

In this assignment, you will be assembling a predefined circuit, the Measuring Tape. It uses only a few components and cables to show the capabilities of sensor feedback.

Final Deliverables

One Functioning Circuit

2b- Measuring Tape(Sensor)

What you'll need

The Measuring Tape Sketch(Code)-

Follow the Instructions and Parts list found at the top of the code provided. It will walk you through connections, switches, compiling, and uploading your code. Then once finished test out your circuit by placing your hand over the Ultrasonic sensor and watching the Serial Monitor change.

Components Required

Arduino Uno- Arduinos

Grove Base Shield- Arduinos

USB B to USB A Cable- Misc Cables

Ultrasonic Ranger v2.0

If sensors need cables grab any ribbon cable from the clear bin

Instructions

- Attach Grove Shield to the Arduino Uno by lining up the pins on the side and the 6 pins with the blue block on the underside of the grove shield

- Ensure the Ultrasonic Ranger Module is plugged into D2

In Arduino IDE go to Tools<Board<Arduino Uno

In Arduino IDE go to Tools<Port<Look for the COM port that says (Arduino Uno) next to it.

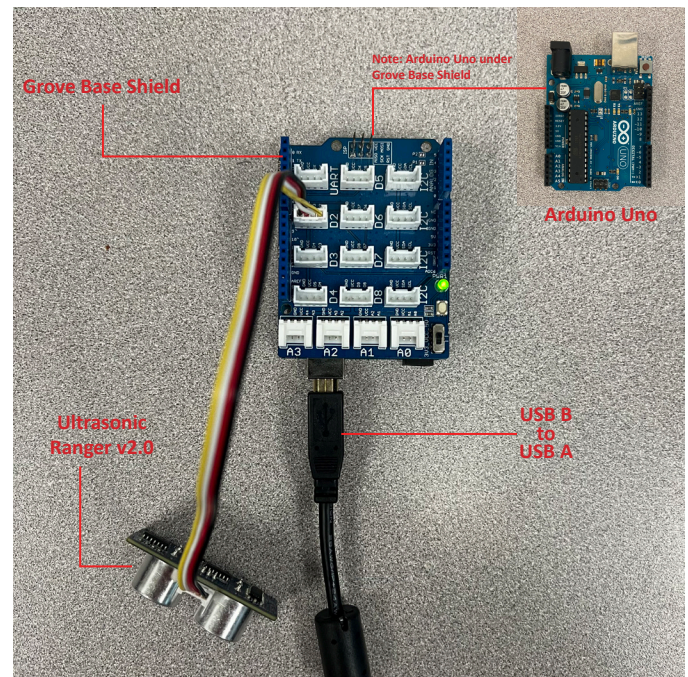
If no COM port shows with (Arduino Uno) next to it, go to the windows button<search device manager<Ports (COM & LPT)< Look for COM port labeled Arduino Uno

Download the Ultrasonic Ranger Library from ([https://github.com/Seeed-Studio/Seeed\\_Arduino\\_UltrasonicRanger/archive/master.zip](https://github.com/Seeed-Studio/Seeed_Arduino_UltrasonicRanger/archive/master.zip))

To install this library go to Sketch<Include Library<Add .Zip Library<Downloads select the folder and open it  
Now you have the necessary library required to run this code

Ensure Arduino Switch is set to 5V it is located on the grove shield next to the green LED

// Finally click the right-facing arrow at the top left of the Arduino IDE to flash the code onto the Arduino  
(Proceed to M5A2 c or d)



(Code Download Link)