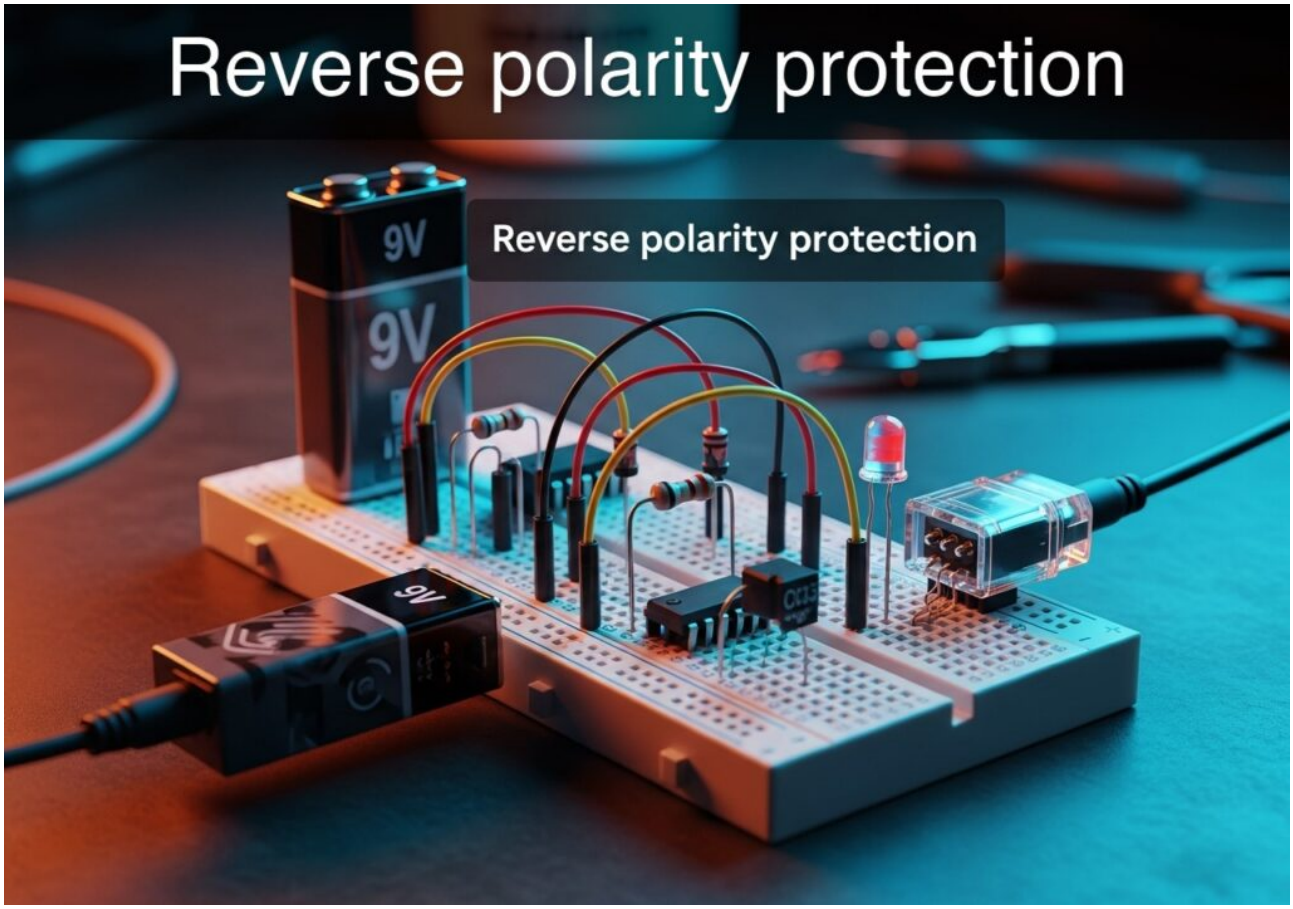
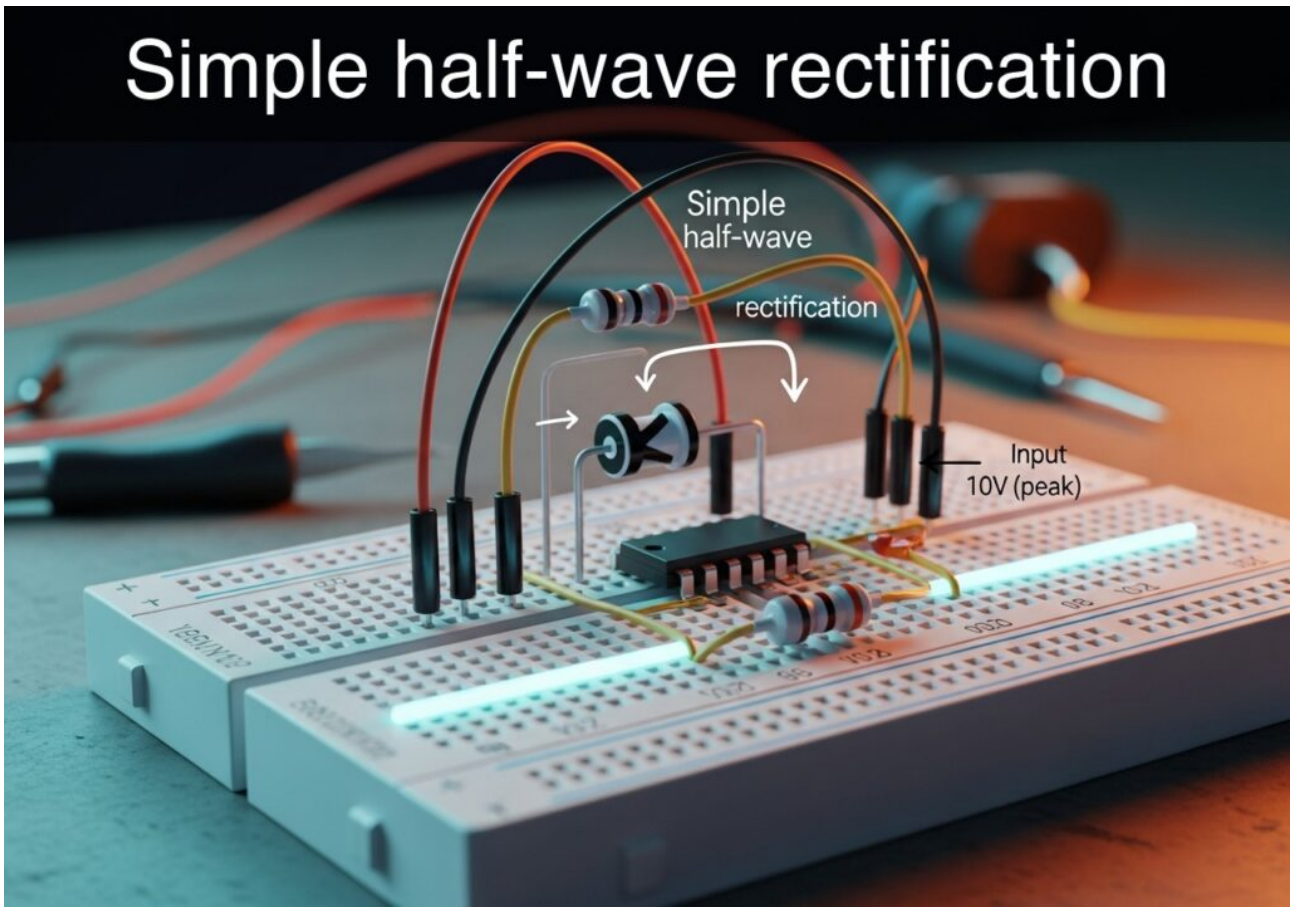
Practical case: Reverse polarity protection



