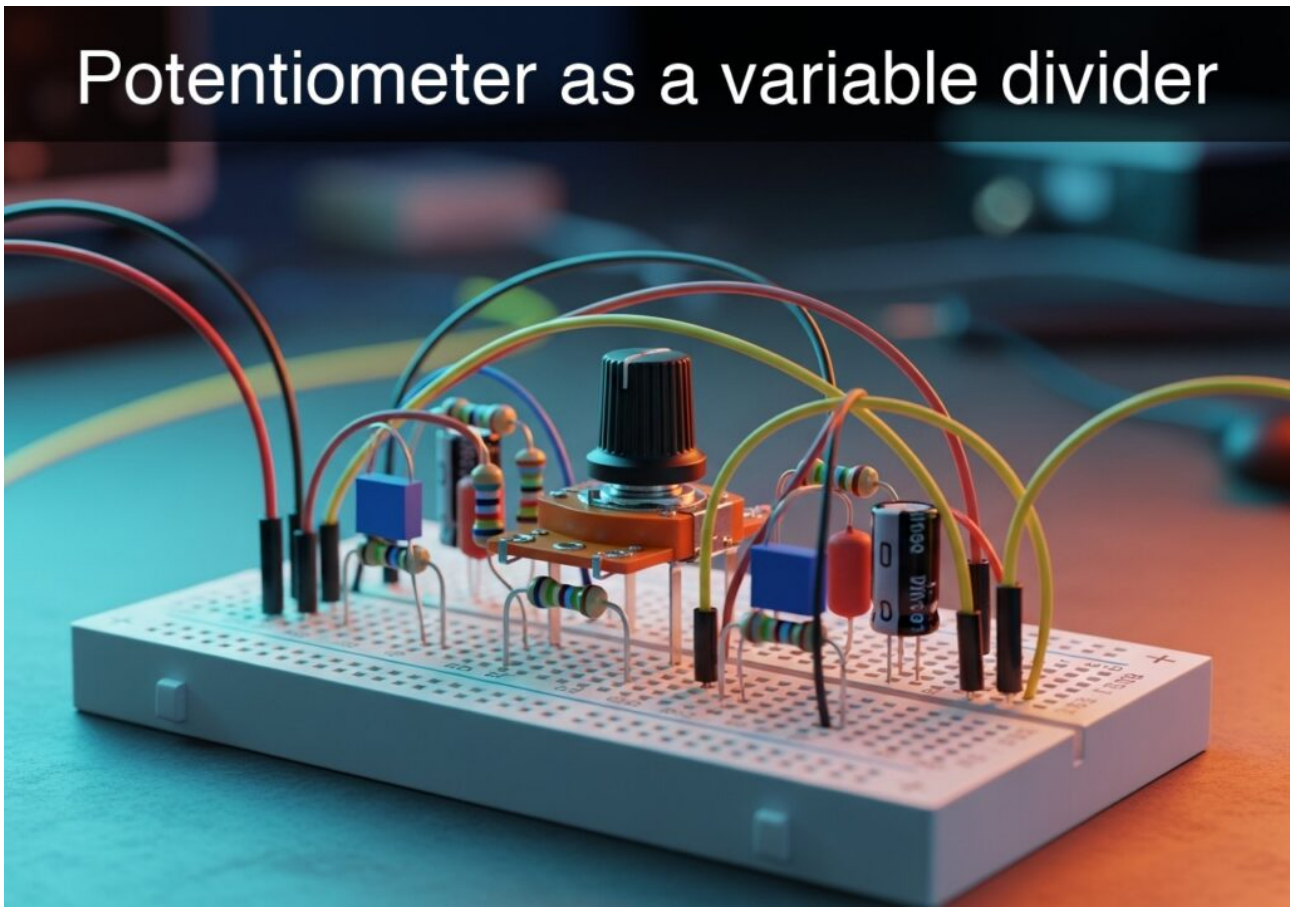
Practical case: Unbalanced Wheatstone Bridge

