



VegasLights\_01

# Wi-Fi Smart LED Controller User Manual

Model: VegasLights\_01 | Brand: Generic

## 1. INTRODUCTION

The Wi-Fi Smart LED Controller, also known as the "LED Chauffeuse" or "Vegas Lights" system, is engineered for seamless control of 5V individually addressable LEDs such as WS2811 or WS2812B. This controller comes with the popular WLED software pre-installed, enabling extensive customization of lighting effects through a mobile application, web interface, or integration with smart home systems like Alexa. Its design prioritizes ease of use, featuring plug-and-play connectors and an internal antenna optimized for Wi-Fi networks. This manual provides essential information for setup, operation, and maintenance to help you create stunning lighting displays.

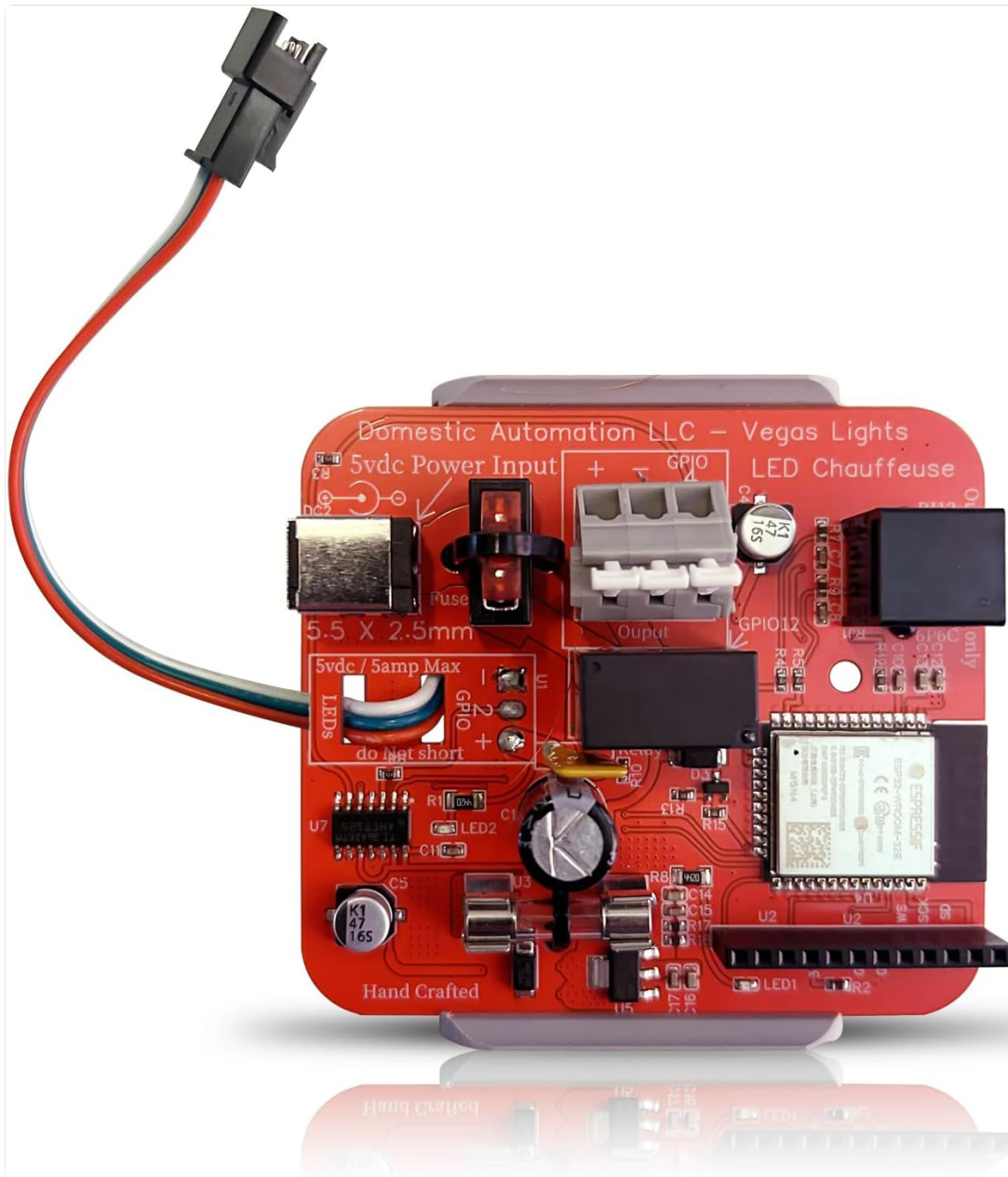


Figure 1: Wi-Fi Smart LED Controller (LED Chauffeuse)

## 2. FEATURES

- **Energy Efficient:** Includes a power relay to automatically shut down LEDs when not in use, conserving energy.
- **Smart LEDs Compatibility:** Designed for Individually Addressable LEDs (WS2812b or WS2811 5VDC), allowing each LED to display different colors simultaneously. Supports hundreds of animated effects like “Android”, “Rainbow Runner”, and “Twinklefox”.
- **Pre-Installed Software:** Comes preloaded with the popular open-source WLED (Wi-fi Lighting Effects Driver) software.
- **Easy Setup:** Quick start instructions and plug-in connectors facilitate rapid deployment without specialized tools.
- **Mobile Control:** Control your LED lighting via the free WLED smartphone app, available on Google Play Store and iOS App Store.
- **Expandable:** Supports optional peripheral add-ons such as motion sensors and/or buttons via an RJ12 connector cable.

- **Built-in Antenna:** Optimized for reliable 2.4 GHz Wi-Fi network connectivity.
- **Easy Mounting:** Features a 2.75-inch-long track for simple placement in concealed locations.

### 3. SAFETY INFORMATION

Please read and understand all safety instructions before operating the device. Failure to do so may result in injury or damage to the product.

