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Description: Kitchen LED
Date: 12/16/2022

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Kitchen 5V Addressable LEDs

Kitchen Cabinet Upper & Lower:

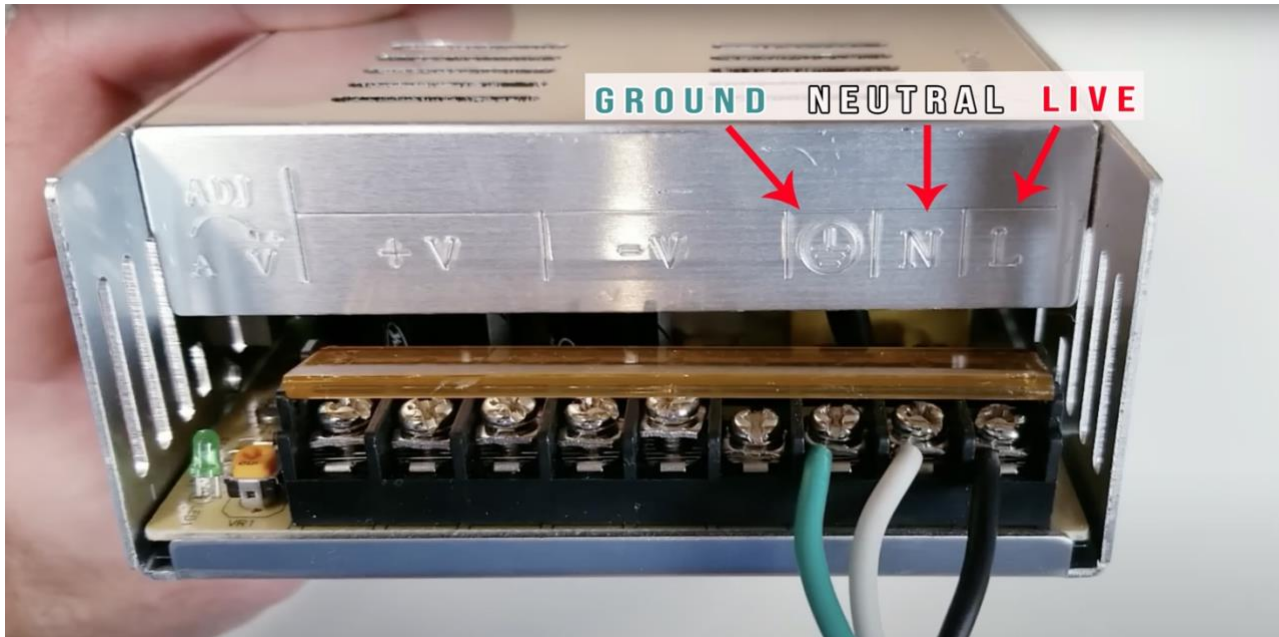
Total length of LED strips ordered $16.4 \times 2 = 32.8$ ft

