

```
// Potentiometer Variables
int potL;
int potR;

// Mechanical Switch
int mouseSetUp_p;

// Process sensor signals into piston fires and steering
int PistonState; // Piston: 0 (no air) to 1
                (pressurized);
int DesiredSteeringAngle; // Steering: -60 to 60

// Impulse length
int currentMillis;
int startMillis;
int p = 1000; // length of timing the impulse of piston

void setup() {
  Serial.begin(9600);
  pinMode(2, INPUT_PULLUP);
}

void loop() {
  potL = analogRead(A0); // reads 0-1023
  potR = analogRead(A1); // reads 0-1023
  mouseSetUp_p = digitalRead(2); // reads LOW = 0 or
HIGH = 5
  currentMillis = millis();

  p = map(potL, 0, 1023, 0, 1000);
```

```
    if (currentMillis - startMillis >= p) {
        PistonState = !PistonState;
        startMillis = currentMillis;
    }
    if (p < 25) {
        PistonState = 0;
    }

    // -60 to 60 is 120 character values
    // b/c potR goes up to 1023, divide by the character
counts needed & subtract the angle desired, 60
    DesiredSteeringAngle = ( ( (120.0/1023.0) * potR) -
60);

    if (mouseSetUp_p == 0) {
        PistonState = 666;
        DesiredSteeringAngle = 666;
    }

    Serial.print(PistonState);
    Serial.print(" ");
    Serial.println(DesiredSteeringAngle);
}
```