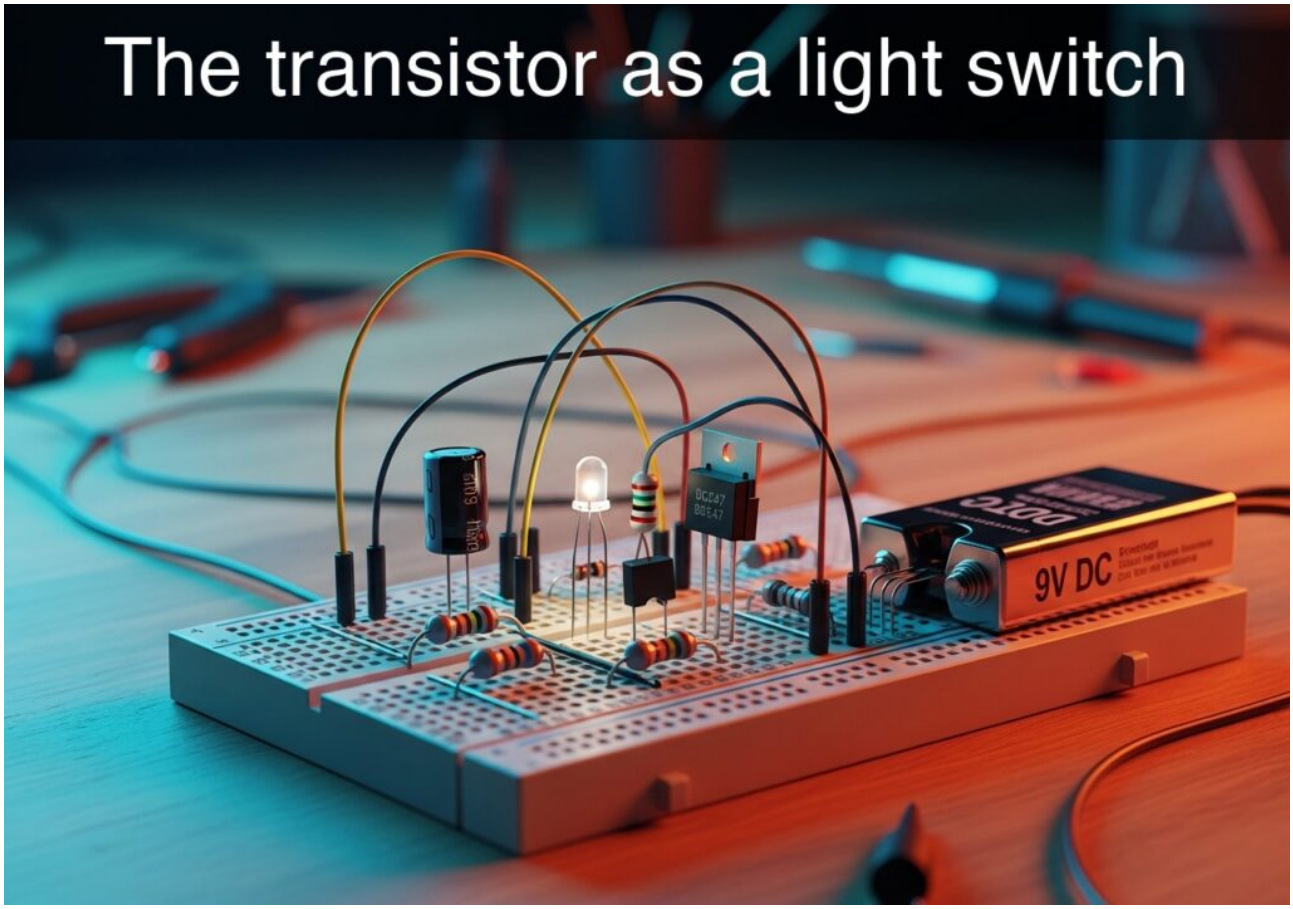
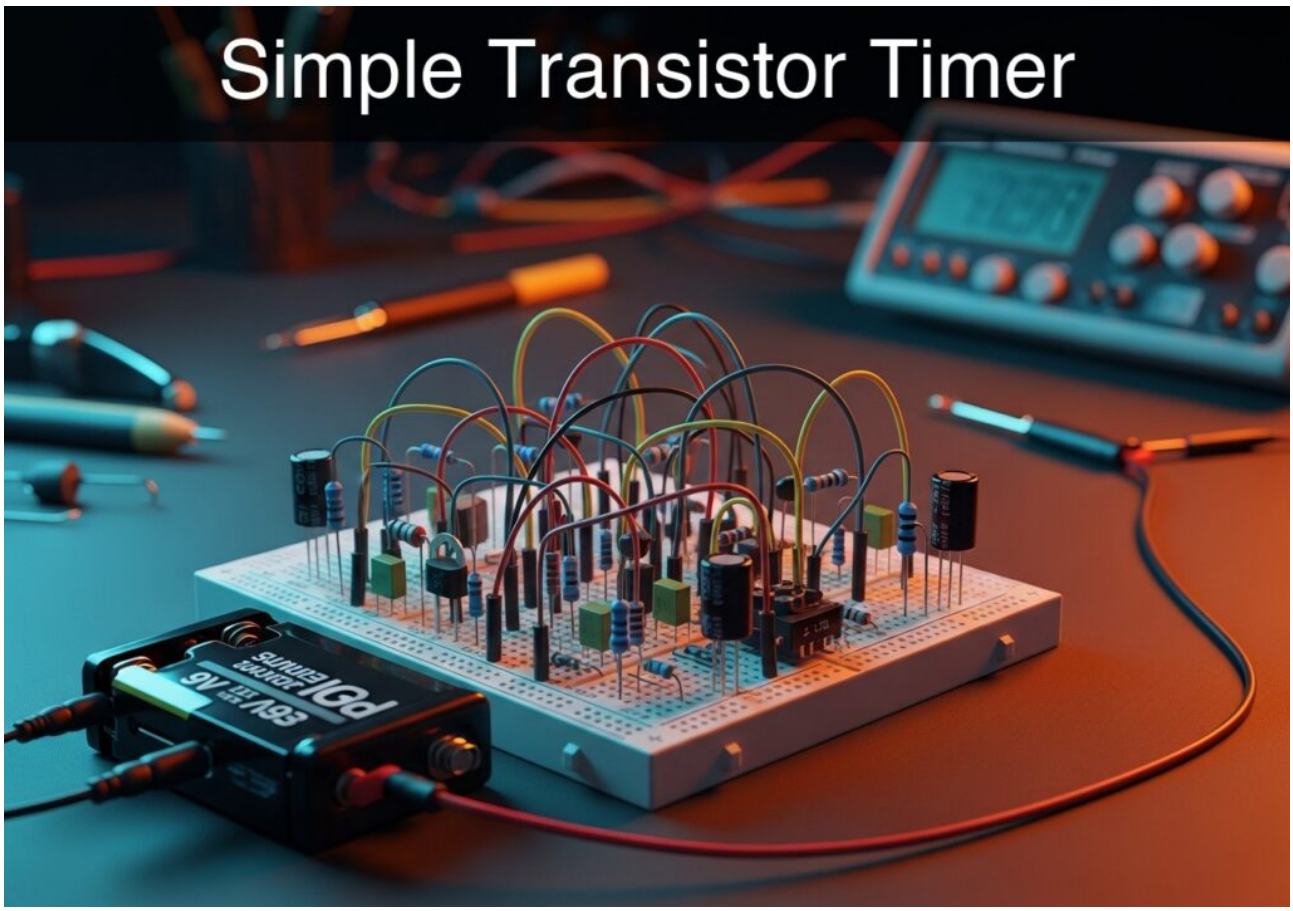
Practical case: The transistor as a light switch



