

Program : 13

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Program Title: IR based SERVO Motor Controller

Aim: Design IR based SERVO Motor controller (Clockwise and Counterclockwise rotation of Shaft).

Hardware Required:

- Arduino Board.
- Breadboard.
- IR Sensor
- IR Remote
- Micro Servo

Code:

```
#include <Servo.h>
```

```
#include <IRremote.h>
```

```
int RECV_PIN = 11;
```

```
IRrecv irrecv(RECV_PIN);
```

```
decode_results results;
```

```
Servo myservo;
```

```
void setup()
```

```
{ Serial.begin(9600);
```

```
  irrecv.enableIRIn();
```

```
}
```

```
void loop() {
```

```
  if (irrecv.decode(&results))
```

```
  {
```

```
    switch (results.value)
```

```
    {
```

```
      case 0XFD00FF:
```

```
        myservo.attach(9);
```

```
        Serial.println("Start");
```

```
        break;
```

```
      case 0XFD609F:
```

```
        myservo.write(360);
```

```
        Serial.println("Clockwise");
```

```
        break;
```

```
      case 0XFD020DF:
```

```
        myservo.write(-360);
```

```
        Serial.println("Counter Clockwise");
```

```
        break;
```

```
      default:
```

```
        Serial.println("Unrecognized code received: 0x");
```

```
        Serial.println(results.value, HEX);
```

```
        break;
```

```
    }
```

```
    irrecv.resume();
```

```
  }
```

```
}
```

//