

Arduino Robot System Wiring Datasheet

Motor Driver (L298N) Connections

Component	Connection
EN A	Pin 6 (PWM)
EN B	Pin 9 (PWM)
IN1	Pin 2 (Left Motor)
IN2	Pin 3 (Left Motor)
IN3	Pin 4 (Right Motor)
IN4	Pin 5 (Right Motor)
OUT1/OUT2	Left Motor
OUT3/OUT4	Right Motor
VCC	9V Battery
GND	Common Ground
5V	5V Breadboard Rail

IR Sensor Connections

Component	Connection
Left IR Sensor	A0
Right IR Sensor	A1

Color Sensor (TCS3200/TCS230) Connections

Component	Connection
S0	A2
S1	A3
S2	A4
S3	A5
OUT	Pin 11
OE	Pin 13 (Output Enable)
LED	Pin 12 (LED Control)

Servo Motor Connections

Component	Connection
Signal	Pin 10
VCC	5V

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GND	Common Ground
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