

Servo Angle Control with Arduino Uno

Overview

This project demonstrates how to control an **SG92R micro servo motor** using an **Arduino Uno**. The servo angle is adjusted in real-time based on user input through the **Serial Monitor** in the Arduino IDE.

Components Used

- Arduino Uno
- SG92R Micro Servo
- USB Cable
- Jumper Wires
- External 5V Power Supply (recommended for stable servo performance)

Features

- Controls servo angle from 0° to 180°
- Accepts angle input via Serial Monitor
- Uses Arduino's built-in `Servo` library

How It Works

1. User enters a value (0–180) in the Serial Monitor.
2. Arduino reads this value and moves the servo to the corresponding angle using PWM.
3. The servo responds immediately, allowing real-time testing and control.

Setup Instructions

1. Connect the SG92R servo:
 - Red wire → 5V
 - Brown wire → GND
 - Orange wire → Digital Pin 9 (PWM pin)
2. Upload the Arduino code using Arduino IDE.
3. Open the Serial Monitor, set baud rate to 9600, and input angles between 0 and 180.

DAY 2 CODE LINK:

<https://github.com/Shindepooja30/day-2-code>