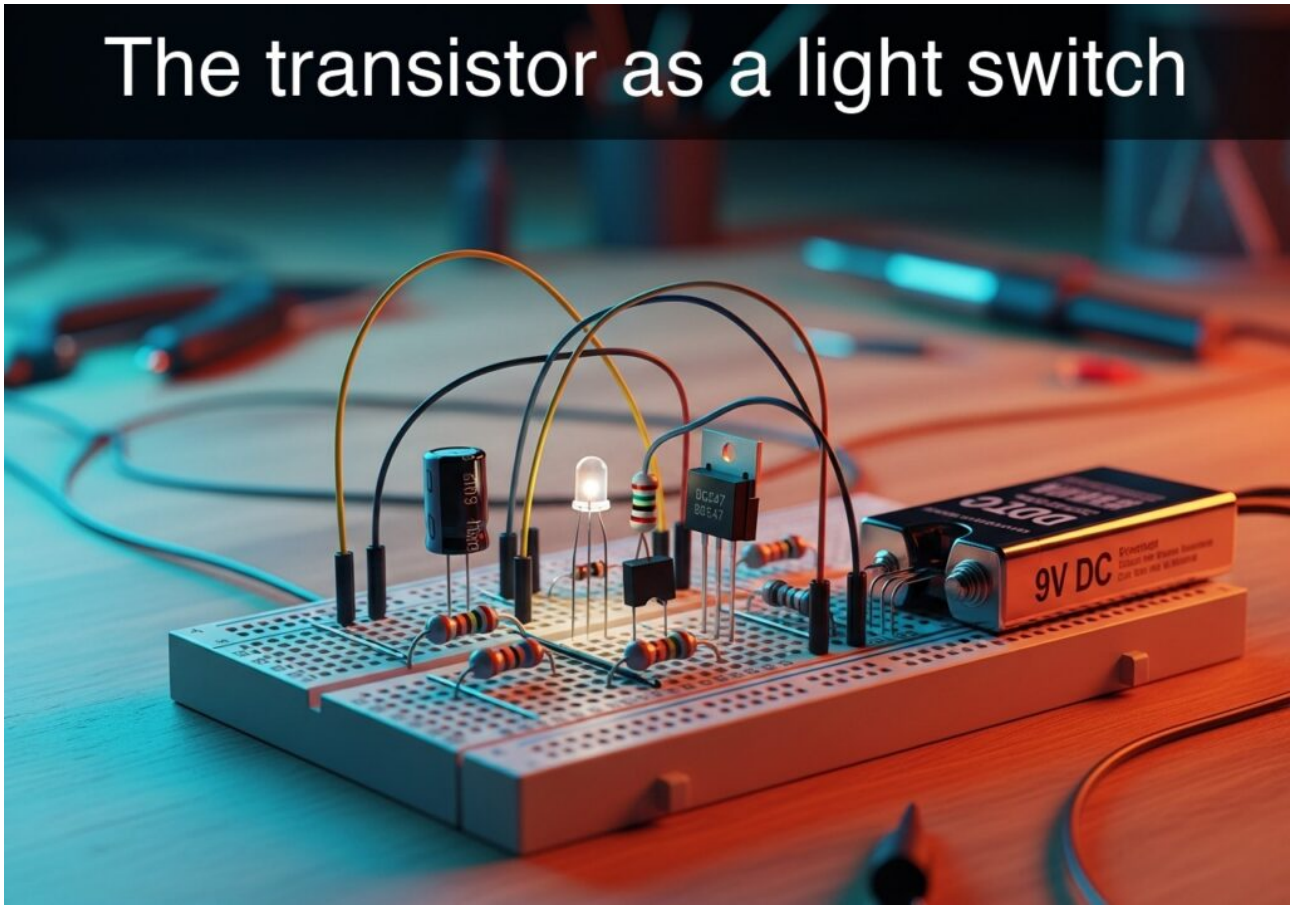
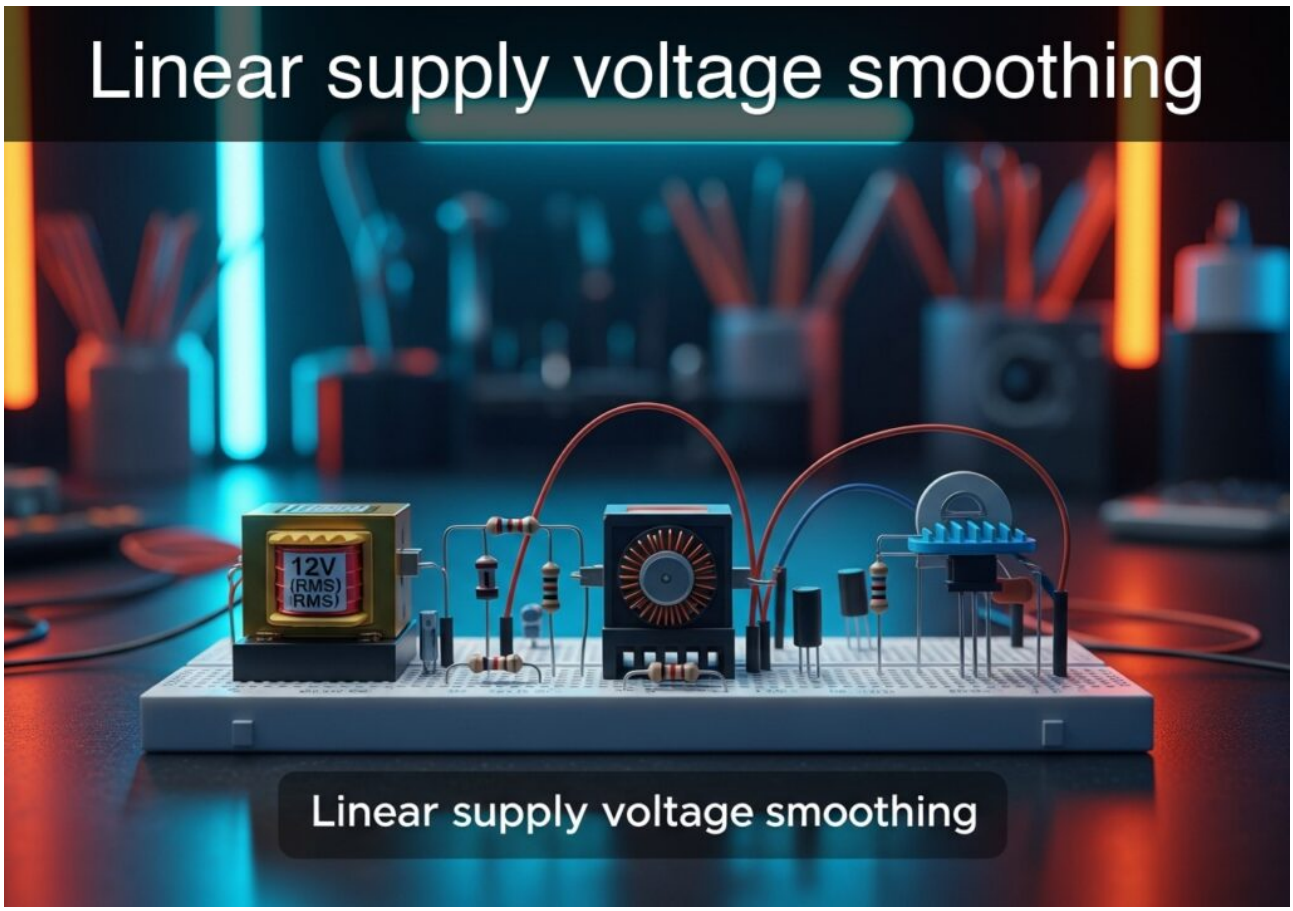
Practical case: The transistor