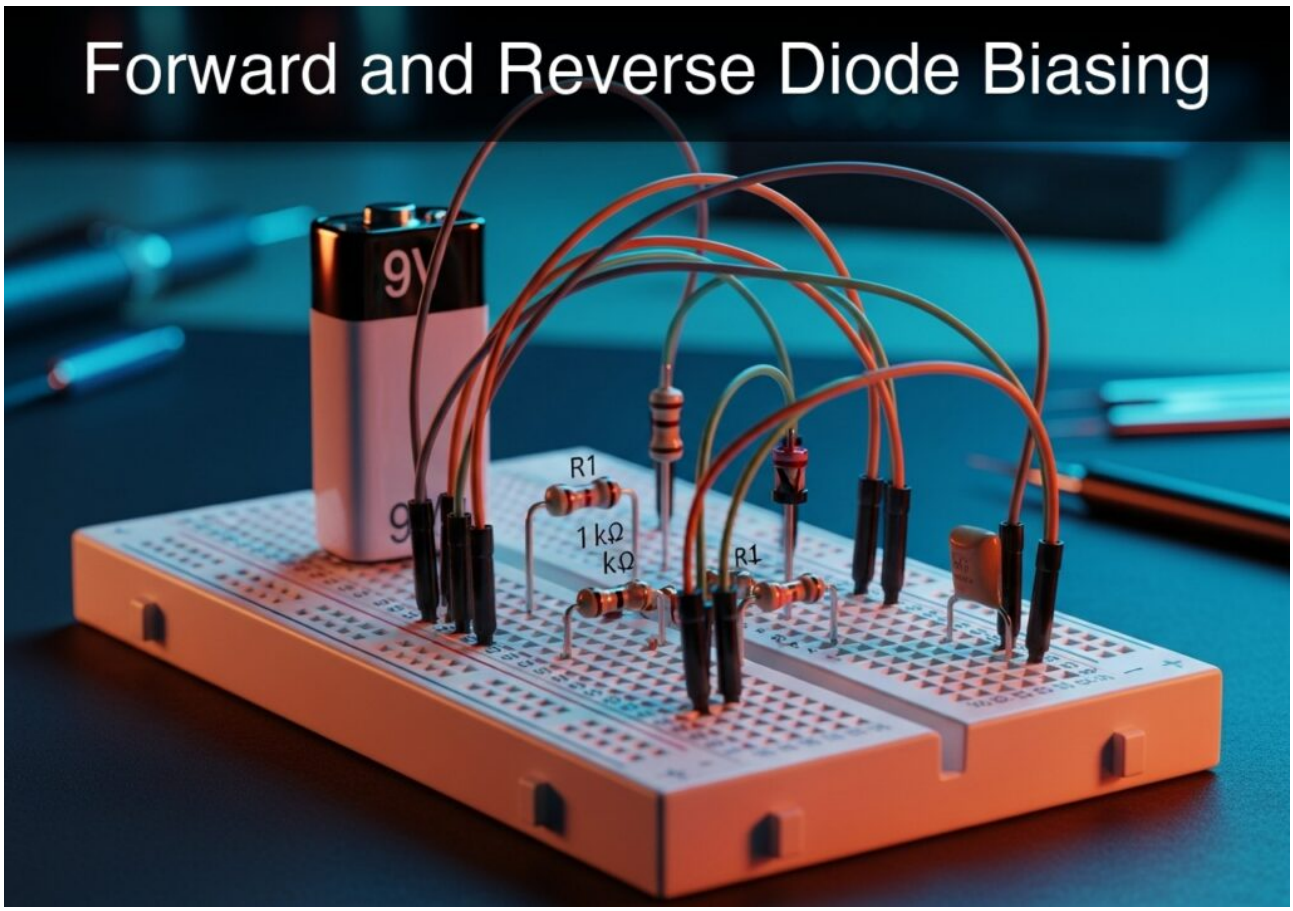
Learn Analog Electronics by building a Diode protection circuit for a DC motor. Prevent damage from reverse polarity and measure the 0.7V voltage drop.