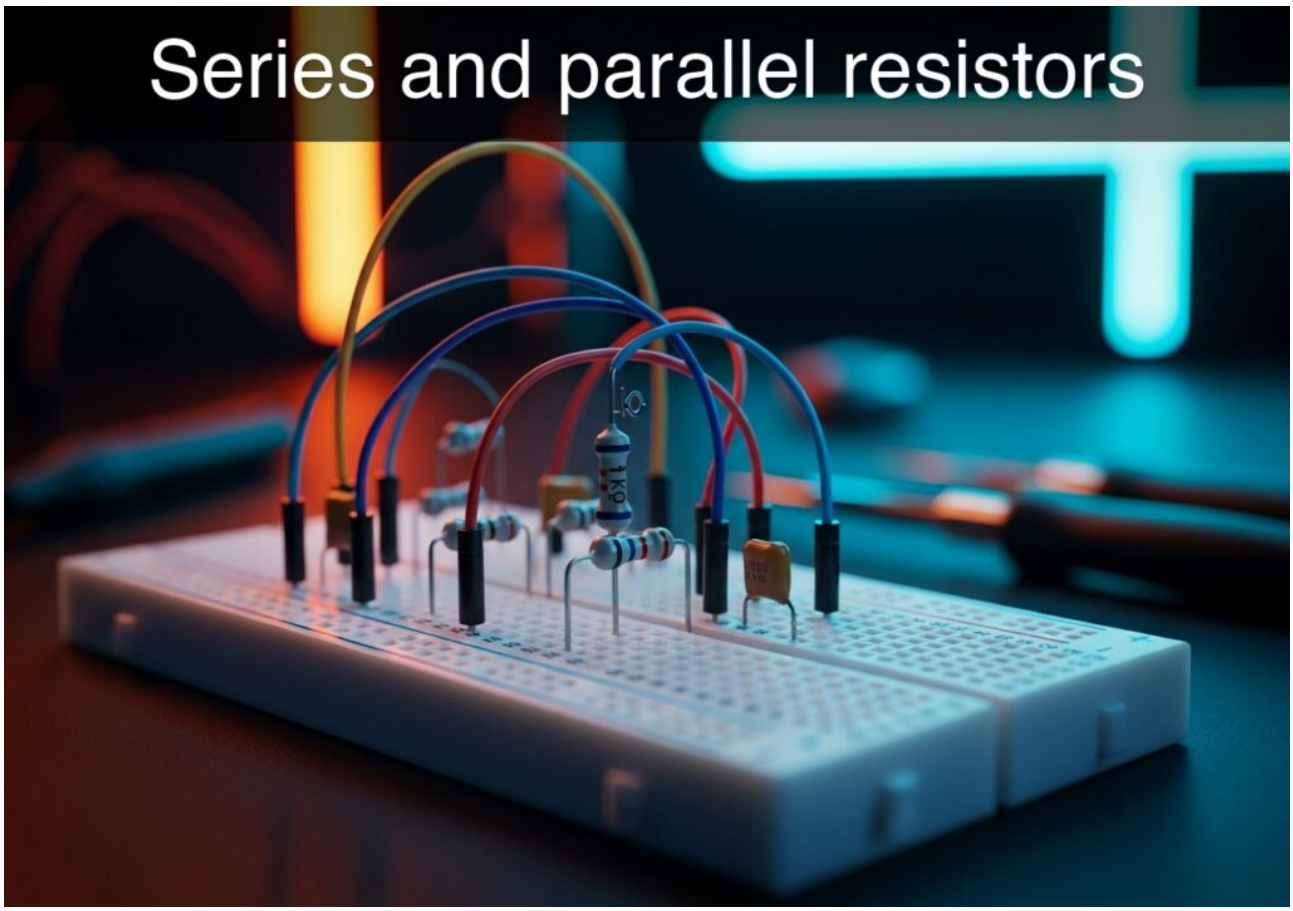
Master Analog Electronics by building a Wheatstone bridge with a Resistor sensor. Measure precise differential voltage changes and calibrate zero-point offsets.

