

LEDLUX CL3801

LEDLUX CL3801 Mini Tuya Smart Controller WiFi LED Dimmer User Manual

Model: CL3801

Brand: LEDLUX

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your LEDLUX CL3801 Mini Tuya Smart Controller. This device is designed to control mono-color LED strips, offering smart dimming capabilities and compatibility with popular voice assistants like Amazon Alexa and Google Home.

2. SAFETY INFORMATION

- Ensure the power supply is disconnected before performing any installation or maintenance.
- Do not expose the device to moisture, water, or high humidity.
- Use only with compatible mono-color LED strips and appropriate 12V or 24V DC power supplies.
- Do not exceed the maximum output current of 6A.
- Keep out of reach of children.

3. PACKAGE CONTENTS

- 1x LEDLUX CL3801 Mini Tuya Smart Controller
- 1x User Manual (this document)

4. PRODUCT FEATURES

- Mini Tuya Smart Controller for 1-channel LED dimming.
- Supports 12V or 24V DC input/output.
- Maximum output current: 6A.

- Compatible with Amazon Alexa, Google Home, Mi, Aligenie, DuerOS Rokid.
- Operates exclusively on 2.4 GHz Wi-Fi networks (not compatible with 5 GHz).
- Compact dimensions for easy integration.

5. SPECIFICATIONS

Parameter	Value
Brand	LEDLUX
Model	CL3801 (AP-1CH-1)
LED Type Compatibility	Single Color
Input/Output Voltage	DC 5-24V
Output Current	6A/Channel (1 Channel)
Wi-Fi Frequency	2.4 GHz (not 5 GHz)
Dimensions (approx.)	9.4 x 5.08 x 2.54 cm
Weight (approx.)	40 g

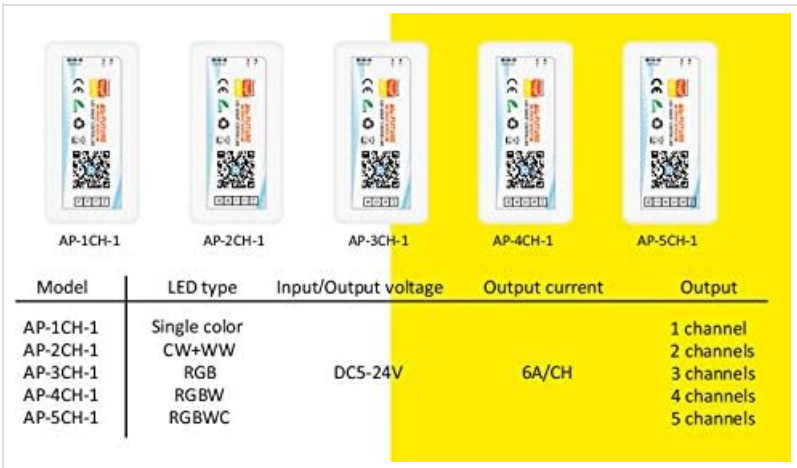


Figure 1: Specification overview for LEDLUX Smart Controller models. The CL3801 corresponds to the AP-1CH-1 model, designed for single-color LED strips with a 6A per channel output.

6. SETUP

6.1 Physical Connection

1. Ensure the power supply is turned off before making any connections.
2. Connect the positive (+) and negative (-) terminals of your 12V or 24V DC power supply to the 'V+' and 'V-' input terminals on the controller. The input terminals are typically located on one end of the device, often labeled 'DC 5-24V'.
3. Connect the positive (+) and negative (-) wires of your mono-color LED strip to the 'V+' and 'V-' output terminals on the other end of the controller. These are usually grouped together for the LED output.



Figure 2: Top view of the controller illustrating input and output connections. Ensure correct polarity for both power supply and LED strip.

6.2 App Installation

1. Download the **Tuya Smart** or **Smart Life** app from your mobile device's app store (Google Play Store for Android or Apple App Store for iOS).
2. Alternatively, scan the QR code provided on the product packaging or the device itself to quickly access the app download page. The direct link is <https://smartapp.tuya.com/smartlife>.
3. Register or log in to your account within the app.



Figure 3: Product packaging displaying the QR code for the Tuya Smart Life app.

6.3 Device Pairing (Wi-Fi Connection)

1. After connecting the controller and LED strip, turn on the power supply.
2. The LED indicator on the controller should start blinking rapidly. If it does not, power cycle the device 3-5 times (turn off and on quickly) until the LED indicator blinks rapidly, indicating it is in pairing mode.
3. Open the Tuya Smart or Smart Life app on your phone.
4. Tap the '+' icon in the top right corner to add a new device.
5. Select 'Lighting' from the category list, then choose 'Light Source (Wi-Fi)' or a similar option for LED controllers.
6. Confirm that the indicator light is blinking rapidly in the app.
7. Enter your 2.4 GHz Wi-Fi network name and password. **Note: 5 GHz Wi-Fi networks are not supported.**
8. The app will begin searching for the device. Once found and connected, you can rename the device for easier control.

7. OPERATING

7.1 App Control

- Once the device is successfully paired, open the Tuya Smart or Smart Life app.
- Select your LED controller from the device list.
- You can now turn the LED strip on/off, adjust its brightness, and set schedules or timers directly from the app.

7.2 Voice Control (Alexa/Google Home)

1. Ensure your LEDLUX controller is successfully connected to the Tuya Smart or Smart Life app.
2. Open the Amazon Alexa app or Google Home app on your mobile device.
3. Navigate to the 'Skills & Games' section (Alexa) or 'Works with Google' section (Google Home).
4. Search for and enable the 'Tuya Smart' or 'Smart Life' skill/service.
5. Link your Tuya Smart/Smart Life account when prompted.
6. Once linked, ask Alexa or Google Assistant to 'Discover devices'.
7. You can now control your LED strip using voice commands. Examples:
 - "Alexa, turn on [device name]"
 - "Hey Google, turn off [device name]"
 - "Alexa, set [device name] to 50 percent"
 - "Hey Google, dim [device name]"

8. MAINTENANCE

- Keep the device clean and dry. Use a soft, dry cloth for cleaning.
- Ensure the controller is placed in an area with adequate ventilation to prevent overheating.
- Periodically check all electrical connections to ensure they are secure.
- Do not attempt to disassemble or repair the device yourself.

9. TROUBLESHOOTING

- **Device not pairing:**
 - Ensure your Wi-Fi network is 2.4 GHz.
 - Confirm the controller's LED indicator is blinking rapidly (pairing mode). If not, power cycle 3-5 times.
 - Check that your phone is connected to the same 2.4 GHz Wi-Fi network.
 - Move the controller closer to your Wi-Fi router.
- **LED strip not lighting up:**
 - Verify the power supply is connected and functioning correctly.
 - Check all wiring connections for correct polarity and secure contact.
 - Ensure the LED strip itself is functional.
- **Voice control not working:**
 - Confirm your Tuya Smart/Smart Life account is correctly linked in the Alexa or Google Home app.
 - Ensure devices have been discovered by your voice assistant.
 - Use the exact device name you set in the Tuya app.

10. WARRANTY AND SUPPORT

For technical assistance, warranty claims, or any product-related inquiries, please contact LEDLUX customer service through your purchase platform or the official LEDLUX website. Please have your product model (CL3801) and purchase details ready when contacting support.