Practical case: Simple half-wave rectification



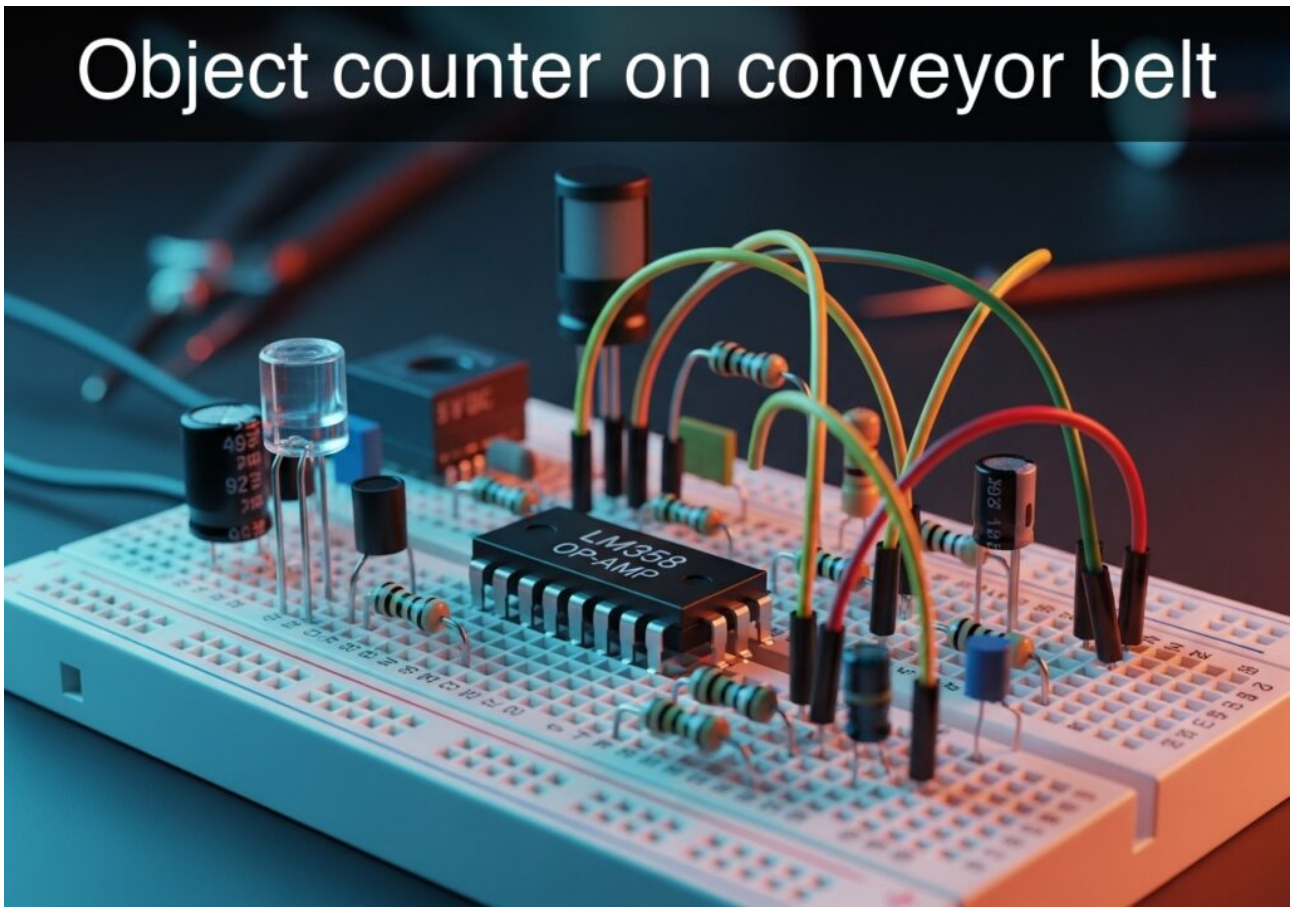
Master Analog Electronics by building a half-wave rectifier using a Diode. Convert AC to pulsating DC and visualize signal clipping on your oscilloscope.