- **Power Supply:** Use only a 5-volt DC power supply with a 2.5x5.5mm barrel connector. Using an incorrect voltage (e.g., 12V) will damage the controller and connected LEDs.
- **Current Management:** For setups involving many LEDs or high brightness, ensure your power supply can provide sufficient current (amperage). It is recommended to use thick gauge wires and multiple power injection points along long LED strips to prevent voltage drop and overheating.
- **Fuses:** The controller is equipped with fuses for protection. If the device stops functioning, check and replace any blown fuses with the correct rating.
- **Indoor Use Only:** This product is designed for indoor use. Do not expose it to moisture or outdoor elements.
- **Ventilation:** Ensure adequate ventilation around the controller to prevent overheating, especially when operating at high loads.

### 4. PACKAGE CONTENTS

- 1 x Wi-Fi Smart LED Controller (LED Chauffeuse)
- Quick Start Card
- Plug-in Connectors

*Note: A 5VDC power supply and compatible WS2811/WS2812B LED strips are sold separately and are required for operation.*

### 5. SETUP & INSTALLATION

Follow these steps to set up your Wi-Fi Smart LED Controller:

1. **Connect LED Strips:** Connect your 5V WS2811 or WS2812B LED strips to the designated output terminals on the controller. The controller is designed for individually addressable LEDs.
2. **Connect Power Supply:** Plug your 5V DC power supply (with a 2.5x5.5mm barrel connector) into the power input port on the controller. Ensure the power supply is rated for sufficient current based on the length and density of your LED strips.
3. **Initial Power-Up:** Once connected, the controller will power on. The pre-installed WLED software will create a Wi-Fi Access Point (AP) named "WLED-AP" (or similar).
4. **Connect to WLED-AP:** On your smartphone or computer, connect to the "WLED-AP" Wi-Fi network. No password is required for the initial connection.
5. **Access WLED Interface:** Once connected to the WLED-AP, open a web browser and navigate to <http://4.3.2.1> or <http://wled.local>. This will open the WLED configuration interface.

