



Grove - Servo

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Wiki: [http://www.seeedstudio.com/wiki/Grove - Servo](http://www.seeedstudio.com/wiki/Grove_-_Servo)

Bazaar: <http://www.seeedstudio.com/depot/Grove-Servo-p-1241.html>

Document Revision History

Revision	Date	Author	Description
1.0	Sep 21, 2015	Victor.He	Create file

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Disclaimer

For physical injuries and possessions loss caused by those reasons which are not related to product quality, such as operating without following manual guide, natural disasters or force majeure, we take no responsibility for that.

Under the supervision of Seeed Technology Inc., this manual has been compiled and published which covered the latest product description and specification. The content of this manual is subject to change without notice.

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1. Introduction

Grove - Servo is DC motor with gearing and feedback system. It is used in driving mechanism of robots. The module is a bonus product for Grove lovers. We regulated the three-wire servo into a Grove standard connector. You can plug and play it as a typical Grove module now, without jumper wires clutter. But if you feel more like a proto servo, check out EMAX 9g ES08A High Sensitive Mini Servo. They are the same model, both of good quality and burden-free price.



2. Features

- Small module
- Grove Compatible Interface
- Easy to use

3. Specifications

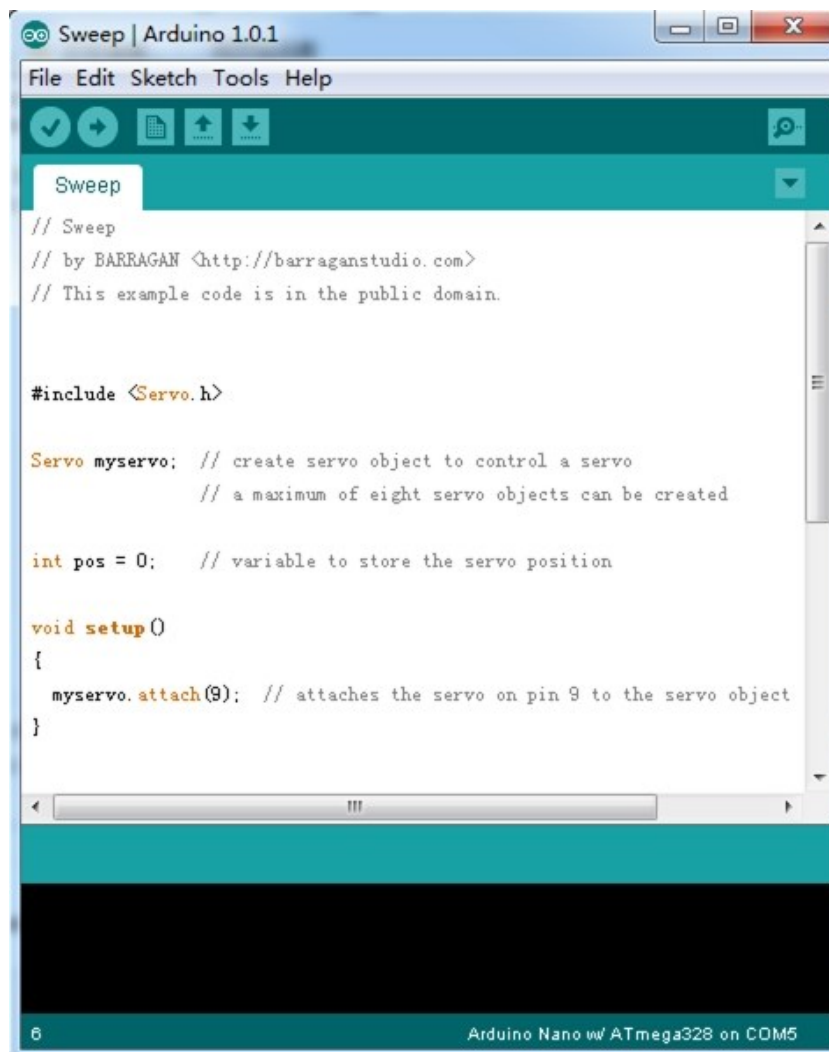
Item	Min	Typical	Max	Unit
Working Voltage	4.8	5.0	6.0	V
Torque	1.5/1.8			Kg.cm
Speed	0.12/0.16			s/60°
Size	32X11.5X24			mm
Weight	8.5			Gram

4. Usage

The Servo has three wires: power, ground, and signal. The power wire is typically red, and should be connected to the 5V pin on the Arduino/Seeeduino board. The ground wire is typically black or brown and should be connected to a ground pin on the Arduino board. The signal pin is typically yellow, orange or white and should be connected to Digital 9 on the Arduino board. You can change to the digital port as you like. But don't forget to change the port number in the definition of the demo code at the same time.

Next sweeps the shaft of a servo back and forth across 180 degrees. This example makes use of the Arduino [servo library](#).

- Connect the Servo to Seeeduino and connect Seeeduino to PC using a USB cable.
- Restart the Arduino IDE, open one demo code you like, for example Sweep directly by the path: File -> Example -> Servo -> Sweep.



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

#include <Servo.h>

Servo myservo; // create servo object to control a servo
               // a maximum of eight servo objects can be created

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()
{
  // Sweep the servo back and forth across 180 degrees
  for (pos = 0; pos < 180; pos += 1) {
    myservo.write(pos); // Tell the servo to move to the position
    delay(15);           // Wait 15ms for the servo to reach the position
  }
  for (pos = 180; pos > 0; pos -= 1) {
    myservo.write(pos); // Tell the servo to move to the position
    delay(15);           // Wait 15ms for the servo to reach the position
  }
}
```

- Upload the code. Please click [here](#) if you do not know how to upload.

5. Support

If you have questions or other better design ideas, you can go to our [forum](#) or [wish](#) to discuss.