as a light switch



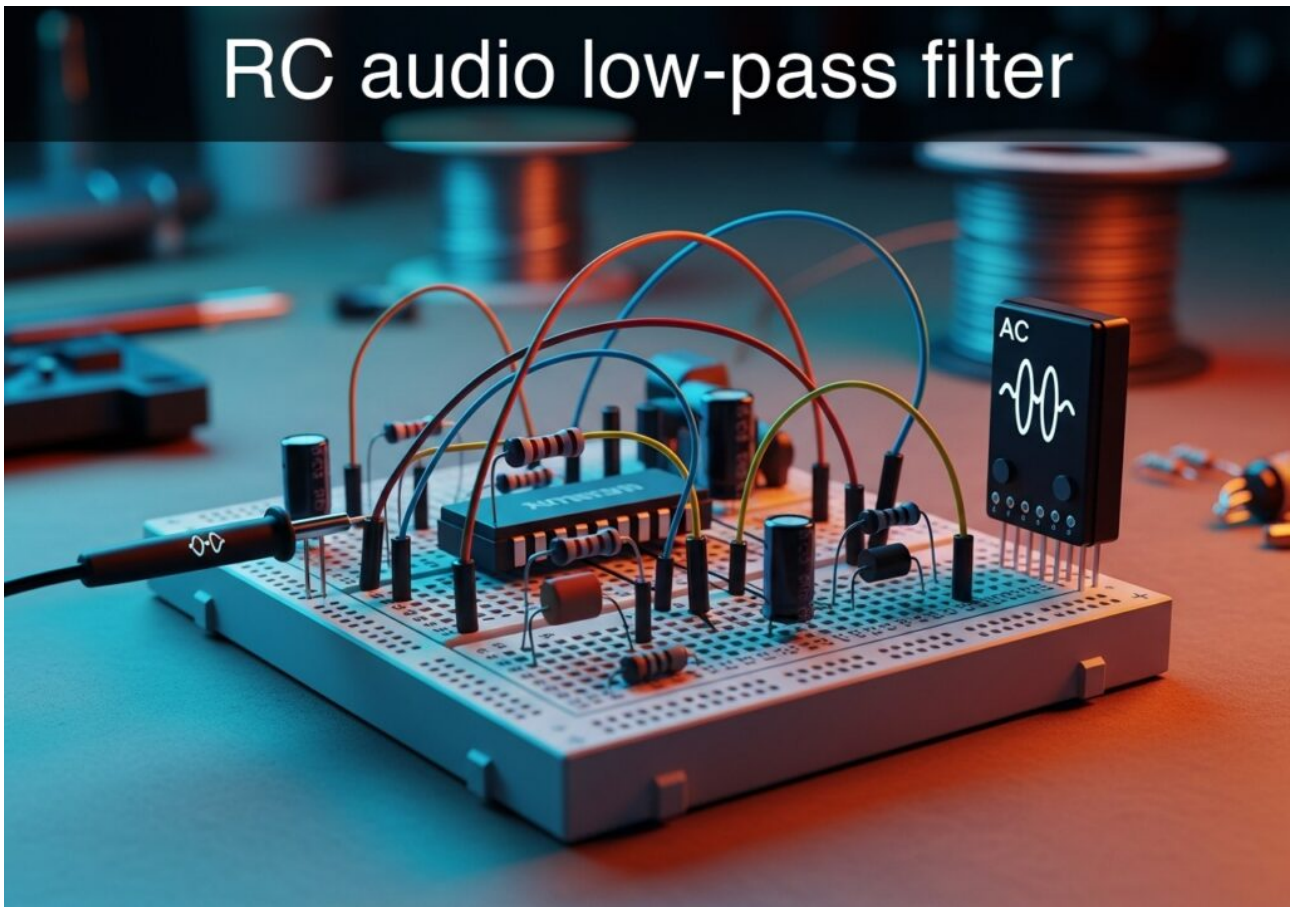
Master Analog Electronics by building a Transistor switch circuit. Learn to control high-current loads like LEDs and measure saturation voltage drops.

