

Continuous Rotation Servo (#900-00008)

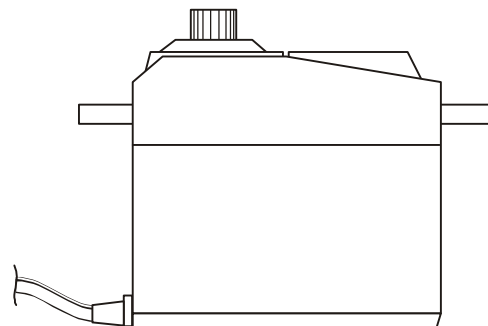
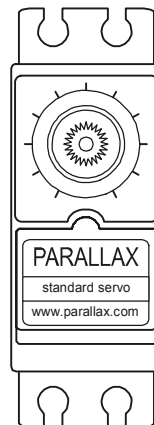
General Information

The Parallax continuous rotation servo is ideal for robotic products that need a geared wheel drive or other project that require a 360 degree rotation geared motor. The Parallax continuous rotation servo output gear shaft is a standard Futaba configuration. The servo can be adjusted with a small Phillips screw driver if the unit becomes out adjustment on its center set point. Servo is manufactured for Parallax by Futaba.



Technical Specifications

- > Power 6vdc max
- > Average Speed 60 rpm
Note: with 5vdc and no torque
- > 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
- > Manual adjustment port



Adjusting the set point for the servo

Using a Parallax screwdriver or an (0x40) size Phillips screw driver. Program the Stamp you are using with one of the following codes or setup your pulse generator to 1.5 ms at 20ms intervals. Once the pulses are generated and the servo is powered and connected. Insert the Phillips side of your screw driver in to the adjustment port. Once inserted you should be able to turn the internal potentiometer to the left and right. You should see the servo change direction also to the left and right. If not make sure you are making contact with the potentiometer. **Warning do not press too hard you may do permanent damage to the servo.** To adjust the potentiometer turn to the left/right until the servo stops turning. Be sure to adjust the potentiometer slowly to in sure you do not pass the set point. If you do pass it the servo will change direction.



‘Stamp 1 code’

```
start:
    pulsout 0,150
    pause 20
goto start
```

‘Stamp 2,2e,2ep code’

```
start:
    pulsout 0,750
    pause 20
goto start
```

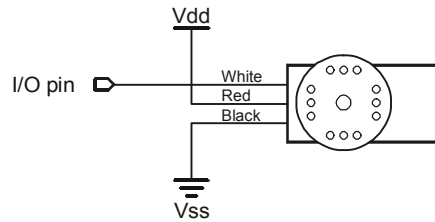
‘Stamp 2sx,2p24,2p40 code’

```
start:
    pulsout 0,1875
    pause 20
goto start
```

Servo 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.parallax.com type in “servo” and you’ll find example codes below.

Wiring setup



The servo is controlled by pulsing of its 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 code below will show center and then rotate the servo to the left and to the right then stop.

```
'Stamp1
symbol temp = w0

    for temp = 0 to 200
    pulsout 0,150
    pause 20
next

    for temp = 0 to 200
    pulsout 0,180
    pause 20
next

    for temp = 0 to 200
    pulsout 0,120
    pause 20
next

stop
```

```
'Stamp 2 ,2e,2pe
temp var word

    for temp = 0 to 200
    pulsout 0,750
    pause 20
next

    for temp = 0 to 200
    pulsout 0,900
    pause 20
next

    for temp = 0 to 200
    pulsout 0,600
    pause 20
next

stop
```

```
'Stamp 2sx,2p24/40
temp var word

    for temp = 0 to 200
    pulsout 0,1875
    pause 20
next

    for temp = 0 to 200
    pulsout 0,2250
    pause 20
next

    for temp = 0 to 200
    pulsout 0,1500
    pause 20
next

stop
```