

Sweep

Sweeps the shaft of a RC [servo motor](#) back and forth across 180 degrees.

This example makes use of the Arduino [servo library](#).

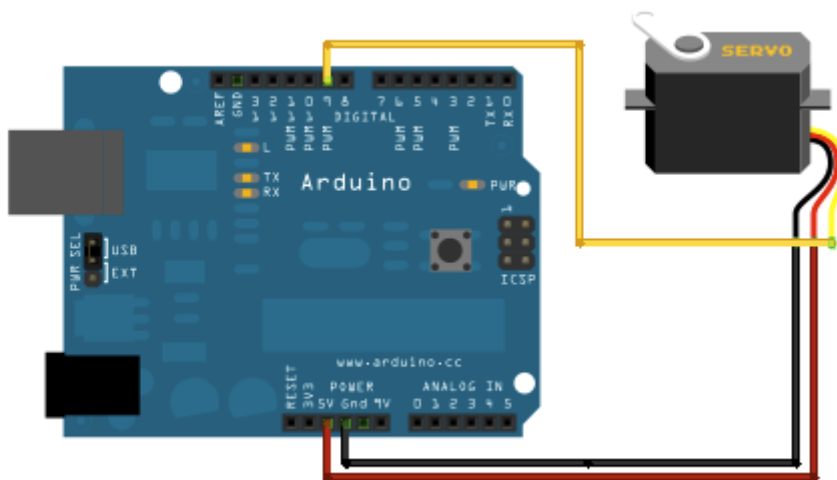
Hardware Required

- Arduino or Genuino Board
- Servo Motor
- hook-up wires

Circuit

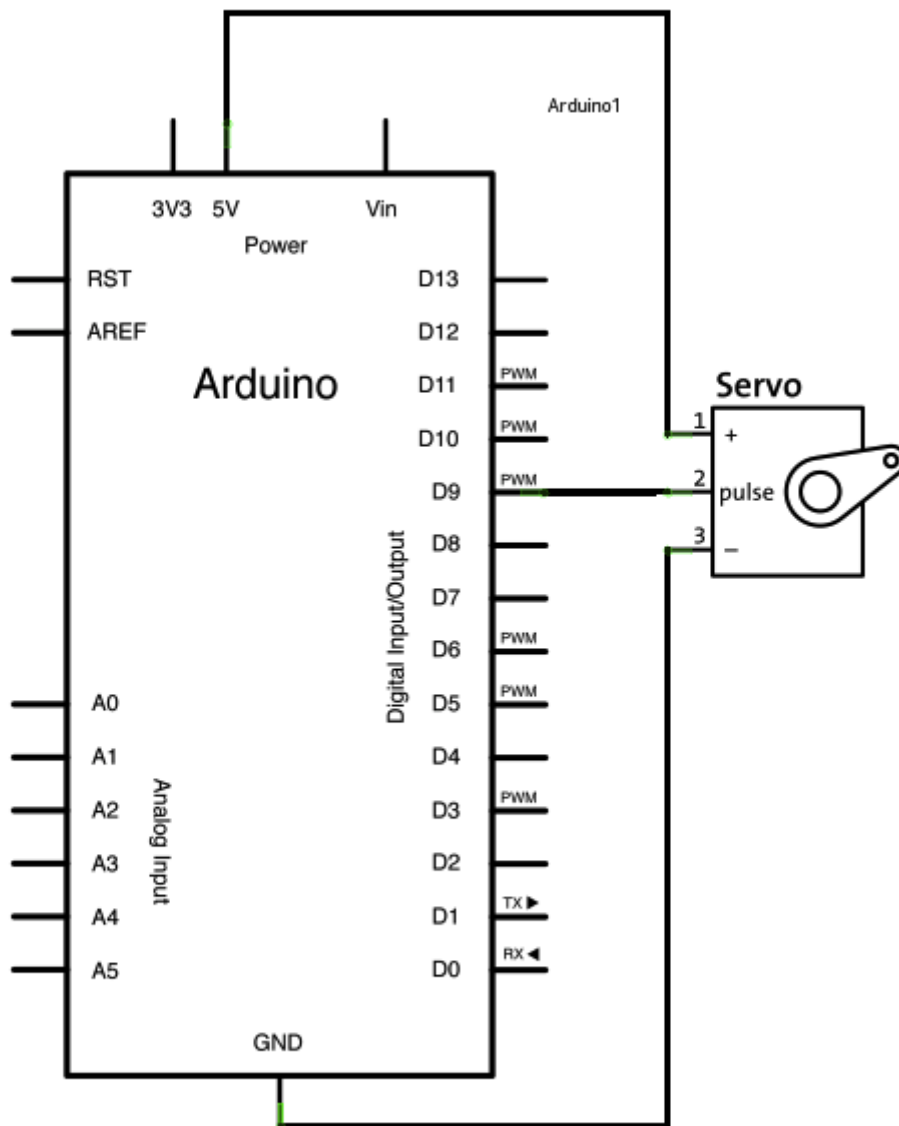
Servo motors have three wires: power, ground, and signal. The power wire is typically red, and should be connected to the 5V pin on the Arduino or Genuino board. The ground wire is typically black or brown and should be connected to a ground pin on the board. The signal pin is typically yellow, orange or white and should be connected to pin 9 on the board.

click the images to enlarge



images developed using [Fritzing](#). For more circuit examples, see the [Fritzing project page](#)

Schematic



Code

```

/* Sweep
by BARRAGAN <http://barraganstudio.com>
This example code is in the public domain.

modified 8 Nov 2013
by Scott Fitzgerald
http://www.arduino.cc/en/Tutorial/Sweep
*/

#include <Servo.h>

Servo myservo; // create servo object to control a servo

```

```
// twelve servo objects can be created on most boards

int pos = 0; // variable to store the servo position

void setup() {
  myservo.attach(9); // attaches the servo on pin 9 to the servo object
}

void loop() {
  for (pos = 0; pos <= 180; pos += 1) { // goes from 0 degrees to 180 degrees
    // in steps of 1 degree
    myservo.write(pos); // tell servo to go to position in variable 'pos'
    delay(15); // waits 15ms for the servo to reach the position
  }
  for (pos = 180; pos >= 0; pos -= 1) { // goes from 180 degrees to 0 degrees
    myservo.write(pos); // tell servo to go to position in variable 'pos'
    delay(15); // waits 15ms for the servo to reach the position
  }
}
```

[\[Get Code\]](#)

See also

- [attach\(\)](#)
- [write\(\)](#)
- [map\(\)](#)
- [Servo library reference](#)
- [Knob](#) - Control the position of a servo with a potentiometer.