

Arduino code for single axis solar tracker

```
#include <Servo.h> //including the library of servo motor

Servo sg90;

int initial_position = 90;

int LDR1 = A0; //connect The LDR1 on Pin A0

int LDR2 = A1; //Connect The LDR2 on pin A1

int error = 5;

int servopin=9; //You can change servo just makesure its on arduino's PWM pin

void setup()

{

    sg90.attach(servopin);

    pinMode(LDR1, INPUT);

    pinMode(LDR2, INPUT);

    sg90.write(initial_position); //Move servo at 90 degree

    delay(2000);

}

void loop()

{

    int R1 = analogRead(LDR1); // read LDR 1

    int R2 = analogRead(LDR2); // read LDR 2

    int diff1= abs(R1 – R2);

    int diff2= abs(R2 – R1);

    if((diff1 <= error) || (diff2 <= error)) {
```

```

} else {
  if(R1 > R2)
  {
    initial_position = -initial_position;
  }
  if(R1 < R2)
  {
    initial_position = ++initial_position;
  }
}

sg90.write(initial_position);

delay(100);
}

```

Connections like this:

