

Source Code:USED ARDUINO UNO AND MOTOR SHIELD

```
#include <PS2X_lib.h>
```

```
PS2X ps2x;
```

```
int right_motor_direction = 12;
```

```
int right_motor_speed= 3;
```

```
int left_motor_direction = 13;
```

```
int left_motor_speed = 11;
```

```
void setup() {
```

```
  pinMode(right_motor_direction, OUTPUT);
```

```
  pinMode(left_motor_direction, OUTPUT);
```

```
  ps2x.config_gamepad(7,5,4,6, false, false);
```

```
}
```

```
void loop() {
```

```
  ps2x.read_gamepad(false, 0);    //read controller and set large motor to spin at 'vibrate' speed
```

```
  if(ps2x.Analog(PSS_RY) < 128) {
```

```
    digitalWrite(right_motor_direction,HIGH);
```

```
    analogWrite(right_motor_speed, map(ps2x.Analog(PSS_RY), 128, 0, 0, 255));
```

```
  }
```

```
  else if(ps2x.Analog(PSS_RY) > 128) {
```

```
    digitalWrite(right_motor_direction,LOW);
```

```
    analogWrite(right_motor_speed, map(ps2x.Analog(PSS_RY), 128, 255, 0, 255));
```

```
  }
```

```
  else {
```

```
    analogWrite(right_motor_speed, 0);
```

```
  }
```

```
  if(ps2x.Analog(PSS_LY) < 128) {
```

```
    digitalWrite(left_motor_direction,HIGH);
```

```
    analogWrite(left_motor_speed, map(ps2x.Analog(PSS_LY), 128, 0, 0, 255));
```

```
  }
```

```
  else if(ps2x.Analog(PSS_LY) > 128) {
```

```
    digitalWrite(left_motor_direction,LOW);
```

```
    analogWrite(left_motor_speed, map(ps2x.Analog(PSS_LY), 128, 255, 0, 255));
```

```
  }
```

```
  else{
```

```
    analogWrite(left_motor_speed, 0);
```

```
  }
```

```
  delay(50);
```

```
}
```