Practical case: Forward and Reverse Diode Biasing



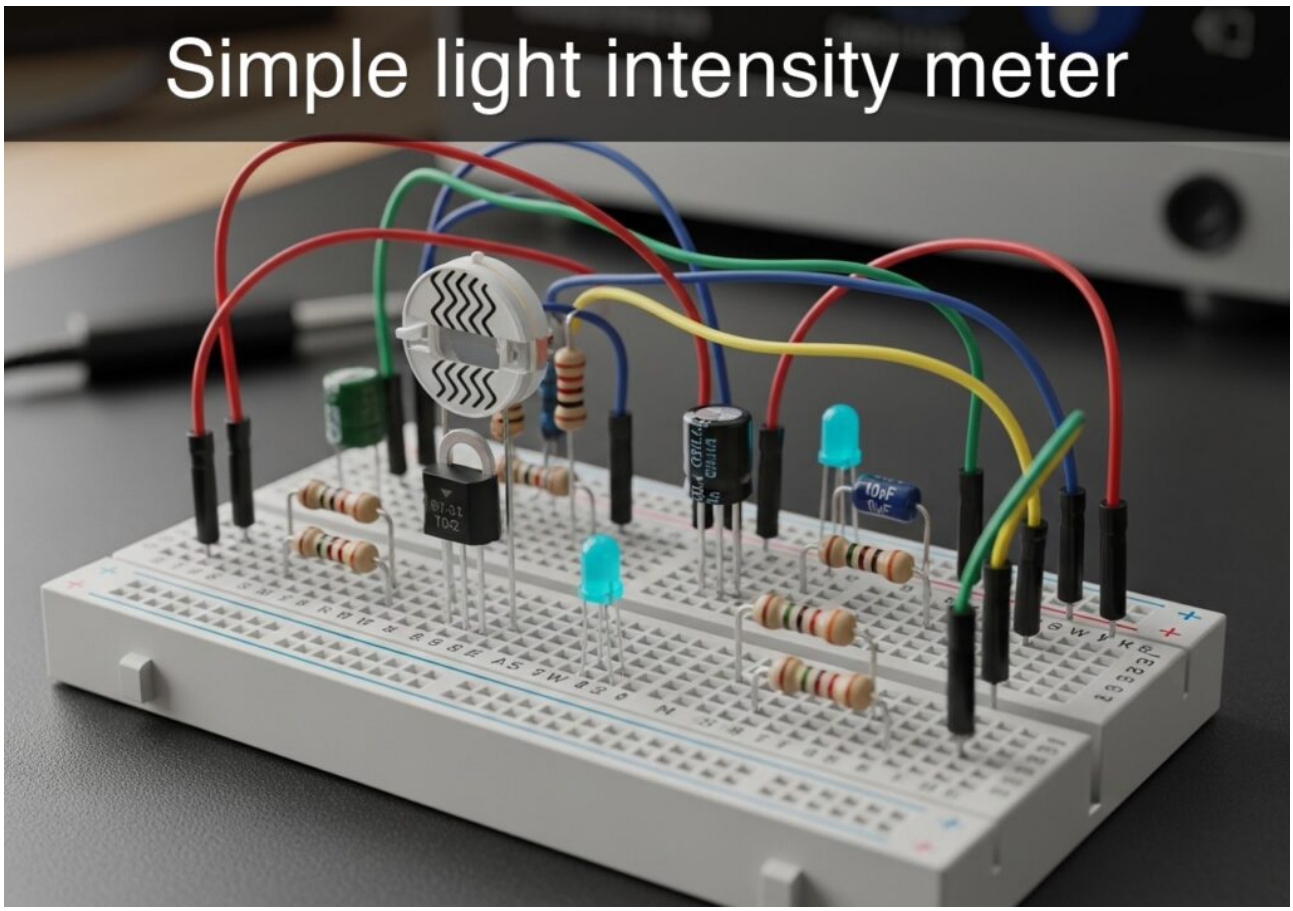
Master Analog Electronics by building a Diode circuit to verify unidirectional current flow. Measure 0.7V drops and block reverse polarity in this lab.