Total length of cabinet = 34.8 ft

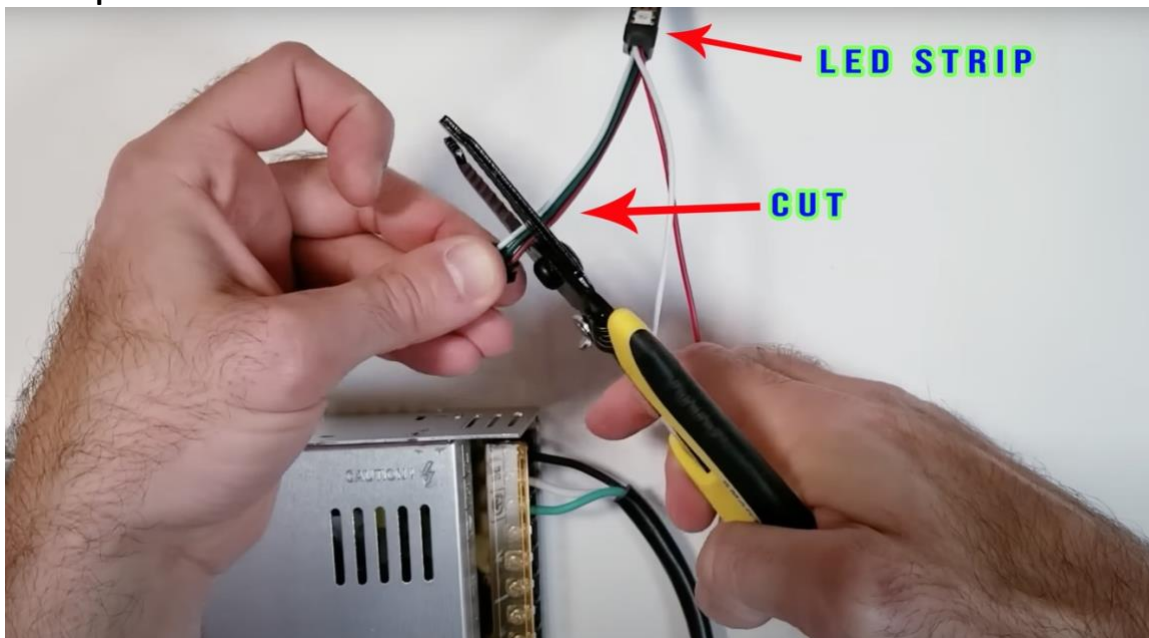
Materials:

- 16 AWG, 6 ft, 13A Power Cord
- 5V 60A Transformer Switching Driver Power Supply
- ESP8266 Wi-Fi Module
- BTF LED Strips 60/m IP30
- BTF LED corner connectors
- Aluminum Channel 12mm
- 18 AWG Silicone Stranded Wire (Multicolored)
- Helping Hands Soldering Tool
- Flux Paste
- Soldering Iron Holder w/Brass Coil Cleaner

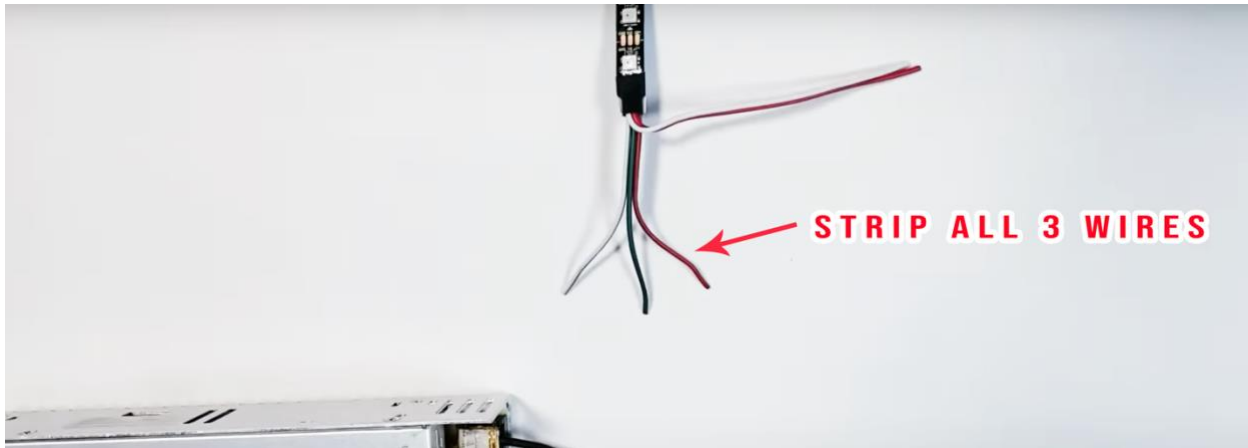
Step 1 - Install Power cord to 5V60A power supply:



Step 2 - Cut the LED wires:

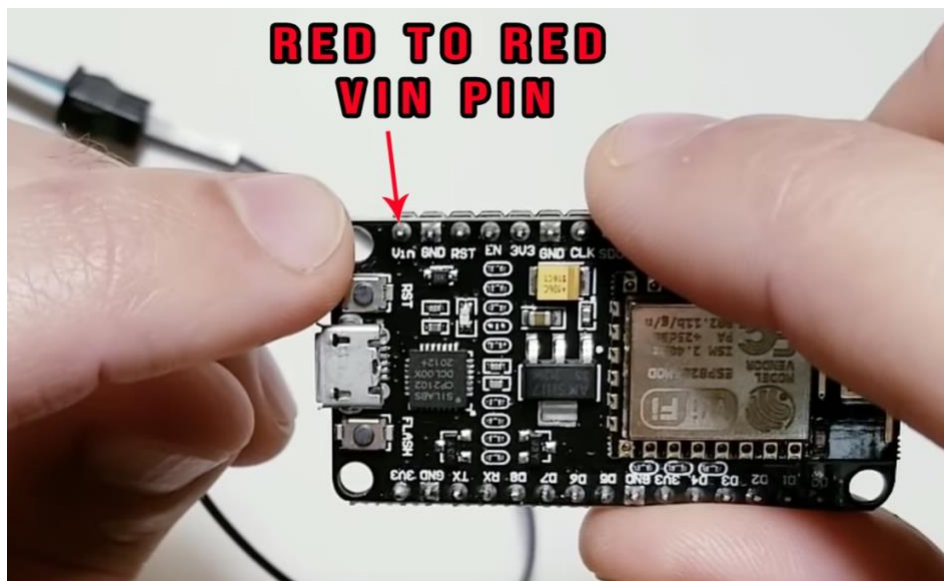


Step 3 - Strip all (3) LED Wires

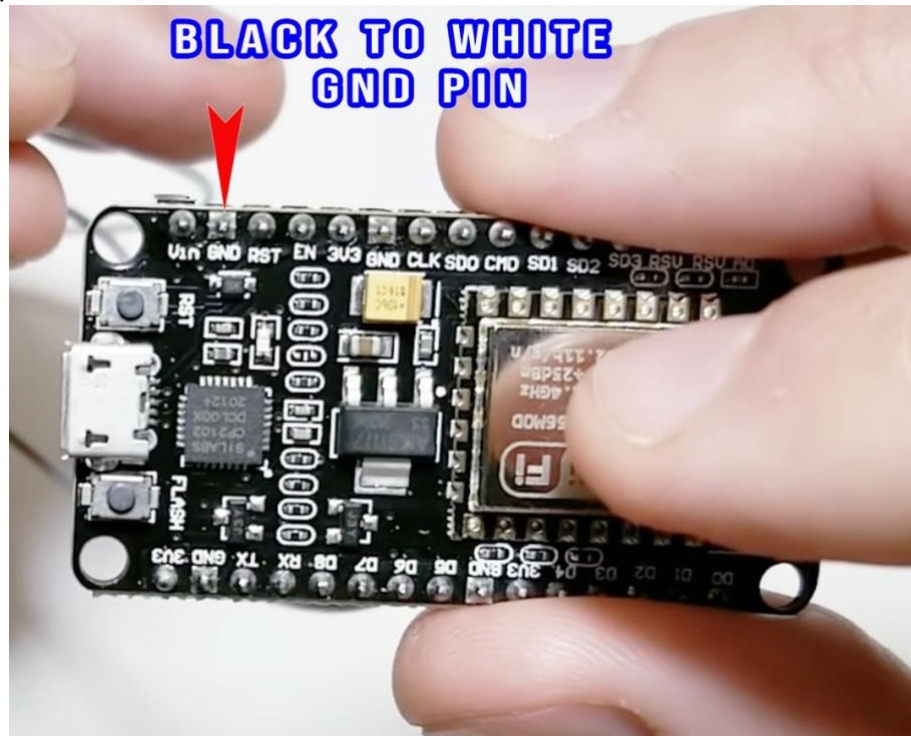


Step 4 – ESP8266 Wi-Fi Board (3) wires

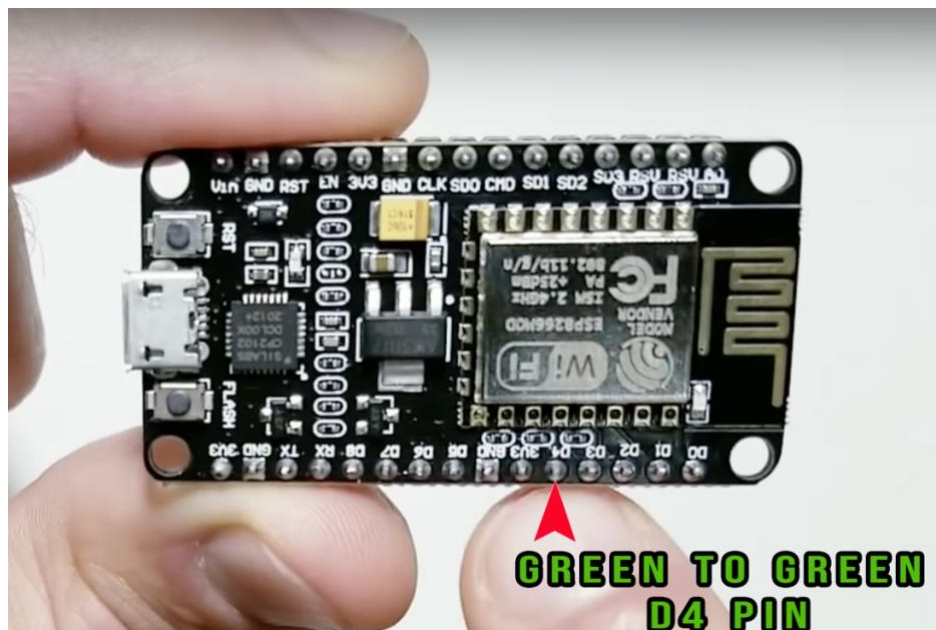
- Pair Red to Red – Twist together that's going to the VIN pin on the module to the red voltage wire connected to the LED lights