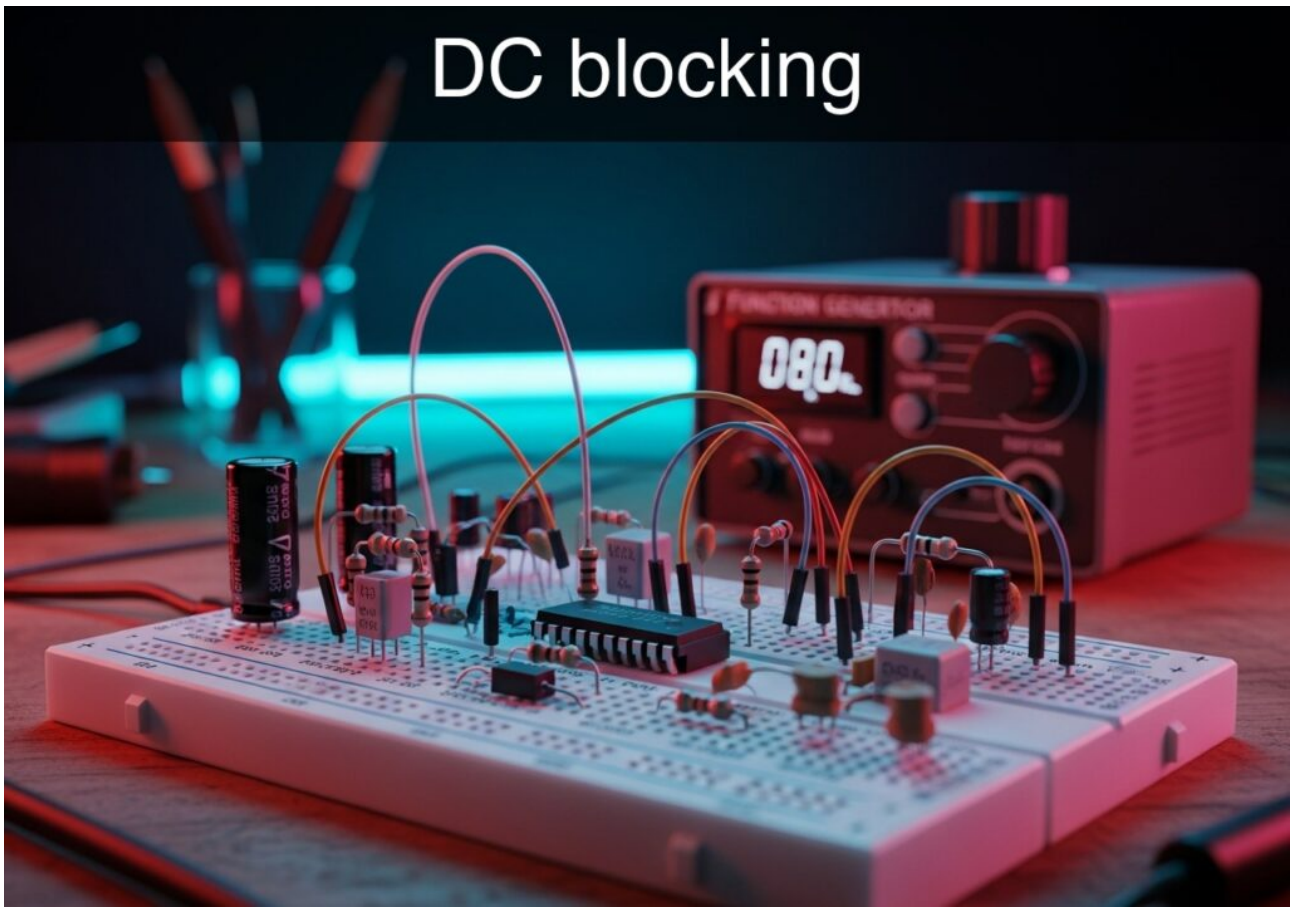
Master Analog Electronics by building a Transistor switch circuit. Learn to control high-current loads like LEDs and measure saturation voltage drops.

