

// This code is for controlling servo motor with IR remote control
// When clicking at any of two buttons the motor is toggling between the rotation and stop

```
#include <IRremote.h>          //must copy IRremote library to arduino libraries
#include <Servo.h>
#define plus 0xA3C8EDDB        //clockwise rotation button
#define minus 0xF076C13B       //counter clockwise rotation button
```

```
int RECV_PIN = 2;              //IR receiver pin
Servo servo;
int val;                       //rotation angle
bool cwRotation, ccwRotation;  //the states of rotation
```

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

```
decode_results results;
```

```
void setup()
{
    Serial.begin(9600);
    irrecv.enableIRIn(); // Start the receiver
    servo.attach(9);      //servo pin
}
```

```
void loop()
{
    if (irrecv.decode(&results)) {
        Serial.println(results.value, HEX);
        irrecv.resume(); // Receive the next value

        if (results.value == plus)
        {
            cwRotation = !cwRotation;    //toggle the rotation value
            ccwRotation = false;         //no rotation in this direction
        }

        if (results.value == minus)
        {
            ccwRotation = !ccwRotation;  //toggle the rotation value
            cwRotation = false;          //no rotation in this direction
        }
    }
    if (cwRotation && (val != 175)) {
        val++;                          //for clockwise button
    }
    if (ccwRotation && (val != 0)) {
        val--;                          //for counter clockwise button
    }
    servo.write(val);
    delay(20);                          //General speed
}
```