- Pair Black to White – Twist together, black wire is coming from Wi-Fi module to the GND white wire on the LED lights



- Pair Green to Green – Data wires



Step 5 – Terminate wires to the 5V 60A power supply (Unplugged Power Supply).

Positive Terminal +V:

- Terminate the red wires in the 1st slot.

Negative Terminal -V:

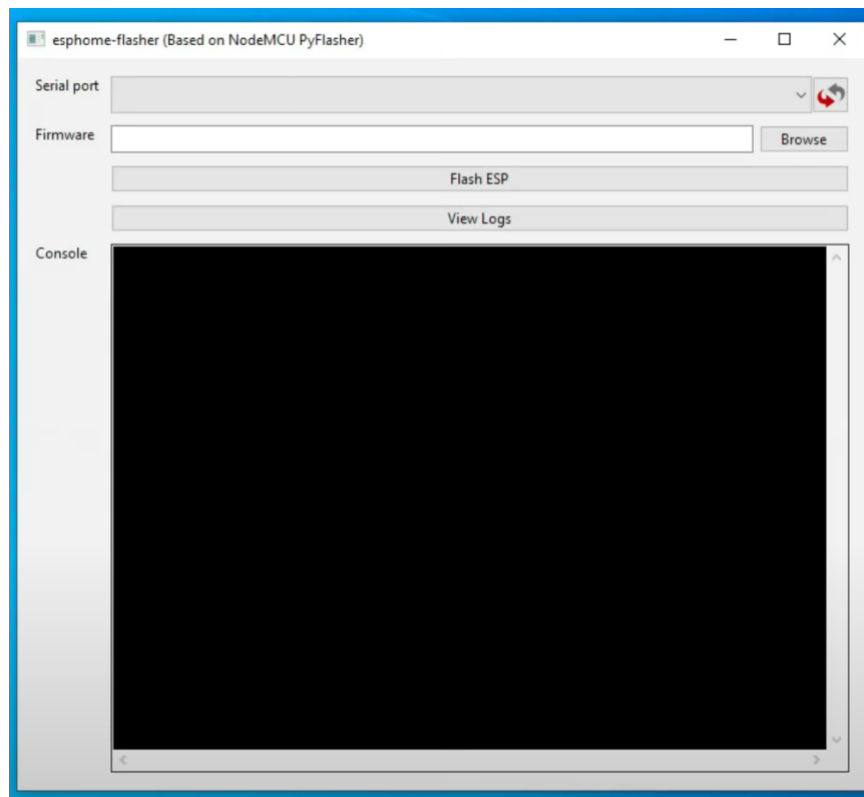
- Terminate the black and white wires in the 4th slot.