Practical case: Linear supply voltage smoothing



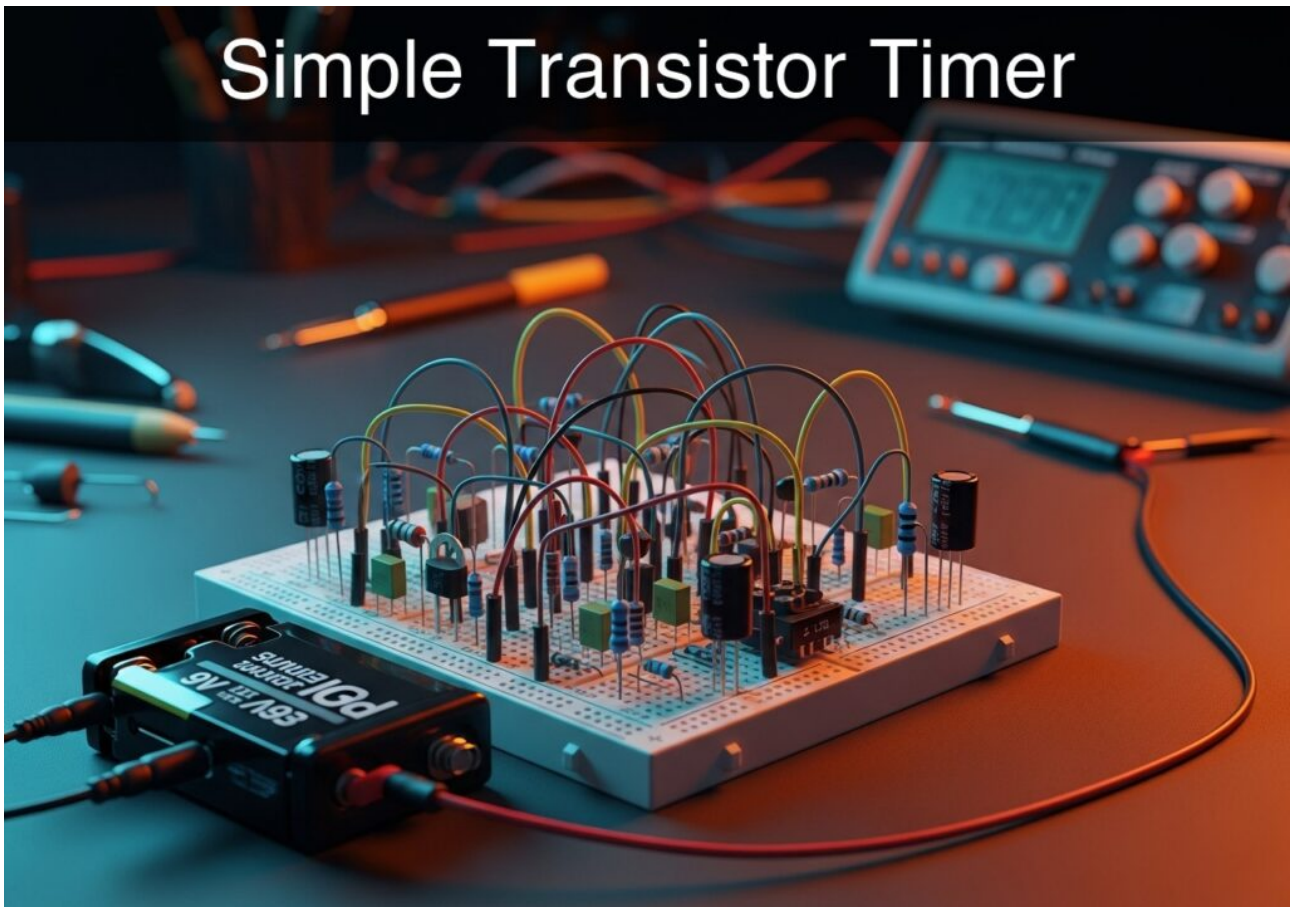
Master Analog Electronics by building a power supply filter. Test how Capacitor values reduce voltage ripple from 5V to 0.5V, ensuring stable DC for circuits.

