

TESTING

WORKING

Initially, upload the code to Arduino after making the connections. You can observe the servo sweeping from 00 to 180 and again back to 00. Since the Ultrasonic Sensor is mounted over the Servo, it will also participate in the sweeping action. When an object is detected in ultrasonic sensor then the rotation of sensor fixed servo motor will be stopped. The angle in which the sensor fixed is stopped then that angle is sent as the input angle for the launcher fixed servo motor. If both the servo motors performed in a perfect manner then, at the last the servo motor which will trigger the launcher will release the fixed missile at the desired position where the object is detected.

Now, open the processing application and paste the above given sketch. In the Processing Sketch, make necessary changes in the COM Port selection and replace it with the COM Port number to which your Arduino is connected to.

If you note the Processing Sketch, I have used the output display size as 1280×720 (assuming almost all computers now-a-days have a minimum resolution of 1366×768) and made calculation with respect to this resolution. In the future, I will upload a new Processing sketch where you can enter the desired resolution (like 1920×1080) and all the calculations will be automatically adjusted to this resolution. Now, run the sketch in the Processing and if everything goes well, a new Processing window opens up.