6. **Configure Wi-Fi:** In the WLED interface, go to "Config" > "WiFi Setup". Enter your home Wi-Fi network's SSID (name) and password. This will connect the controller to your home network, allowing control from any device on that network.
7. **Install WLED App (Optional but Recommended):** Download the official WLED app from your device's app store (Google Play Store for Android, iOS App Store for Apple). The app provides a user-friendly interface for controlling your lights.
8. **Hardware Setup in WLED:** Within the WLED interface (or app), navigate to "Config" > "LED Preferences" > "Hardware setup". Here, you can set the total number of LEDs in your strip and adjust the maximum current to match your power supply's output (e.g., 5000mA for a 5A power supply). This is crucial for preventing damage and ensuring optimal performance.

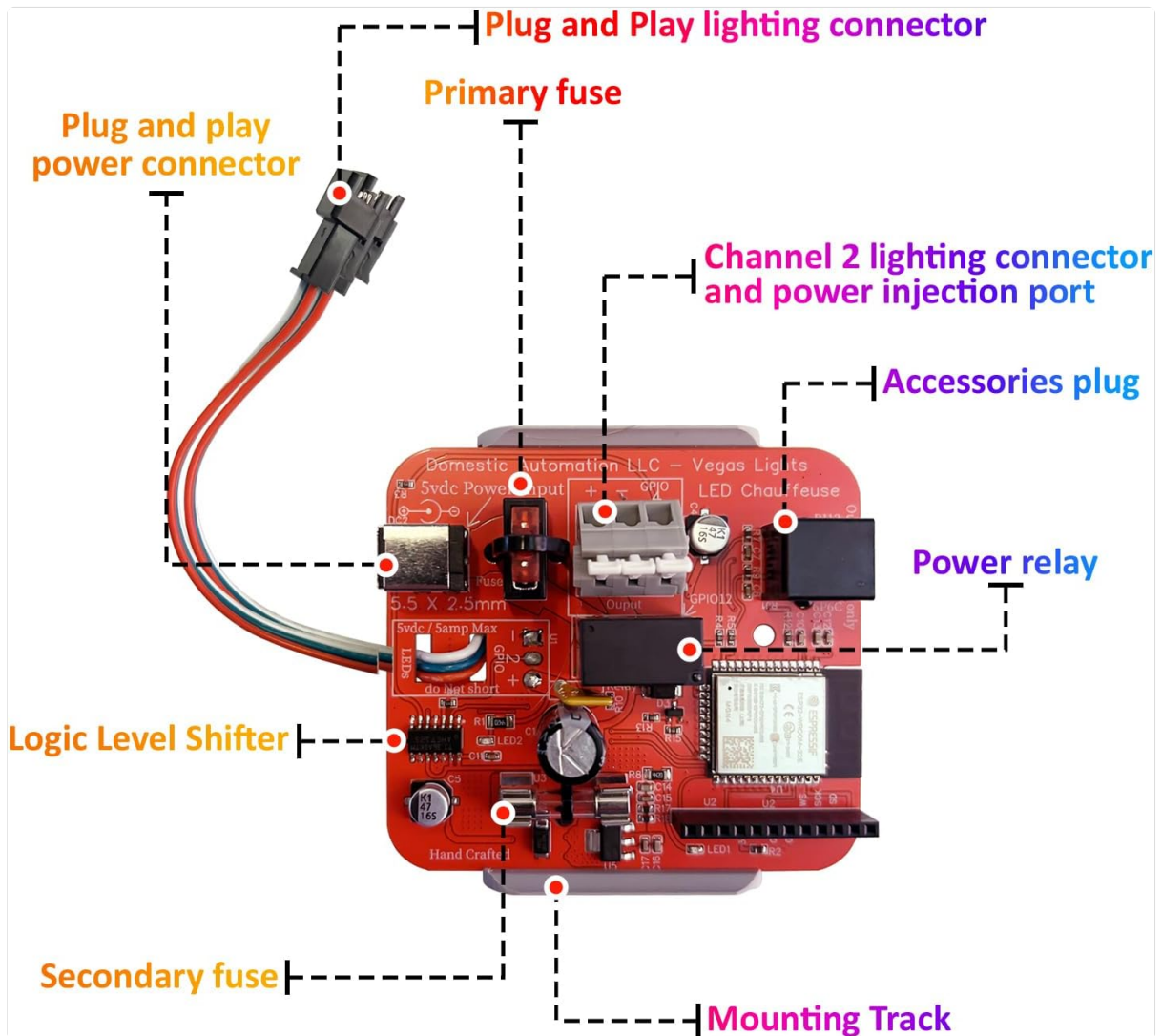


Figure 2: Key Components of the LED Chauffeuse

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Figure 3: Controller connected to LED strips

## 6. OPERATING INSTRUCTIONS

Once your controller is set up and connected to your Wi-Fi network, you can control your LED lights using the WLED app or web interface.

