### **Power Supply:**

* **Arduino: Can be powered via USB or a separate 5V adapter.**
* **Relay and Servo: If using a separate power supply, ensure common ground between the external power supply and Arduino.**

### **Additional Wiring Details:**

* **IR Sensor: Ensure that the sensor is connected to the correct voltage and ground, with the signal line going to pin 2.**
* **Relay: When the relay is activated (via pin 7), it will switch between the NC (normally closed) and NO (normally open) terminals to control power to the motor.**
* **Servo Motor: The servo’s signal pin must be connected to pin 6 for control, while the VCC and GND provide power.**