Step 6 – Download Software from GitHub (macOS Version)

- Flasher Software - [Flasher App](#) (Load the flash drive first)
- WLED Software - [WLED Software](#) (Download the latest software version)

Step 7 – Run Software

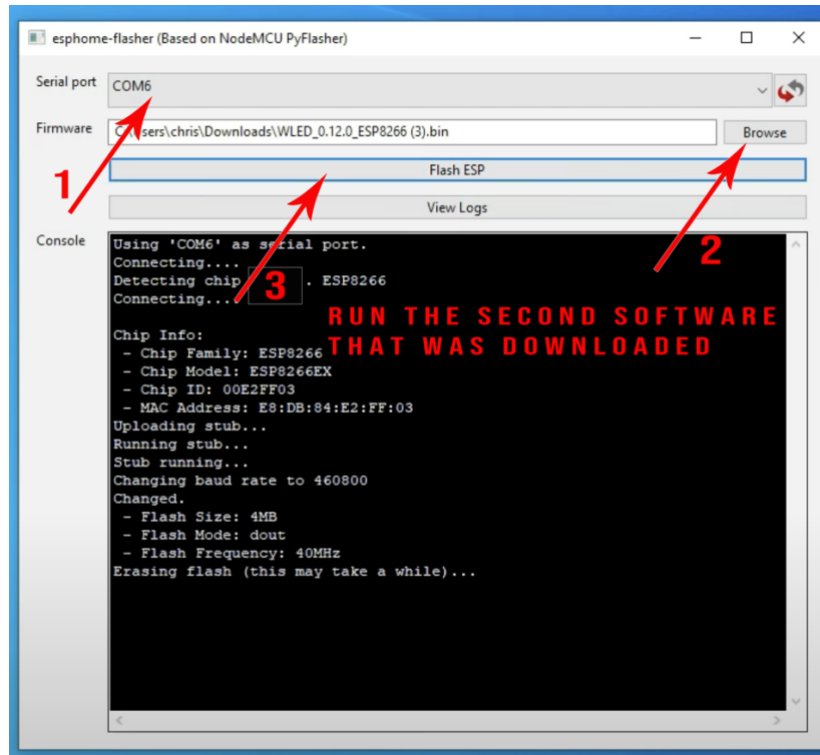
- Run the flasher software



- Plug in the ESP8266 Wi-Fi Module to computer with a USB cable

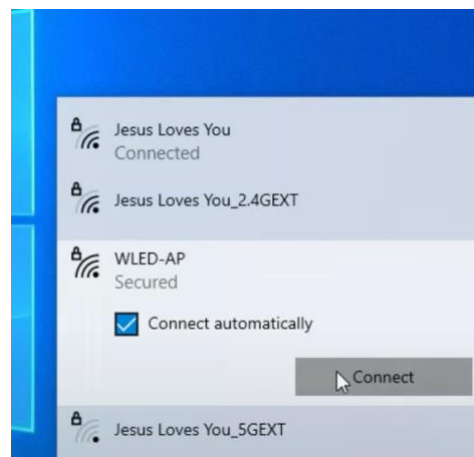


- Run the 2nd software which is the firmware



Step 8 – Connect the ESP8266 to Wi-Fi

- Click on WLED-AP to connect
- Enter Default Password (lowercase): wled1234
- Click Next
- Automatically sends you to the WLED Homepage
- If you're not transferred to the website, in the URL type in 4.3.2.1