Practical case: Simple Transistor Timer



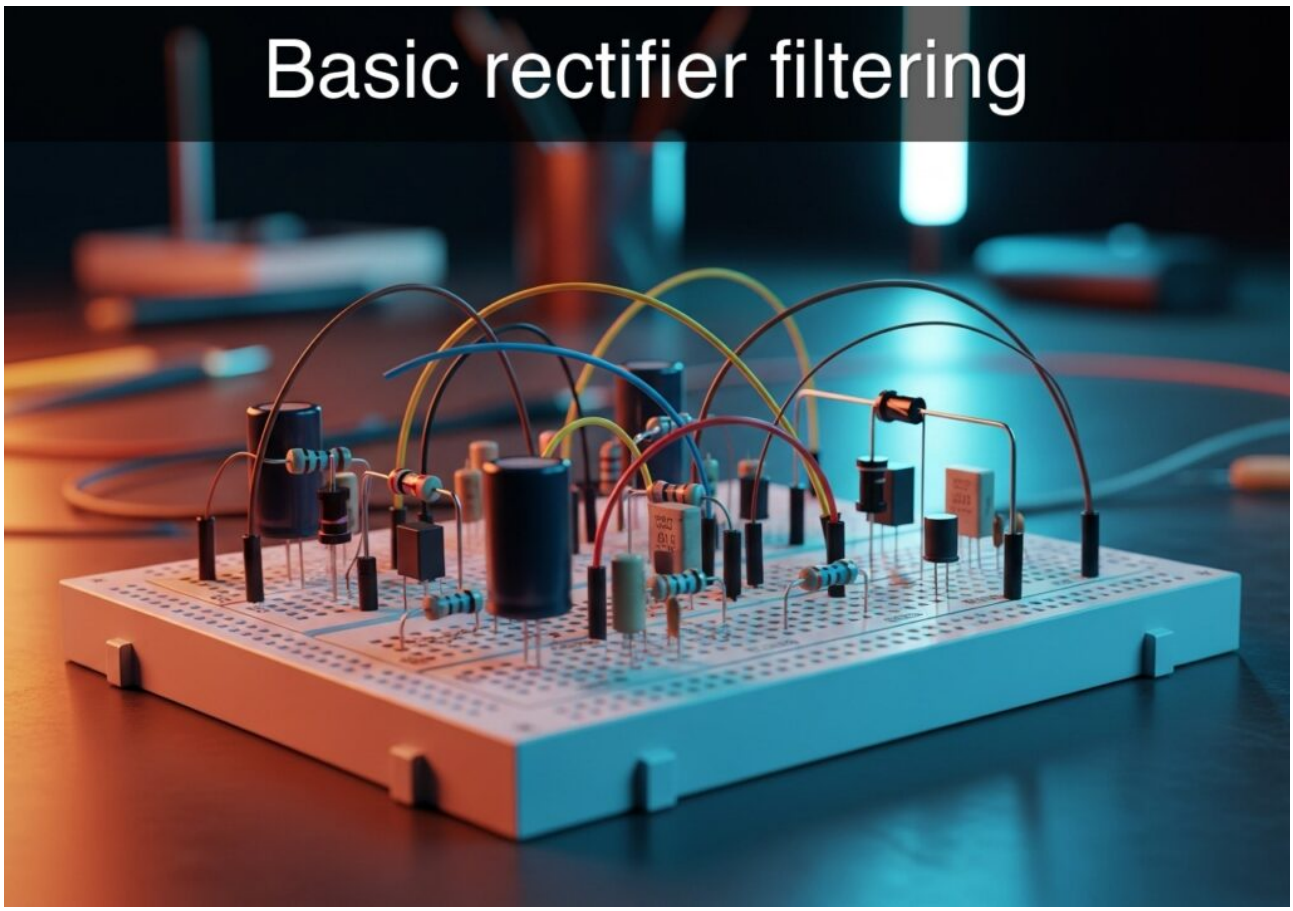
Learn Analog Electronics by building a practical off-delay timer. Use a Capacitor to control transistor switching and create custom lighting fade-out effects.

