

Repeatable Low Power Movement - Controlling Servos with WPILib

Servo motors are a type of motor which integrates positional feedback into the motor in order to allow a single motor to perform repeatable, controllable movement, taking position as the input signal. WPILib provides the capability to control servos which match the common hobby input specification (PWM signal, 1.0ms-2.0ms pulse width)

Constructing a Servo object

C++

```
Servo *exampleServo = new Servo(1);
```

Java

```
Servo exampleServo = new Servo(1);
```

A servo object is constructed by passing a channel.

Setting Servo Values

C++

```
exampleServo->Set(.5);  
exampleServo->SetAngle(75);
```

Repeatable Low Power Movement - Controlling Servos with WPILib

Java

```
exampleServo.set(.5);  
exampleServo.setAngle(75);
```

There are two methods of setting servo values in WPILib:

- Scaled Value - Sets the servo position using a scaled 0 to 1.0 value. 0 corresponds to one extreme of the servo and 1.0 corresponds to the other
- Angle - Set the servo position by specifying the angle, in degrees. This method will work for servos with the same range as the Hitec HS-322HD servo (0 to 170 degrees). Any values passed to this method outside the specified range will be coerced to the boundary.