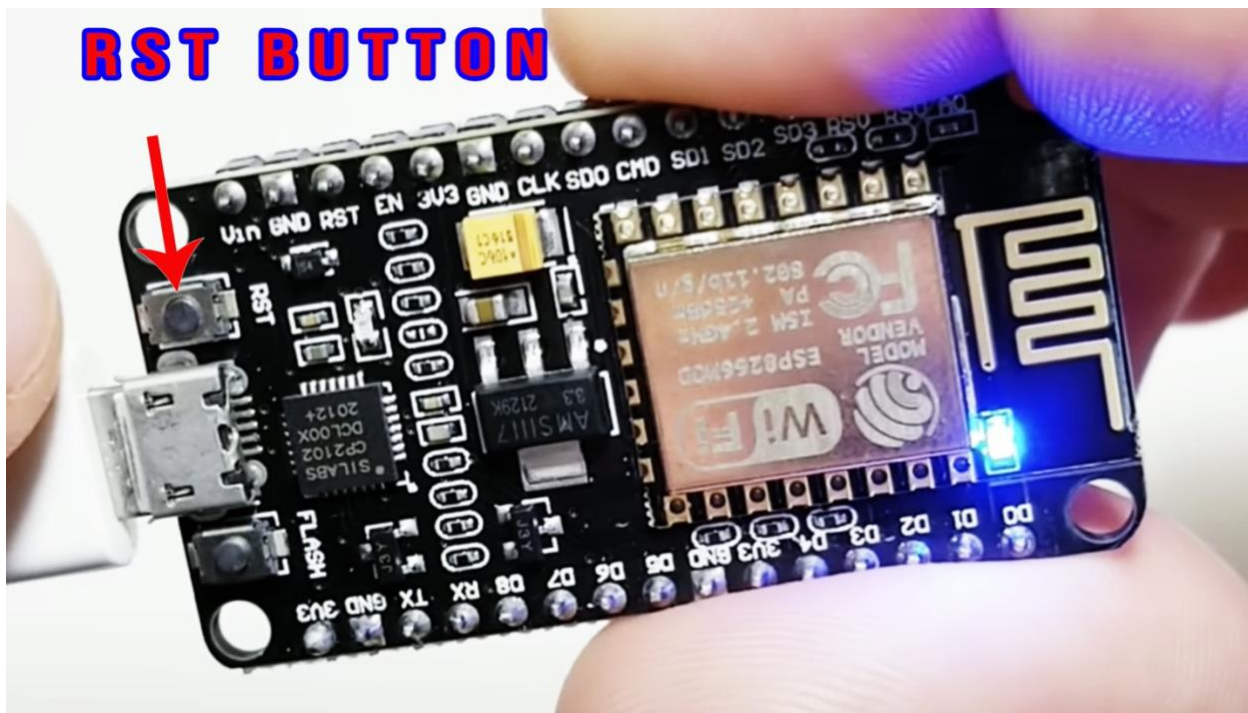
Step 9 – WLED Home Page

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- Click on WIFI SETTINGS
- Enter in the SSID (Network Name)
- Enter Network Password
- Create a name you can remember <http://looseCannon.local> (Example)
- Click Save & Connect
- Close out the website

Step 10: Pick up the ESP8266

- Hit the “RST” button on the left of the charging cable. This will save everything you have entered.
- Then, make sure the device is connected to the Wi-Fi



Step 11 – URL address and WLED Settings

- Type in your URL looseCannon.local (Example)
- Click Config > LED preferences
- Enter in Total LED count:
- Hit Save > Back
- Go to the color wheel and make sure the colors match up
- If colors do not match up go to Config > LED Preferences
- Scroll down to LED outputs:
- Play with the color order to get a color match you desire