# Link232-Wifi Manual Firmware Update Tutorial

This will cover the manual upgrade for the Link232-Wifi using the Ardunio IDE.

I'm using Windows for the Tutorial, but most of the steps will work for Mac/Linux

Hardware needed.

You will need a micro usb cable from the computer to the Wemos D1 mini in the Link232-Wifi.

### Step 1. Installing CH340 drivers.

Go to the following Website.

https://learn.sparkfun.com/tutorials/how-to-install-ch340-drivers/all

And install the correct drivers for your Operating System, this will allow the Link232-Wifi appear as a serial port.

### Step 2. Install Arduino IDE.

Go to the following Website.

https://www.arduino.cc/en/software

Select the correct installer for your Operating System, download and install.

## Step 3. Download Current Firmware

Download and extract the current firmware from my github page.

https://github.com/dabonetn/Link232-Wifi/archive/master.zip

You must unzip this file to use it, under Windows explorer, right click and select extract all.

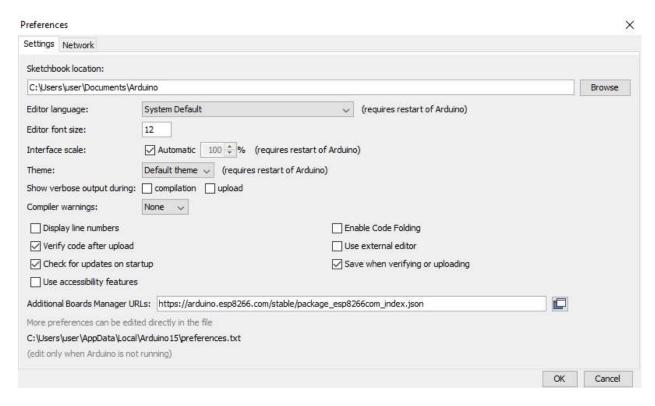
# Step 4. Arduino IDE Setup.

Start Arduino, and go to File, then settings.

Add the following to the Additional Boards Manager URLs.

https://arduino.esp8266.com/stable/package\_esp8266com\_index.json

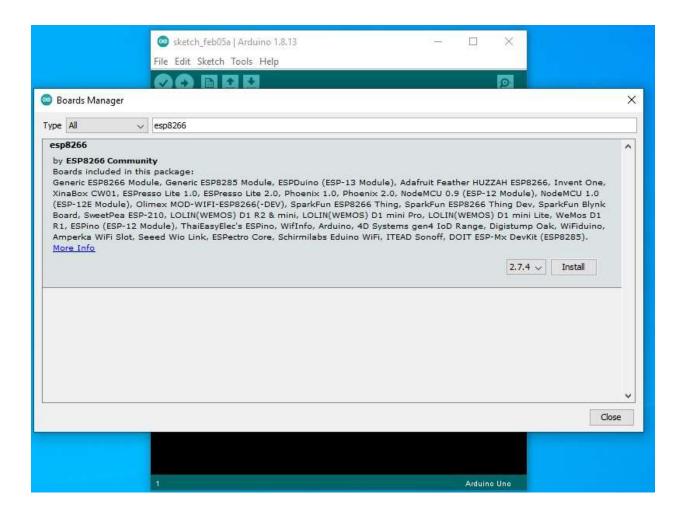
It should look like this.



Now add the board.

Select Tools, Board, And Boards Manager.

Type esp8266 in the search bar.



Click install.

### Step 5. Programming The Firmware

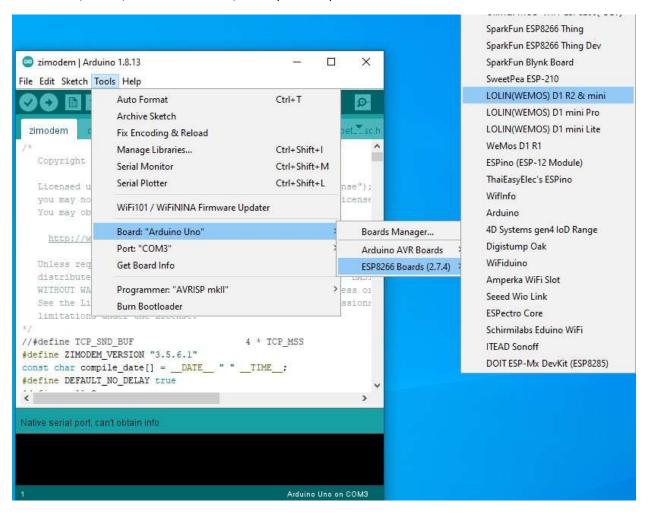
Load the latest firmware that you downloaded and extracted.

The file is located at

(Where you extracted)\Link232-Wifi-master\zimodem\zimodem\zimodem.ino

Now select the correct board for programming.

Go to Tools, Board, ESP8266B Boards, LOLIN(WEMOS) D1 R2 & mini



Now double check the board settings.

