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Standard Servo (#900-00005)

General Information

The Parallax standard servo is ideal for robotics and basic movement projects. These servos will allow a movement range of 0 to 180 degrees. The Parallax servo output gear shaft is a standard Futaba configuration. The servo is manufactured by Futaba specifically for Parallax.

Technical Specifications

> Power 6vdc max

> Speed 0 deg to 180 deg in 1.5 seconds on average

> Weight 45.0 grams/1.59oz

> Torque 3.40 kg-cm/47oz-in

> Size mm (L x W x H)
40.5x20.0x38.0

> Size in (L x W x H)
1.60x.79x1.50
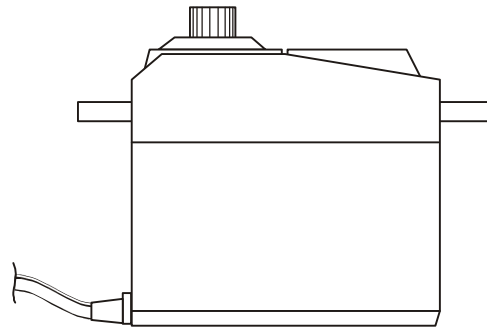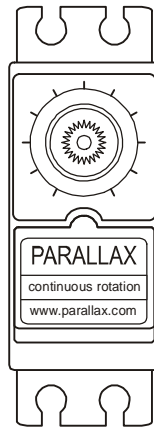
Motor Control from a BASIC Stamp

Parallax (www.parallax.com) publishes many circuits and examples to control servos. Most of these examples are available for download from our web site. On www.parallaxinc.com type in "servo" and you'll find example codes below.

Wiring setup
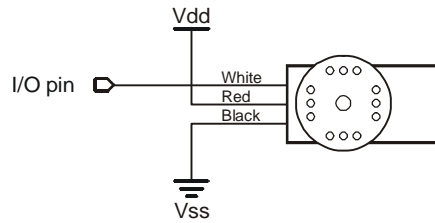
The servo is controlled by pulsing of it's signal line. If you are using an Basic Stamp this is done with the pulsout command. Below is stamp code that will help you with basic control of a servo. The codes below may not move the servos from on extreme to another but is will give you a general demonstration on function.

Stamp1 code

```
SYMBOL Servo_pin  = 0      'I/O pin that is connected to servo
SYMBOL Temp = W0           'Work space for FOR NEXT
start:
   FOR temp =  70 TO 250
  PULSOUT Servo_pin,temp
  PAUSE 50
   NEXT
   FOR temp =  250 TO 70
  PULSOUT Servo_pin,temp
  PAUSE 50
   NEXT
GOTO start
```

'Stamp 2 ,2e,2pe

```
Servo_pin  CON           0      'I/O pin that is connected to servo
Temp        VAR          Word          'Work space for FOR NEXT
start:
  FOR temp =  200 TO 1200
    PULSOUT Servo_pin,temp
    PAUSE 50
  NEXT
  FOR temp =  1200 TO 200
    PULSOUT Servo_pin,temp
    PAUSE 50
  NEXT
GOTO start
```

'Stamp 2sx,2p24/40

```
Servo_pin  CON           0      'I/O pin that is connected to servo
Temp        VAR          Word          'Work space for FOR NEXT
start:
   FOR temp =  500 TO 3000
  PULSOUT Servo_pin,temp
  PAUSE 20
   NEXT
   FOR temp =  3000 TO 500
  PULSOUT Servo_pin,temp
  PAUSE 20
   NEXT
GOTO start
```