Practical case: Object counter on conveyor belt



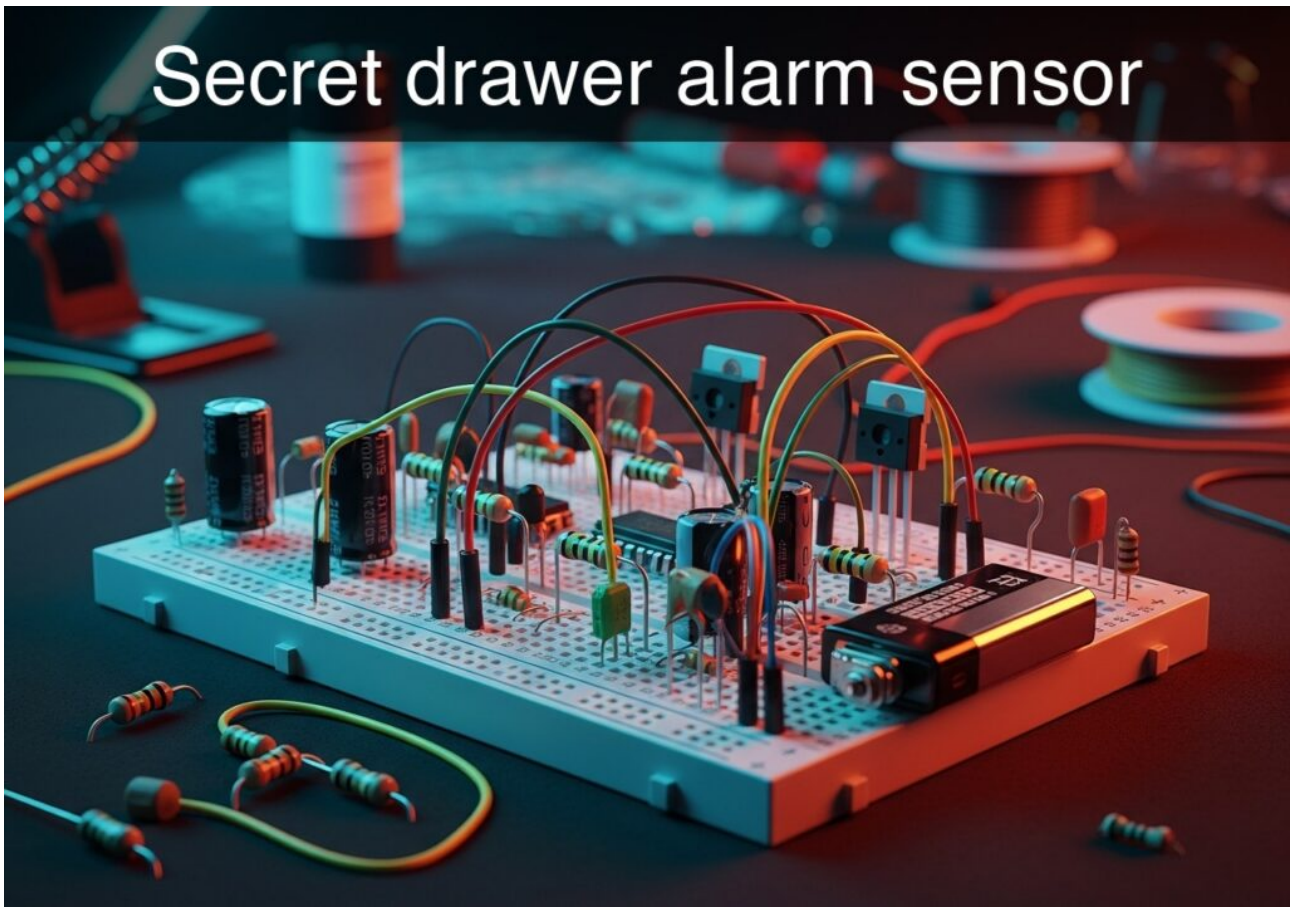
Master Analog Electronics by building an optical barrier with a Photoresistor. Detect moving objects and trigger a precise logic signal when the beam is broken.

Practical case: Simple light intensity meter



Master Analog Electronics by building a dark sensor with a Photoresistor. Create a circuit where an LED automatically dims in bright light to save power.

Practical case: Secret drawer alarm sensor



Master Analog Electronics by building a drawer alarm. Use a Photoresistor to detect light and trigger a buzzer instantly, securing your valuables effectively.