Practical case: Potentiometer as a variable divider



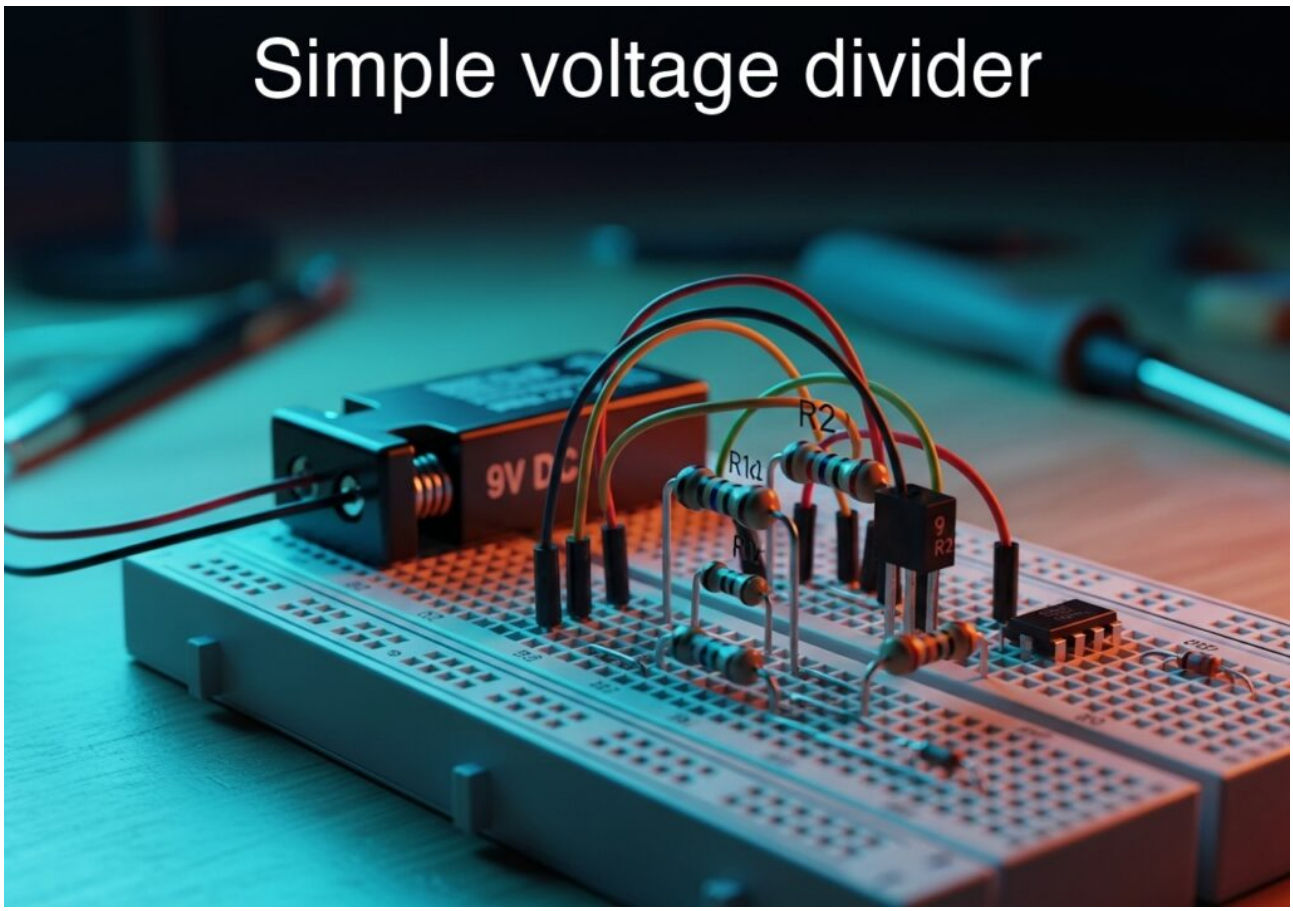
Master Analog Electronics basics by building a variable voltage divider. Use a potentiometer as a variable Resistor to control output signals from 0V to 5V.