Practical case: DC blocking



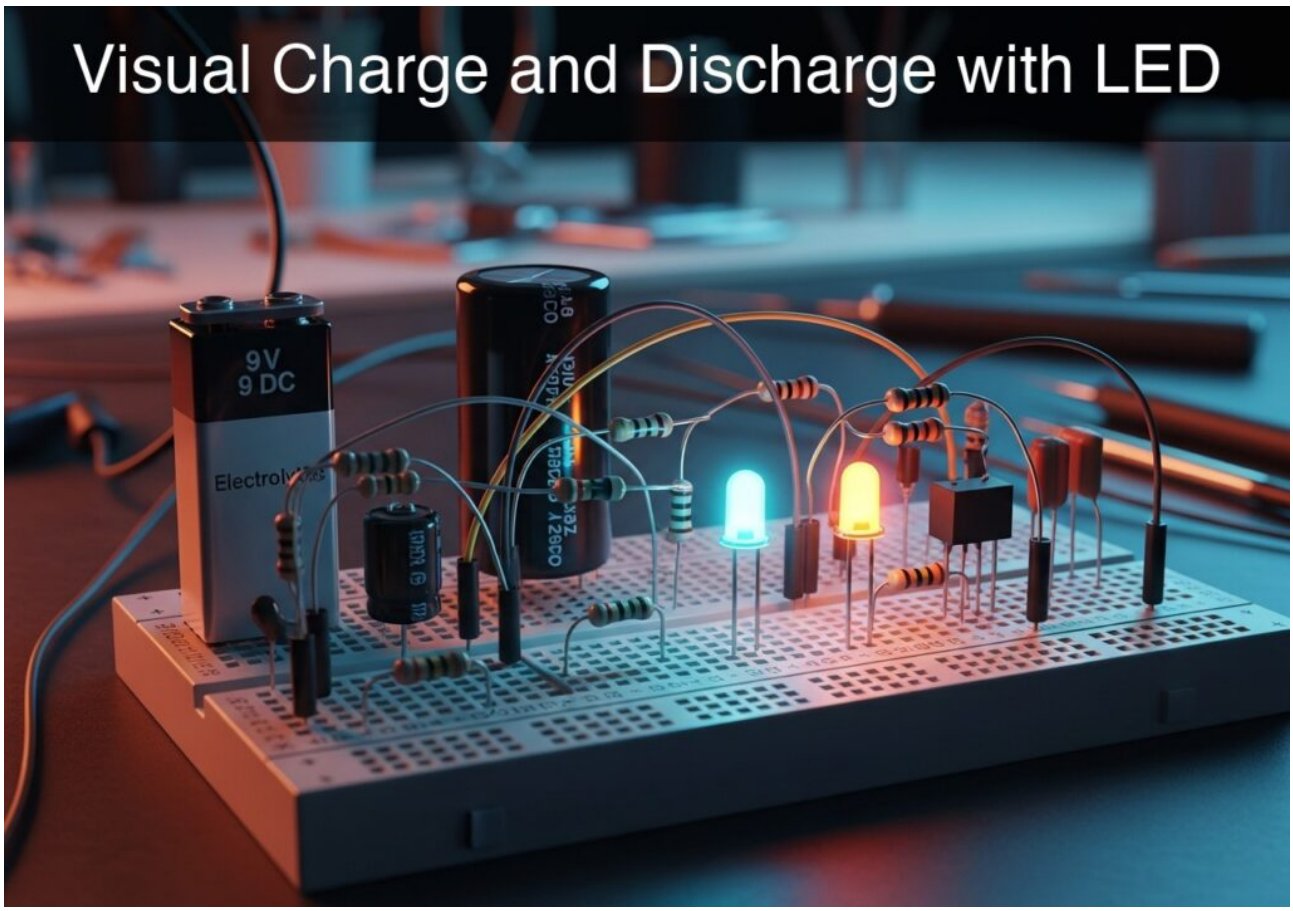
Master Analog Electronics by building a coupling circuit with a Capacitor. Learn to block DC offsets while passing AC audio signals for clear, centered output.

