## EEPROM

Only have 100,000 rewrites to this. Don't write to it every loop. EVER.

**EEPROM Setup**

```
//put at top of file
#include <EEPROM.h>
```

no need to attach instance.

**EEPROM.write(int *location*, byte *value*);**

I'll say it again: Only have 100,000 rewrites to this. Don't write to it every loop. EVER.

location = number between 0 and 512 on ATmega168
location = number between 0 and 1023 on ATmega328

value = full range of byte values, 0-255

```
void eepromClear() {
   for (int i = 0; i < 512; i++) {
     EEPROM.write(i, 0);
   }
}
```

**EEPROM.read(int *location*);**

location = number between 0 and 512 on ATmega168
location = number between 0 and 1023 on ATmega328

```
void eepromPrintValueAtLocation(int address) {
  byte value = EEPROM.read(address);
  Serial.print(address);
  Serial.print("\t");
  Serial.print(value, DEC);
  Serial.println();
}
```

## Servo

Library disables analogWrite() (PWM) functionality on pins 9 and 10 on boards other than the mega. Up to 12 motors on those boards up to 48 on Mega, over 12 will again screw with PWM on Mega pins 11 & 12

**Servo Setup**

```
//put at top of file
#include <Servo.h>

//declare values
Servo myservo;
int servoPin = 11;

//attach in setup
myservo.attach(servoPin);
```

**Servo.write(int *location*);**

location = number between 0 and 179, represents degree

```
void servoGoTo(Servo aServo, int location) {
     aServo.write(location);
}
```

**also:**

Servo.read()  : returns last thing you told it to do
Servo. writeMicroseconds() : lets you access the pulsing
Servo.detach() : lets you use PWM again
Servo.attached() : is it currently attached? Returns bool