Setup and Usage Instructions for Arduino IDE

(PCB LightSound with Adafruit Feather 328p)

Installing Arduino Legacy IDE

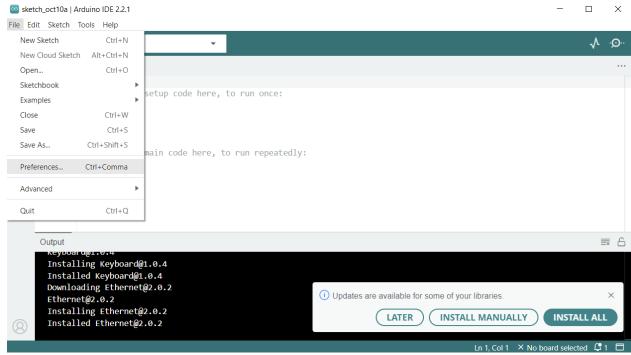
- 1. Scroll down to the "Legacy IDE (1.8.X)" section of the page at https://www.arduino.cc/en/software and download the appropriate installer file.
- 2. Follow the instructions for installing the Arduino Legacy IDE (1.8.x) at one of the links below, depending on your operating system for setting up the Arduino IDE:
 - a. If you have a Windows 8.1 or 10 computer, you can also get it from the Windows app store for free at https://www.microsoft.com/store/apps/9nblggh4rsd8?ocid=badge
 - b. Windows: http://docs.arduino.cc/software/ide-v1/tutorials/Windows
 - c. Mac OS: http://docs.arduino.cc/software/ide-v1/tutorials/macOS
 - d. Linux: http://docs.arduino.cc/software/ide-v1/tutorials/Linux
 - e. Documentation for Arduino Legacy IDE (1.8.X)

Installing Arduino Legacy IDE

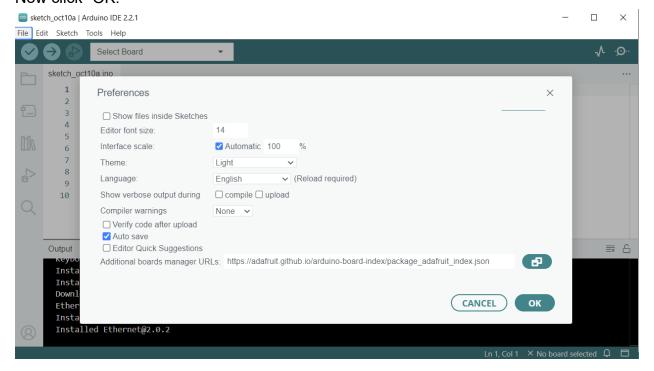
- 3. Go to the Arduino IDE 2.X section at the top of the page at https://www.arduino.cc/en/software and download the appropriate installer file.
- 4. Follow the instructions for installing the Arduino IDE version 2 and higher
 - a. Documentation for Arduino IDE versions 2 and higher: https://docs.arduino.cc/software/ide-v2/tutorials/getting-started-ide-v2

Setting up your IDE

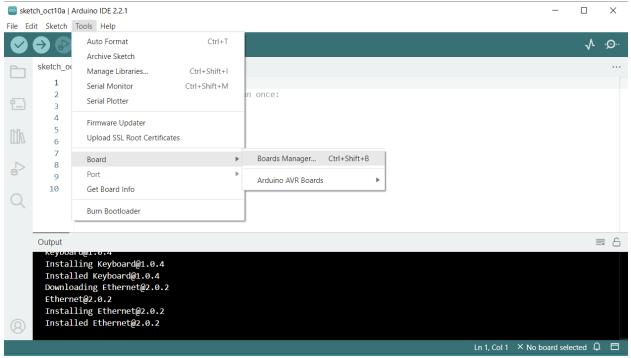
1. Go to the file tab and to Preferences and click on it:



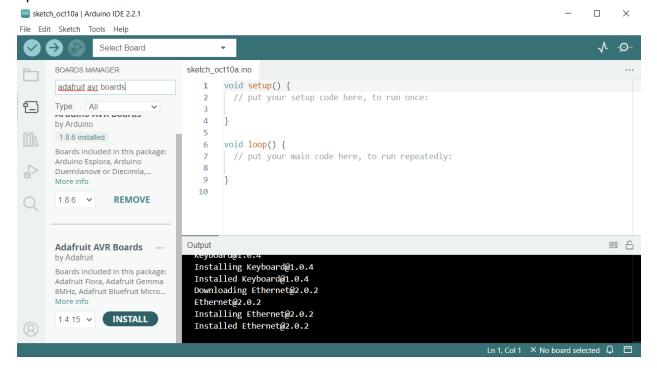
2. Scroll down and under "Additional board manager URLs," paste the following link: https://adafruit.github.io/arduino-board-index/package_adafruit_index.json. Now click "OK."



