

Assembly Guide

D-Lab Team Mexico

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1 Software

1.1 Installing the Arduino IDE

To install the Arduino IDE, visit the official Arduino website at the following link:

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

Download the version appropriate for your operating system and follow the installation instructions provided on the website.

1.2 Installing the libraries

Once you have opened the Arduino IDE, click on the Library Manager in the left bar. It has the following icon:



Now look for the following libraries:

- Adafruit GFX Library, by Adafruit: say yes to installing all dependencies (which will be only Adafruit BusIO).
- MCUFRIEND_kbv, by David Prentice.
- SD, by Arduino and SparkFun.

Now, navigate to the location of your computer where the Arduino IDE keeps the Arduino Sketchbook folder. If you're unsure about where it is, there are some common paths:

- Windows: C:\Users\[your username]\Documents\Arduino

- Mac: ~/Documents/Arduino
- Linux: ~/Arduino

Inside that folder, look for the folder "libraries". Click on "MCUFRIEND_kbv" and then on "utils". Now, do the following:

- Edit `mcufriend_shield.h`: in the first line, remove the two slashes (//) before `#define USE_SPECIAL`.



- Edit `mcufriend_special.h`: in the 6th line, remove the two slashes (//) before `#define USE_MEGA_16BIT_SHIELD`.

1.3 Downloading the code

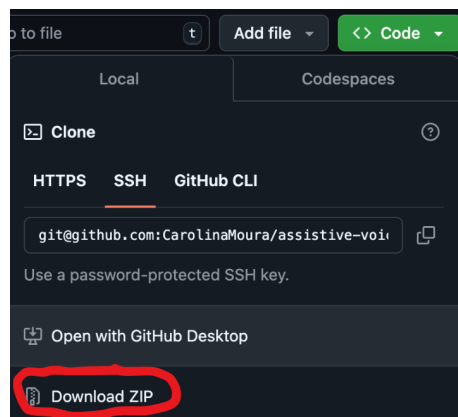
To download the code, go to the following link:

<https://github.com/CarolinaMoura/assistive-voices>

Once in the page, click on the green button that reads "Code", and then on "Download ZIP":



The "code" button.



The "Download ZIP" option.

Now, unzip the downloaded folder. Inside the unzipped folder, you will find a folder named "main". This folder contains the code for the project.

- Go inside the "main" folder.
- Double-click the file named "main.ino". This should open the Arduino IDE with the code.
- If the file does not open automatically, right-click on "main.ino" and select "Open with...". Choose the Arduino IDE from the list of available programs.

Now you have the code open in the Arduino IDE.

2 Tools and Materials

3 Step-by-Step Instructions

4 Troubleshooting

5 Conclusion