Practical case: Series and parallel resistors



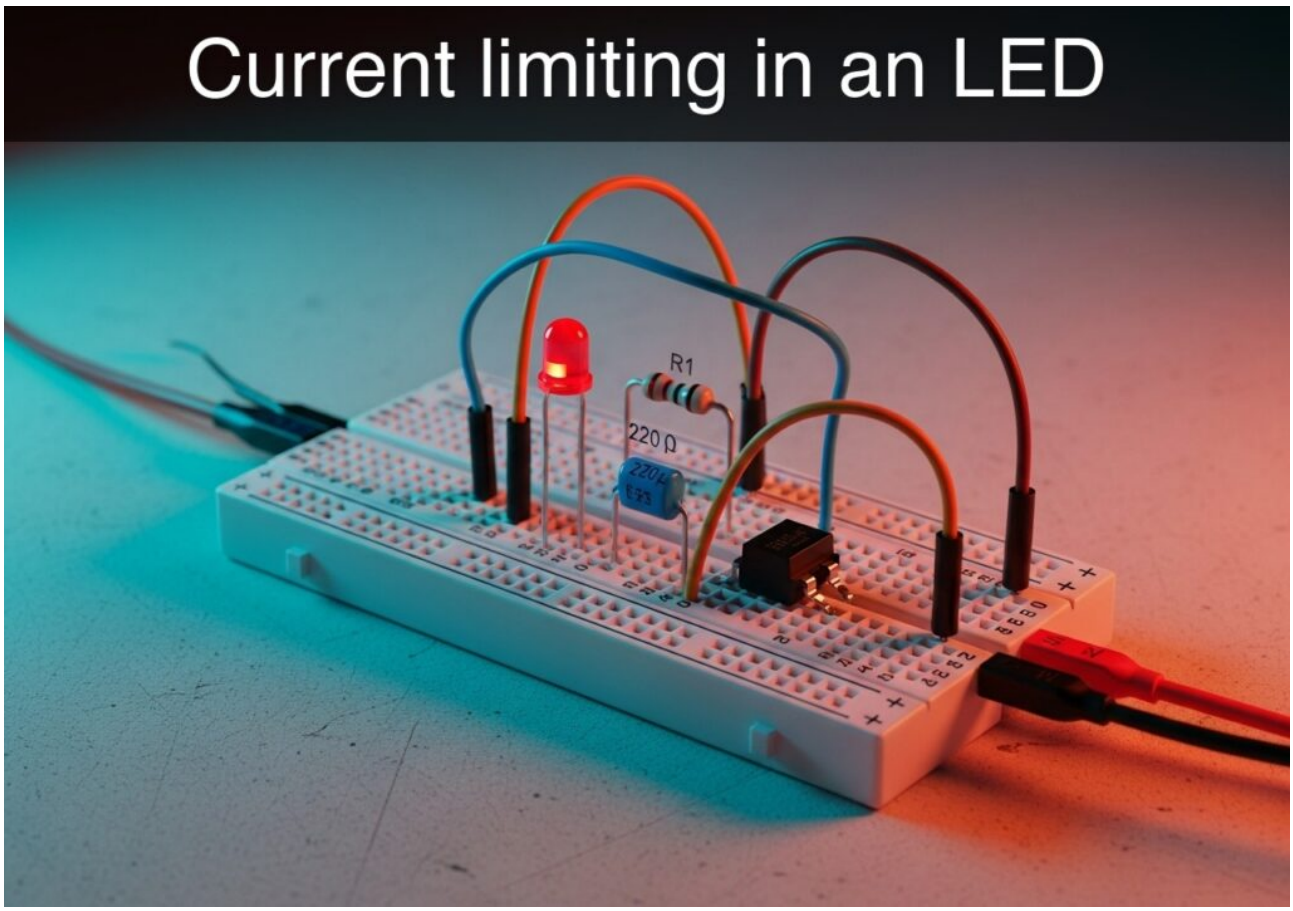
Master Analog Electronics basics by building series and parallel Resistor circuits. Measure equivalent resistance to design precise voltage dividers and loads.

Practical case: Simple voltage divider



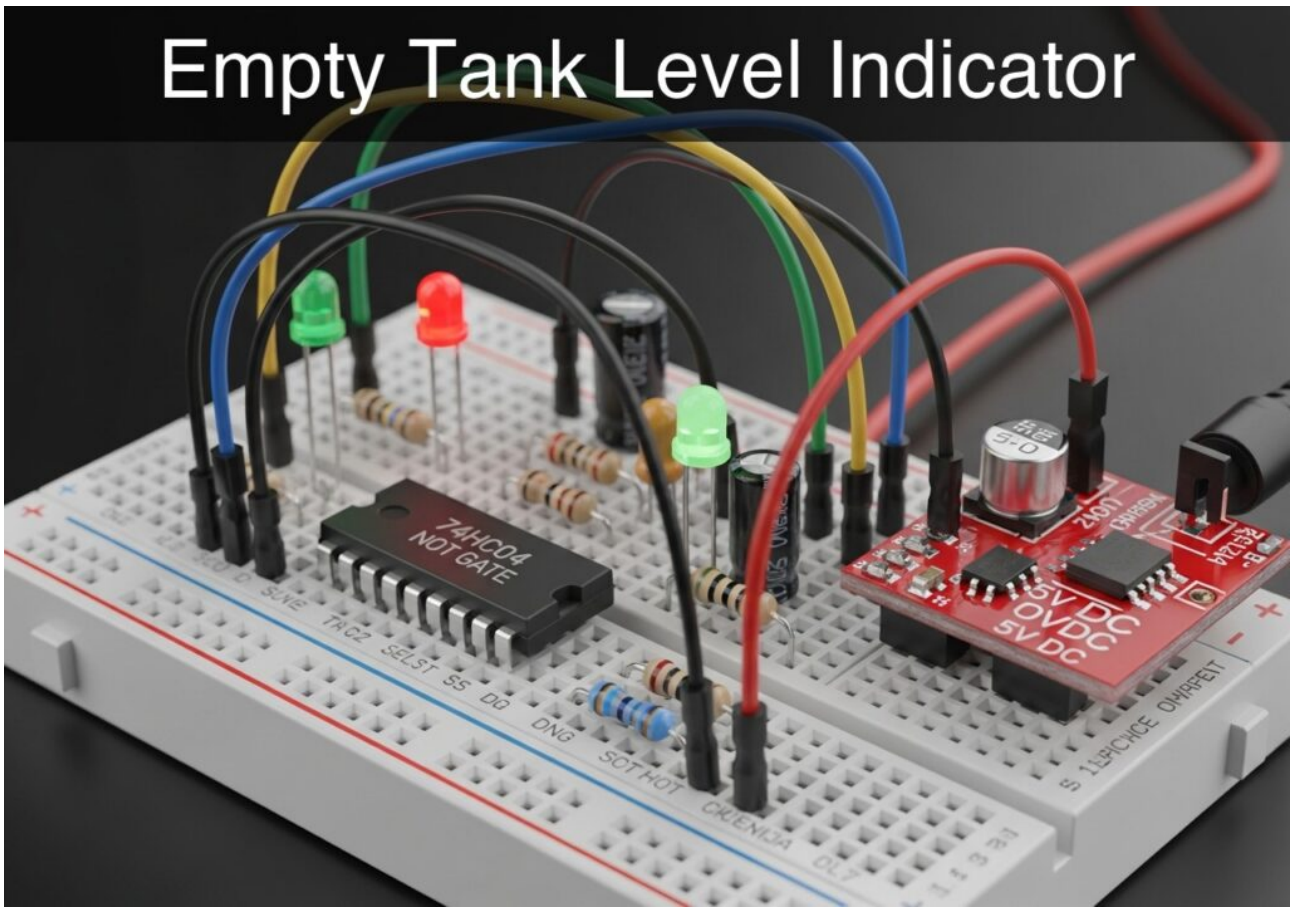
Master Analog Electronics by building a voltage divider with a Resistor pair. Learn to step down 9V to 4.5V for sensor interfacing and verify the output ratio.

Practical case: Current limiting in an LED



Master Analog Electronics basics by building a circuit where a Resistor protects an LED. Apply Ohm’s Law to limit current and ensure safe, steady illumination.

Practical case: Empty Tank Level Indicator



Master Digital Electronics by building a water level alarm with a NOT gate. Design a circuit that lights an LED when tanks empty, preventing pump damage.