SOLAR TRACKER - CIRCUIT SCHEMATIC

SECTION A: LEFT PHOTORESISTOR

5V

LDR
Left

→ **A0**
(Arduino)
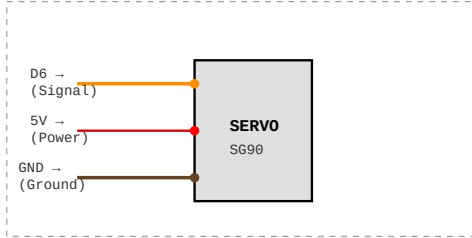
10kΩ

GND
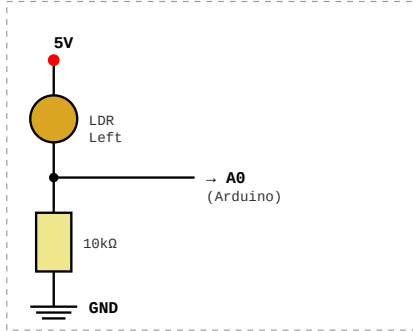
SECTION B: RIGHT PHOTORESISTOR

5V

LDR
Right

→ **A2**
(Arduino)

10kΩ

GND
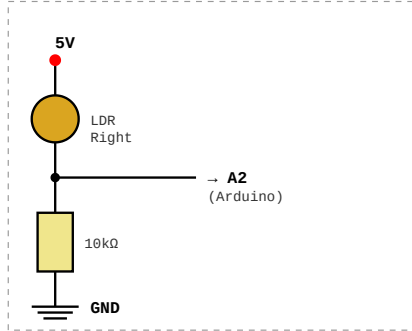
SECTION C: SERVO MOTOR (SG90)

D6 →
(Signal)

5V →
(Power)

GND →
(Ground)

SERVO
SG90

SECTION D: SOLAR PANEL + LED INDICATOR

⚠️ *ELECTRICALLY ISOLATED FROM ARDUINO - Independent circuit*

SOLAR
5V

+

220Ω

Red LED

−
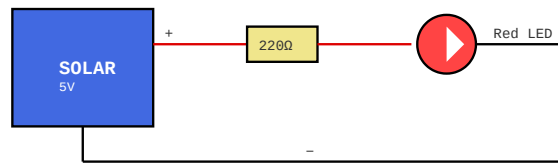
POWER SUPPLY

USB Cable → Arduino Uno

- Provides regulated 5V power
- Powers Arduino, sensors, and servo motor

COMPONENTS SUMMARY

- 2× Photoresistor (LDR 5mm)
- 2× Resistor 10kΩ (voltage dividers)
- 1× Servo Motor SG90
- 1× Solar Panel (5V, small)
- 1× Red LED + 1× Resistor 220Ω