

Shiva Praneeth Kodali

Program No. – 13

Program Title – IR based SERVO Motor controller

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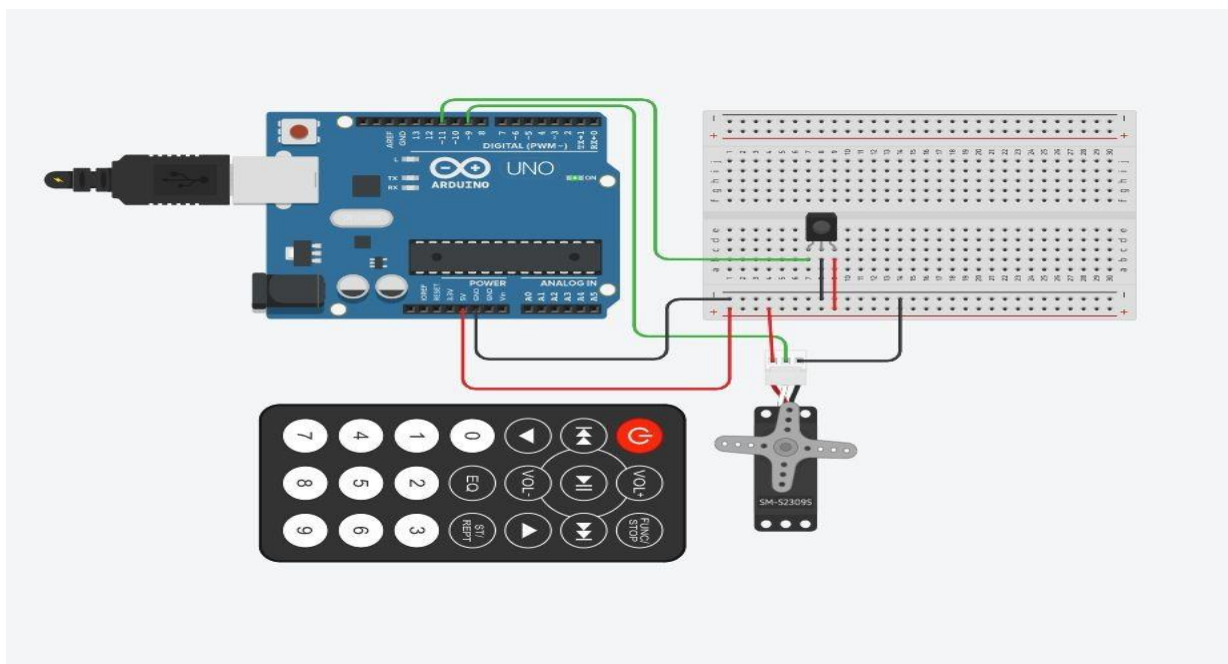
## AIM

Design IR based SERVO Motor controller. (Clockwise and Counterclockwise rotation of shaft).

## HARDWARES REQUIRED

- Arduino Board,
- Breadboard Small,
- IR Sensor,
- IR Remote,
- Micro Servo

## CIRCUIT DIAGRAM



## 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 0xFD20DF:
        myservo.write(-360);
        Serial.println("CounterClockwise");
        break;
    default:
        Serial.print("Unrecognized code received: 0x");
        Serial.println(results.value, HEX);
        break;
}

irrecv.resume();
}
```

## OUTPUT

A screenshot of a 'Serial Monitor' window. The title bar is light gray with a small icon on the left and the text 'Serial Monitor'. The main area is white and contains a series of text lines: 'Starting..', 'Clockwise..', 'Clockwise..', 'Counter Clockwise..', 'Counter Clockwise..', and 'Unrecognized code received: 0xFD48B7'.

```
Starting..  
Clockwise..  
Clockwise..  
Counter Clockwise..  
Counter Clockwise..  
Unrecognized code received: 0xFD48B7
```