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Standard servo - TowerPro SG-5010 - 5010

PRODUCT ID: 155

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DESCRIPTION

TECHNICAL DETAILS

DESCRIPTION

This high-torque standard servo can rotate approximately 180 degrees (90 in each direction). You can use any servo code, hardware or library to control these servos. Good for beginners who want to make stuff move without building a motor controller with feedback & gear box. Comes with 3 horns, as shown. They aren't the highest quality servo (which is why they are less expensive) and so are not suggested for hobby planes. We now carry the Tower-Pro SG-5010.

To control with an Arduino, we suggest connecting the orange control wire to pin 9 or 10 and using the Servo library included with the Arduino IDE (see here for an example sketch). Position "0" (1.5ms pulse) is middle, "90" (~2ms pulse) is all the way to the right, "-90" (~1ms pulse) is all the way to the left.

Note that the default servo pulse widths (usually 1ms to 2ms) may not give you a full 180

...set your servo controller to custom pulse

lengths and try 0.75ms to 2.25ms. You can try shorter/longer pulses but be aware that if you go too far you could break your servo!
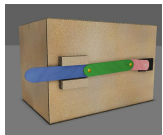
TECHNICAL DETAILS

Details:

- Power: 4.8V - 6V DC max (5V works well)
- Average Speed: 0.2sec/60degree (@ 4.8V), 0.16sec/60degree (@ 6V)
- Weight: 39g (1.37 oz)
- Torque: At 5V, 5.5kg-cm / 76oz-in, and at 6V 6.5kg-cm / 90oz-in.
- Size mm: (L x W x H) 40 x 20.0 x 38 mm
- Size in: (L x W x H) 1.60x.79x1.50
- Spline Count: 25

LEARN

Crickit Powered Minerva Owl Robot
Eyes that move, wings that flap! Build your own owl robot!

Slider Crank Mechanism -- from Cardboard and Craft Sticks
Build a simple slider crank driven mechanism controlled with Circuit Playground Express

Adafruit 16 Channel Servo Driver with Raspberry Pi

Snake Charmer Box
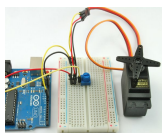Fun beginner's project for Circuit Playground Express
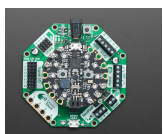
Adafruit PCA9685 16-Channel Servo Driver

Pushrod Garage
Build a cardboard garage with working garage door for your tiny cars or robots!

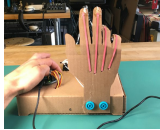### Arduino Lesson 14. Servo Motors
Learn Arduino, Lesson 14. Servo Motors

Introducing Adafruit Crickit #MakeRobotFriend
Make your robot pal who's fun to be with using Crickit!

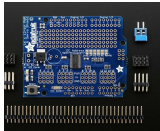### Adafruit's Raspberry Pi Lesson 8. Using a Servo Motor
Write a Python program to control a servo motor with a Raspberry Pi

Animatronic Hand
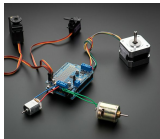Build a cardboard animatronic hand with independent finger control using CRICKIT robotics controller board!

Adafruit 16-channel PWM/Servo Shield
16 channels of servo-bustin' power
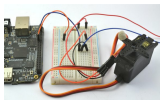
Trash Panda
Adorable Hugging Panda Friend

Adafruit Motor Shield V2 for Arduino
Stackable, high current DC and Stepper motor shield for Arduino

Stumble-Bot
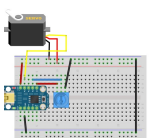A simple walking robot that teaches basic programming skills

Controlling a Servo with a BeagleBone Black
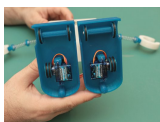Use a BeagleBone Black and Python to set the position of a servo

Crickit Controlled Animatronic Eyeball
Build a robot eye that looks in any direction!

Trinket (& Gemma) Servo Control
Get your Trinket or Gemma moving

Modifying Servos for Continuous Rotation
Make tiny gear-motors for your next robot!

AdaBox 008
Explore and use the contents of your AdaBox 008

Adafruit Motor Selection Guide
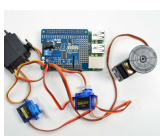Choose the right motor (and controller) for the job!

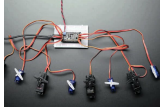### Using NeoPixels and Servos Together
An introduction to AVR peripherals.

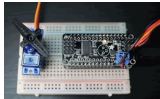### Make It Bubble
Make a soap bubble blowing robot for bubbly fun

Adafruit 16-Channel PWM/Servo HAT & Bonnet for Raspberry Pi
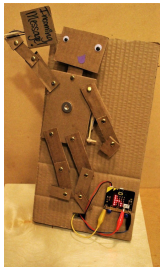16 channels of servo-bustin' power for your Pi

[Adafruit 8-Channel PWM or Servo FeatherWing](#)
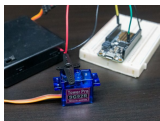A 8 x servo party for your Feather!

[CircuitPython Hardware: PCA9685 PWM & Servo Driver](#)
How to use the PCA9685 PWM & servo driver with CircuitPython!

[Micro:Bit Puppet "Text Message" System!](#)
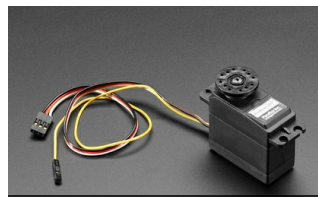Build a simple & silly radio communication system with the Micro:Bit!

[Using Servos With CircuitPython and Arduino](#)
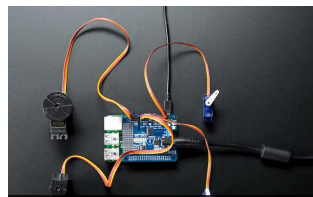How to use servo motors with CircuitPython and Arduino
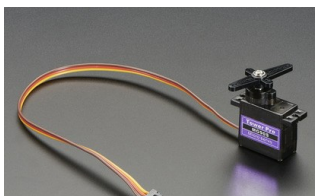
MAY WE ALSO SUGGEST...
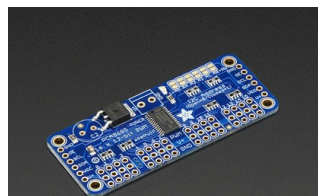
Adafruit MetroX Classic Kit -

Feedback 360 Degree -

Adafruit 16-Channel PWM /

Micro Servo - MG90S High

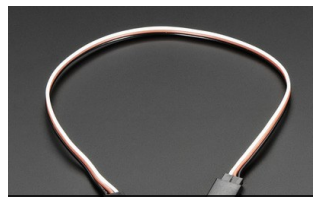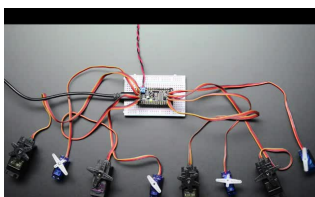Adafruit 16-Channel 12-bit

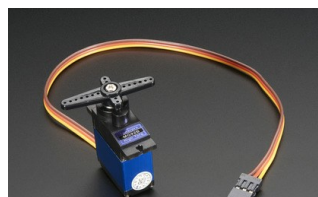Machined Aluminum Servo

Continuous Rotation Micro

Analog Feedback Servo

Servo Extension Cable -

8-Channel PWM or Servo

Micro Servo - High

Standard Size - High Torque

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"The art of progress is to preserve order amid change and to preserve change amid order" - Alfred North Whitehead

4.9 ★★★★★
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