- **Power On/Off:** Use the power button within the WLED app or web interface to turn your lights on or off. The integrated power relay ensures a complete shutdown of the LEDs.
- **Color Selection:** Choose from a vast spectrum of colors using the color wheel or predefined color palettes.
- **Brightness Control:** Adjust the brightness level to suit your preference.
- **Effects and Animations:** Explore hundreds of pre-programmed effects and animations. You can customize parameters like speed and intensity for each effect.
- **Segments:** Divide your LED strip into multiple segments and apply different colors or effects to each segment independently.
- **Presets and Playlists:** Save your favorite color and effect combinations as presets for quick access. Create playlists to cycle through multiple presets automatically.
- **Timers:** Set schedules for your lights to turn on/off or change effects at specific times.

- **Integration:** Integrate with smart home platforms like Alexa, Home Assistant, or Node-RED for voice control and advanced automation.

## 7. MAINTENANCE

- **Cleaning:** Keep the controller free from dust and debris. Use a soft, dry cloth for cleaning.
- **Firmware Updates:** Periodically check for WLED firmware updates through the app or web interface ("Config" > "Security & Updates"). Updates can provide new features, bug fixes, and performance improvements.
- **Fuse Replacement:** The controller includes a mini-blade fuse for protection. If the device unexpectedly loses power or stops working, check the fuse. If blown, replace it with a fuse of the same type and rating.
- **Connection Integrity:** Regularly inspect all connections (power, LED strips, optional modules) to ensure they are secure and free from damage.

## 8. TROUBLESHOOTING

- **No Power/Lights Not Turning On:**
  - Ensure the 5V DC power supply is correctly connected and functioning.
  - Verify that the power supply voltage is exactly 5V DC. Higher voltages (e.g., 12V) will damage the unit.
  - Check the fuses on the controller board. Replace if blown.
  - Confirm that the LED strips are properly connected to the output terminals.
- **Wi-Fi Connectivity Issues:**
  - Ensure the controller is within range of your Wi-Fi router.
  - Double-check the Wi-Fi SSID and password entered during setup for accuracy (case-sensitive).
  - If you changed your Wi-Fi network, you may need to reconnect to the "WLED-AP" and reconfigure the Wi-Fi settings.
  - Restart the controller by unplugging and re-plugging the power.
- **LEDs Displaying Incorrect Colors/Effects:**
  - Verify the "Color Order" setting in WLED's LED Preferences. Common orders are GRB or RGB. Adjust until colors display correctly.
  - Ensure the "Length" setting in LED Preferences matches the actual number of LEDs in your strip.
  - Check for loose connections or damaged sections of the LED strip.
- **Controller Unresponsive:**
  - Perform a power cycle (unplug and replug).
  - If the issue persists, consider performing a factory reset via the WLED interface (refer to WLED documentation for specific steps, usually under "Security & Updates").

## 9. SPECIFICATIONS

Attribute	Value
Brand	Generic
Model Number	VegasLights_01
Input Voltage	5 Volts (DC)
Connectivity Technology	Wi-Fi
Controller Type	App
Special Feature	Motion Sensor (with optional module)
Indoor/Outdoor Usage	Indoor
Material	Plastic
Manufacturer	Domestic Automation LLC

## 10. WARRANTY AND SUPPORT

Specific warranty information for this product is not provided in the available data. For details regarding warranty coverage, returns, or technical support, please contact the seller, Domestic Automation LLC, directly through the platform where the product was purchased. You may also find additional resources and community support for the WLED software online.