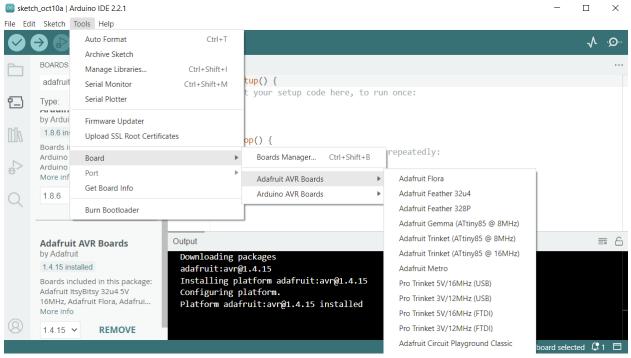
3. Under the Tools tab, go to "Board" and then "Board manager..."



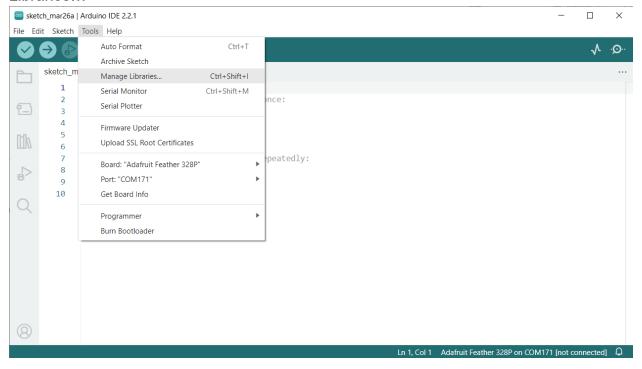
4. In the search field, type "Adafruit AVR Boards" and scroll down until you see that option. Click "Install."



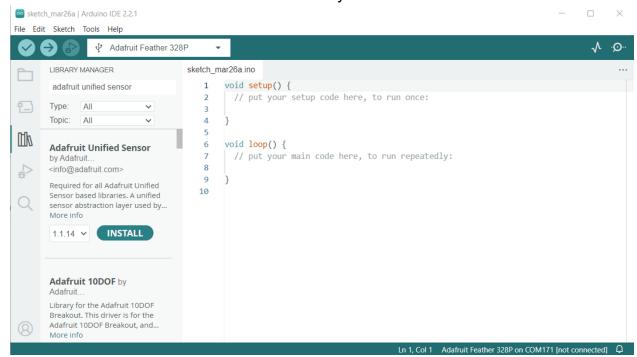
5. If you go back to Tools > Boards, you should see menu for Adafruit AVR Boards:



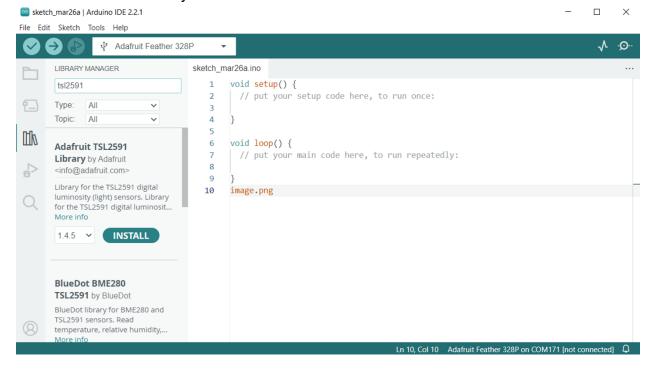
- 6. If you have a PCB LightSound, choose either Adafruit Feather 328p.
- 7. Now you need to install the correct libraries. Go to Tools and click on "Manage Libraries..."



8. In the "Filter your search..." box type "Adafruit Unified Sensor" and click the "Install" button in the Adafruit Unified Sensor by Adafruit section



9. In the "Filter your search..." box type "TSL2591" and click the "Install" button in the Adafruit TSL2591 by Adafruit section



Instructions for uploading new or modified code to a LightSound

- 1. Open up your Arduino IDE and connect your LightSound to your computer via the USB cord. If you have a PCB LightSound, it must be switched ON for the computer to recognize it.
- 2. Under Tools and Board (or via the Dropdown in the Arduino IDE 2.X version), choose the appropriate board for your device (Adafruit Feather 328p).
- 3. To make sure your code compiles, click the checkmark button in the top left or go to Sketch > Verify/Compile.
- 4. To upload your code, click on the right arrow button in the top left go to Sketch > Upload. In the Output terminal at the bottom, it will show the progress and tell you when the uploading is complete.