

```

int readSense = A0;
int sswitch = 0;
int follower_pos, follower_vel;
float test1 = 0;
int cmr;

void setup()
{
  Serial.begin(9600);
  pinMode(13,OUTPUT);
  pinMode(readSense,INPUT);
}

void loop()
{
  float one=analogRead(A0)*0.0048828125; //Conversion from analogRead Value to Voltage

  cmr=41.53*pow((one+0.30221),-1.5281);
  cmr = int(cmr); //Conversion from Voltage to centimeter
  Serial.println(cmr);

  if(Serial.available())
  {
    //digitalWrite(13,HIGH);
    char one = Serial.read();
    if(sswitch == 0)
    {
      while(one != '\n')
      {
        //analogWrite(11,128);
        int test = int(one);
        test1 = test1*10 + test;
        one = Serial.read();
      }
      follower_pos = test1;
      follower_pos = map(follower_pos, 0, 10, 0, 255);
      analogWrite(11,follower_pos);
      test1 = 0;
      sswitch = 1;
    }
    if(sswitch == 1)
    {
      one = Serial.read();
      while(one != '\n')
      {
        //analogWrite(11,255);
        int test = int(one);
        test1 = test1*10 + test;
        one = Serial.read();
      }
      follower_vel = test1;
      follower_pos = map(follower_pos, 0, 10, 0, 255);
      analogWrite(11,follower_pos);
      test1 = 0;
      sswitch = 0;
    }
  }
}

```

```
    }  
  }  
  analogWrite(11,0);  
}
```