



# STEAM CLOWN™ PRODUCTIONS

# SERVOS



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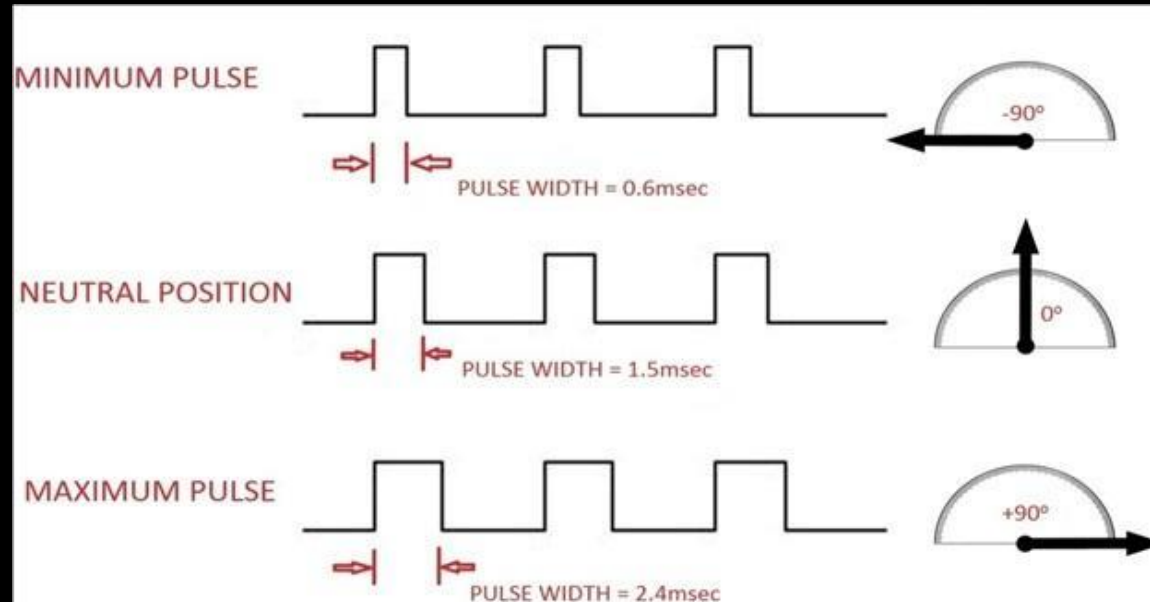
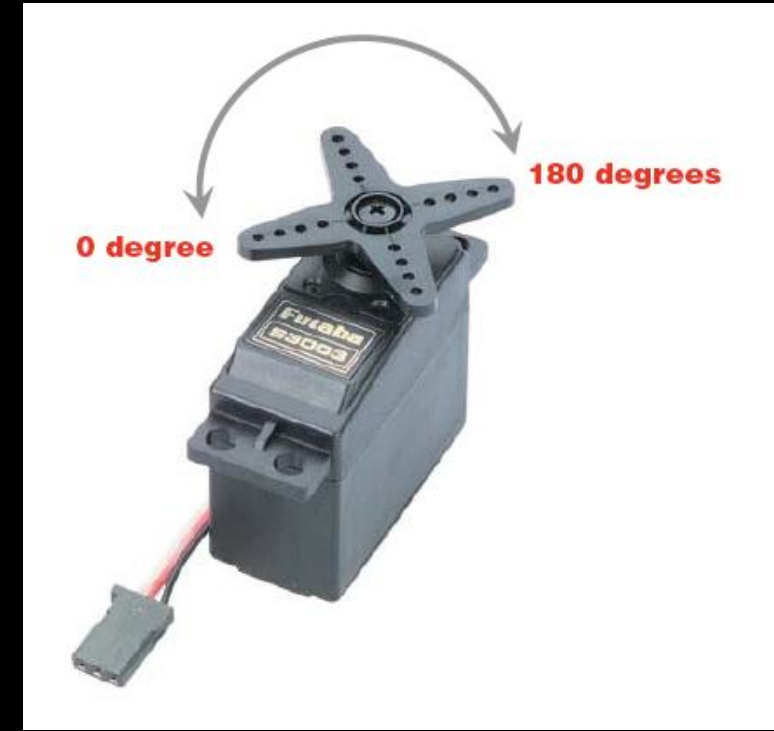
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# NEW WORDS...

- Servo
- 360 Servo
- PWM – Pulse Width Modulation
- Position

# MOVE A SERVO MOTOR

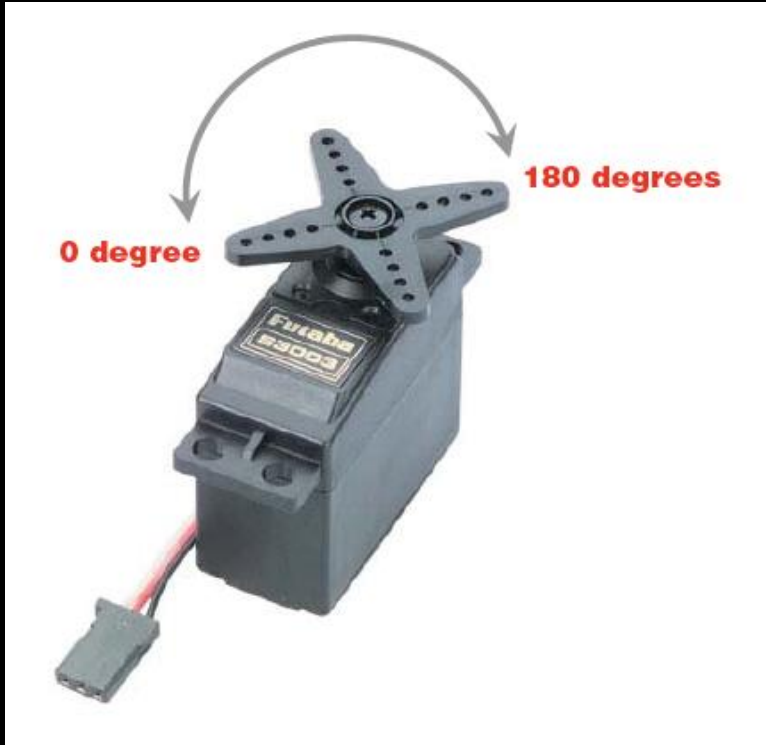
- PWM?
  - Pulse Width Modulation
- Lets Watch a Servo Motor Video



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# WRITING TO A SERVO MOTOR



```
#include <Servo.h>
Servo fingerServo; // create servo object to control a servo
// -----
// the setup function runs once when you press reset or power the board
void setup() {
  fingerServo.attach(9); // attaches the servo on pin 8 to the servo object
  //Setting Servos to a default position
  fingerServo.write(20);
}
// -----
// the loop function runs over and over again forever
void loop()
{
  fingerServo.write(20);
  delay(2000);
  fingerServo.write(80);
  delay(2000) ;
}
```

Github - [servo\\_1 STEAMClown](#)



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# 360 SERVO

## REALLY IS A VARIABLE SPEED GEAR MOTOR

- Stop - To have a 360 motor stop, set the position around 90
- Forward - set the position around 0
- Backwards - set the position around 180? 360?

```
#define STOP_L 95  
#define STOP_R 95
```

```
#define FWD_L 0  
#define FWD_R 360
```

```
#define BWD_L 180  
#define BWD_R 0
```





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# REFERENCE SLIDES



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# APPENDIX



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