brandeismakerlab

How to Master the Micro Servo

This in depth guide will assist you in your conquering of the Micro Servo.

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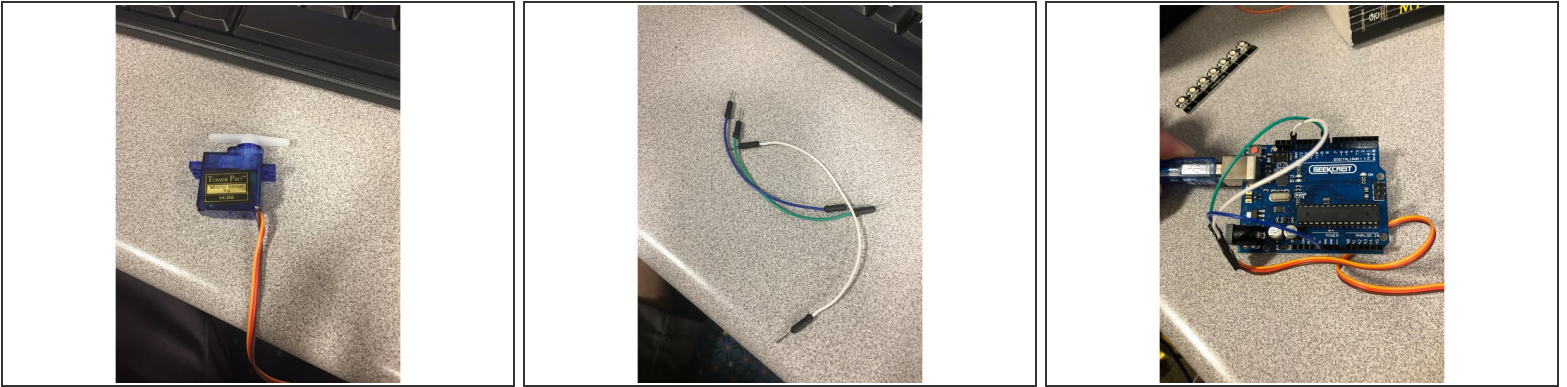

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⚙ PARTS:

- jumper wire (3)
  Male to Male
- Arduino UNO (1)
- Micro Servo 9g (1)
- USB 2.0 A-Male to B-Male Cable (1)

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Step 1 — Acquiring the Goods

- First, you must acquire a micro servo, an Arduino Uno (preferably) with a usb/Arduino cable, and three male to male jumper wires.

- If you want more of a background in electronics, see this tutorial

Step 2 — Assembly
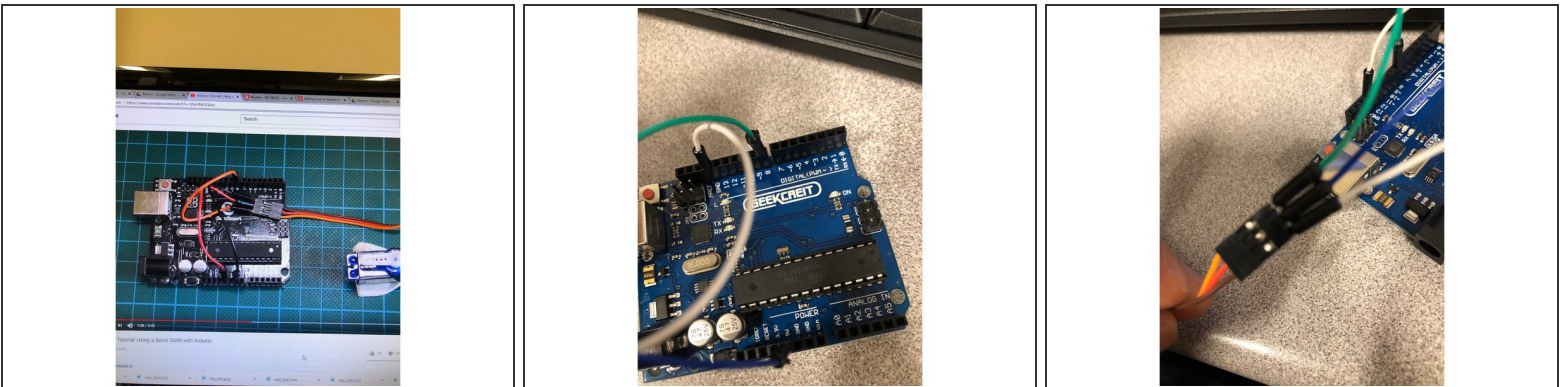
- Connect the three jumper wires to the designated ports on the Arduino.

- The ports will vary based on the Arduino you use, if you don't have access to an Uno then just google to setup to your Arduino.

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Step 3 — Downloading Arduino

- Before you can use the servo, have the Arduino IDE installed

- See How to Use Arduino IDE Tutorial

Step 4 — Use the Part


```
/*
Intro Server Tutorial from https://www.intorobotics.com/tutorial-how-to-control-the
Curated by Brandeis Automation Lab
*/

#include <Servo.h>  //add '<' and '>' before and after servo.h

int servoPin = 9;
int angle;

Servo servo;

int servoAngle = 0;   // servo position in degrees
int time =1000;
void setup()
{
  Serial.begin(9600);
  servo.attach(servoPin);
}


void loop()
{
//control the servo's direction and the position of the motor
  servo.write(45);       // Turn SG90 servo Left to 45 degrees
  delay(time);           // Wait 1 second
  servo.write(90);       // Turn SG90 servo back to 90 degrees (center position)
  delay(time);           // Wait 1 second
  servo.write(135);      // Turn SG90 servo Right to 135 degrees
  delay(time);           // Wait 1 second
  servo.write(90);       // Turn SG90 servo back to 90 degrees (center position)
  delay(time);
//end control the servo's direction and the position of the motor
}
```

- Use this link to get some source code for the part and start learning how to servo functions.

- Link to Program

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