RESET button for 5 seconds, the LED strip will flash 3 times to indicate that the reset is complete.
- Power On/Off reset:**
 - Power on the light strip controller.
 - Within 2 seconds, disconnect the power.
 - Wait for at least 5 seconds to ensure a complete power-off.
 - Repeat the above steps 5 times.
 - The light strip will flash 3 times, indicating that the reset is complete.



Connecting with the Gateway

Network Connection:

- Connect the controller to the power source correctly.
- Use the gateway's app to initiate device search and wait for a certain period of time (refer to the instructions of each gateway). If the gateway doesn't find the controller, try powering off and on the controller again, or reset the controller.
- Once the gateway finds the controller, add the controller to the specified room or group.
- After successful network connection, you can start using the controller.

The product works with many ZigBee 3.0 Gateways like Philips Hue, Amazon Echo Plus or SmartThings.



RGB+White Light Mix



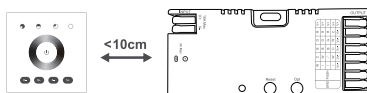
When the color loop moves at the edge, only the RGB light turns on.

When the color loop moves to the mid, both the RGB light and white light turn on together.

ZigBee Touch Link Pairing

- Method 1: Quickly press the device's reset button three times to enter touch link pairing mode.
Method 2: Re-power the unconnected device and it will immediately enter touch link pairing mode.
Method 3: Connected devices will enter touch link pairing mode immediately after being connected to the network.

- To ensure a successful touch link pairing, the distance between the device and the remote control or touch panel must be less than 10cm.



- Set the remote control or touch panel to enter touch link pairing mode (refer to the instructions for each Touchlink remote control or touch panel for details).
- If the connection is successful, the remote control or touch panel will indicate success. After successful TouchLink, the remote control can control the device.

*Note:

- Direct TouchLink (when two devices are not added to the same ZigBee network), each device can only be connected to one remote control.
- After the device and remote control are added to the same ZigBee network, a device can be connected to a maximum of 30 remote controls.
- For Philips Bridge and Amazon Echo Plus, the device and remote control need to be added to the same network before performing TouchLink.

Pairing with 2.4GHz RF Remote Control

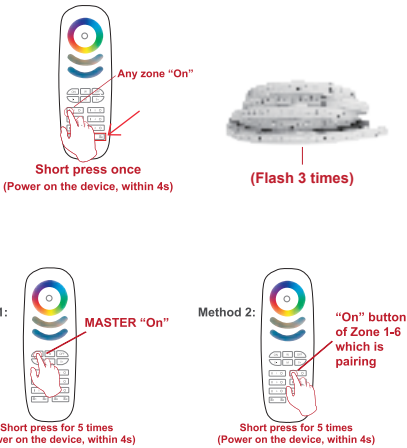
- ① The pairing will be timeout after 4 seconds when the device powered on.
- ② The pairing will be done successfully by pressing any zone "On"key of the 2.4G RF Remote or touch panel.
- ③ The indications from the device will **blink 3 times**.

2.4GHz Remote Control Scene Memory Function

- ① Click on the button (S1, S2, S3, S4) of the remote control to enter the scene memory function.
- ② Long press to save the scene; Short press to activate the scene.

Reset the 2.4GHz RF Network

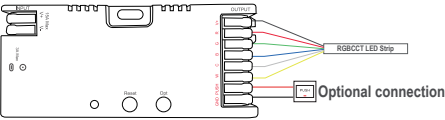
- ① Method 1: Short press the Master "On" Key 5 times within 4 seconds after the device powered on, the device will **blink 3 times**.
- ② Method 2: Short press continuously 5 times the Zone "On" key the device being paired within 4 seconds after the device powered on, the device will **blinks 3 times**.



Wiring diagram

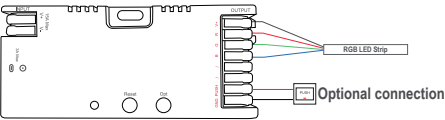
RGBCTT:

Under RGBCTT function, the RGBCTT strip can be connected to the device.



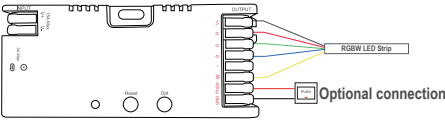
RGB:

Under RGB function, the RGB strip can be connected, without any connection to "N" terminal.



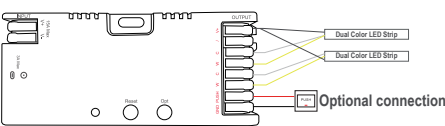
RGBW:

Under RGBW function, the RGBW strip can be connected, without any connection to "N" terminal.



CCT:

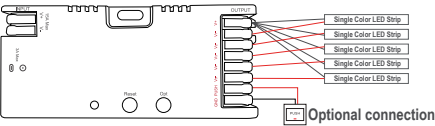
Under CCT function, two pieces of CCT strips can be connected, without any connection to "N" terminal.



DIMMER:

Under dimmer function, five pieces of single color strips can be connected.

Note: The five led strips will be controlled simultaneously (cannot be controlled separately)



2.Frequency Settings

In order to be applicable to different power supplies, the frequency of device is selectable as 600Hz、800Hz、1000Hz、2000Hz、4000Hz、8000Hz with default frequency 1000Hz. Once short pressing "Reset" key, the frequency will switch into the next one. The indicator will flash in Pink color and resume to previous color after "off" for 2 seconds. The rule of indicator flashing times for different frequency please refer to table.

POWER-ON STATUS & FREQUENCY SETTINGS

1.Power-on Status Settings

Long press"opt"key for more than 5 seconds, the indicator flashes light blue for 3 times, the device will remember the on-off state before the last power failure and return to the previous state when powered on. Repeat the operation again to cancel this function, the device will be on by default when powered on.

1000Hz → 2000Hz → 4000Hz → 8000Hz → 600Hz → 800Hz → 1000Hz

	600Hz	800Hz	1000Hz	2000Hz	4000Hz	8000Hz
Flashing times	1	2	3	4	5	6



Attention

- 1. Before turning on the power, please ensure that all wiring is correct and secure. Do not operate while the power is on.
- 2. Use the product under the rated voltage. Overvoltage or undervoltage may cause damage.
- 3. Do not disassemble the product, as it may cause fire and electric shock.
- 4. Do not use the product in direct sunlight, damp, high-temperature, or other harsh environments.
- 5. Do not use the product in metal shielded areas or near strong magnetic fields, as it will severely affect the wireless signal transmission of the product.

DISCLAIMERS

- ★ Our company will update the content of this manual according to product functionality improvements. The updates will be reflected in the latest version of this manual without further notice.
- ★ Due to our continuous adoption of new technologies, the product specifications may change without prior notice.
- ★ This manual is for reference and guidance purposes only. It does not guarantee complete consistency with the actual product. Please refer to the actual product for practical applications.
- ★ The components and accessories described in this manual do not represent the standard configuration of the product. The specific configuration is subject to the package contents.
- ★ All text, tables, and images in this manual are protected by relevant national laws and may not be used without our company's permission.
- ★ This product is compatible with third-party products (such as apps, hubs, etc.) as stated in the gateway compatibility chart. However, our company takes no responsibility for any issues that may arise from changes made by third-party products, resulting in incompatibility or the partial loss of functionality.