Upload Speed: 921600

CPU Frequency: 80 Mhz

Flash Size: "4MB (FS:2MB OTA:~1019KB)

Debug Port: Disabled

Debug Level: None

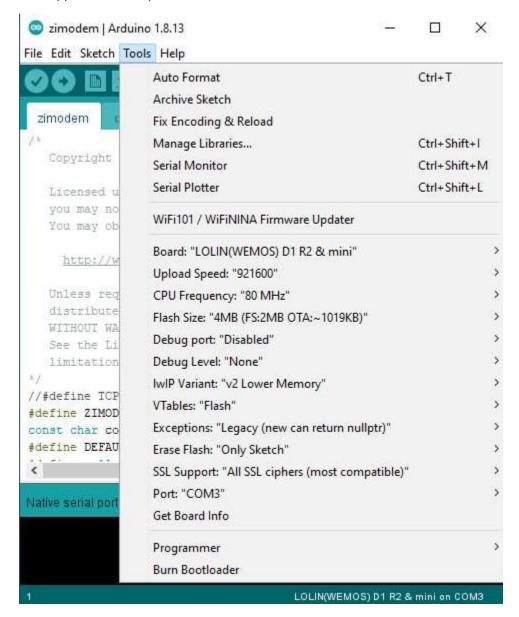
IwIP Variant: v2 Lower Memory

VTables: Flash

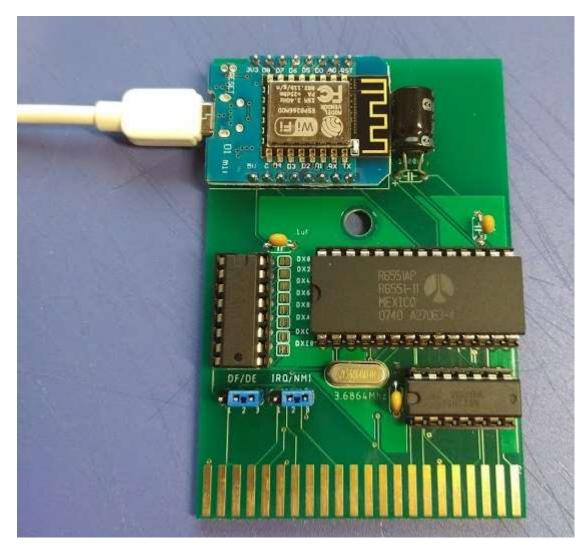
Exceptions: Legacy (new can return nullptr)

Erase Flash: Only Sketch

SSL Support: All SSL ciphers



Remove the case of the Link232-Wifi, place it on a non-conductive surface and plug it into the computer. Do NOT have it plugged into the Commodore at this stage.



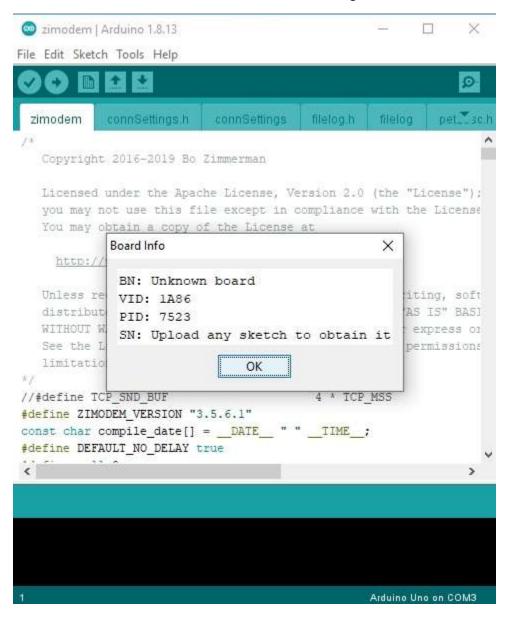
After you do this, windows will add the new serial port, wait until windows is done with the install. (Should be pretty quick)

Now select the correct Port for the Link232-Wifi.

Go to Tools, Port, and select the new com port.

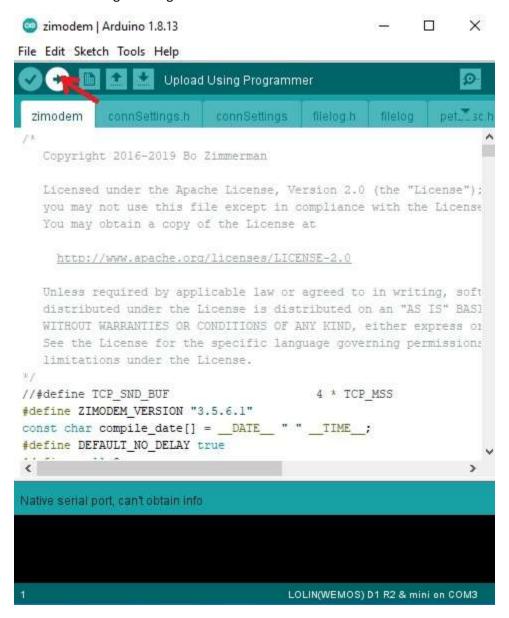
Then check that it's the correct port.

Go to Tools, Get Board Info. It should return the following.



Now we are ready to program.

Just click the Programming Button.



After Programming is done, you should have the following at the bottom of the screen.



You should now be on the current firmware, and now online updates should work.