Practical case: Basic rectifier filtering



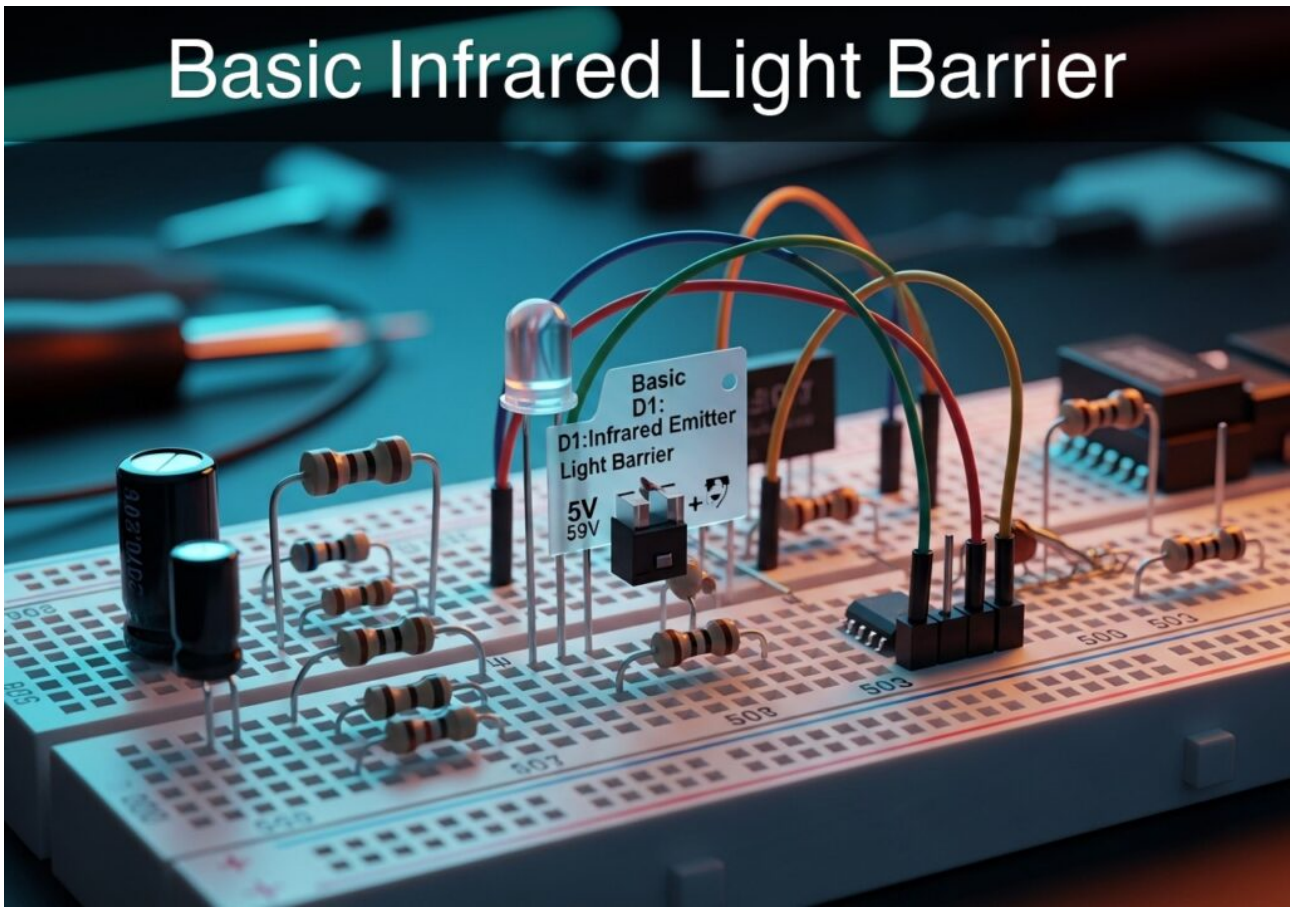
Master Analog Electronics by building a rectifier circuit. See how a Capacitor transforms AC ripple into steady DC voltage for reliable power supplies.

Practical case: Visual Charge and Discharge with LED



Explore Analog Electronics by building a circuit where a Capacitor keeps an LED fading out after power loss, visualizing energy storage and RC time constants.

Practical case: Basic Infrared Light Barrier



Master Analog Electronics by building a light beam alarm. Use a Photodiode to detect interruptions and trigger a 0.7V signal that lights up a security LED.