Practical case: RC audio low-pass filter



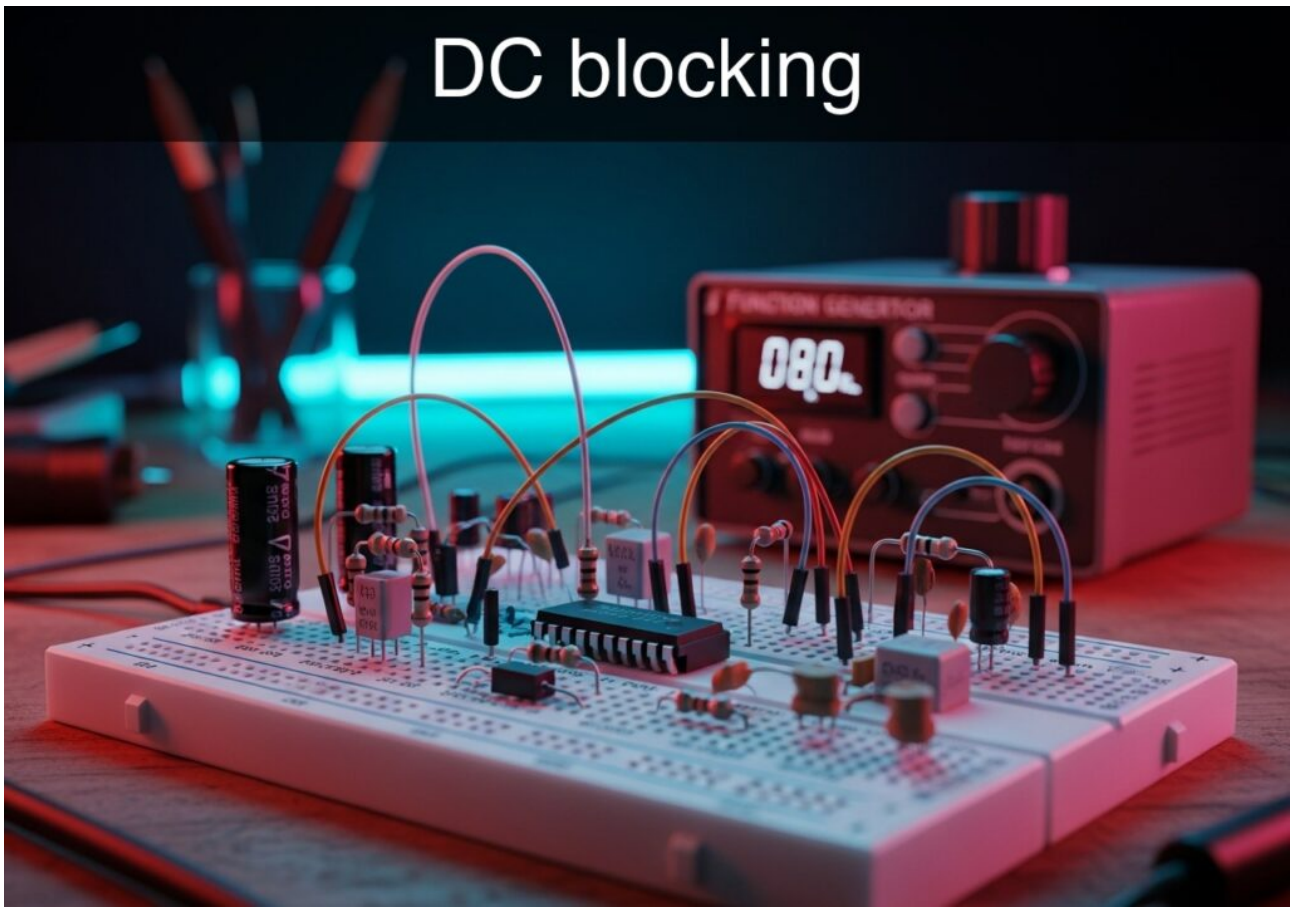
Master Analog Electronics by building a Low-Pass Filter with a Capacitor. Learn to attenuate high frequencies and verify signal cutoff points in real circuits.

Practical case: Simple Transistor Timer



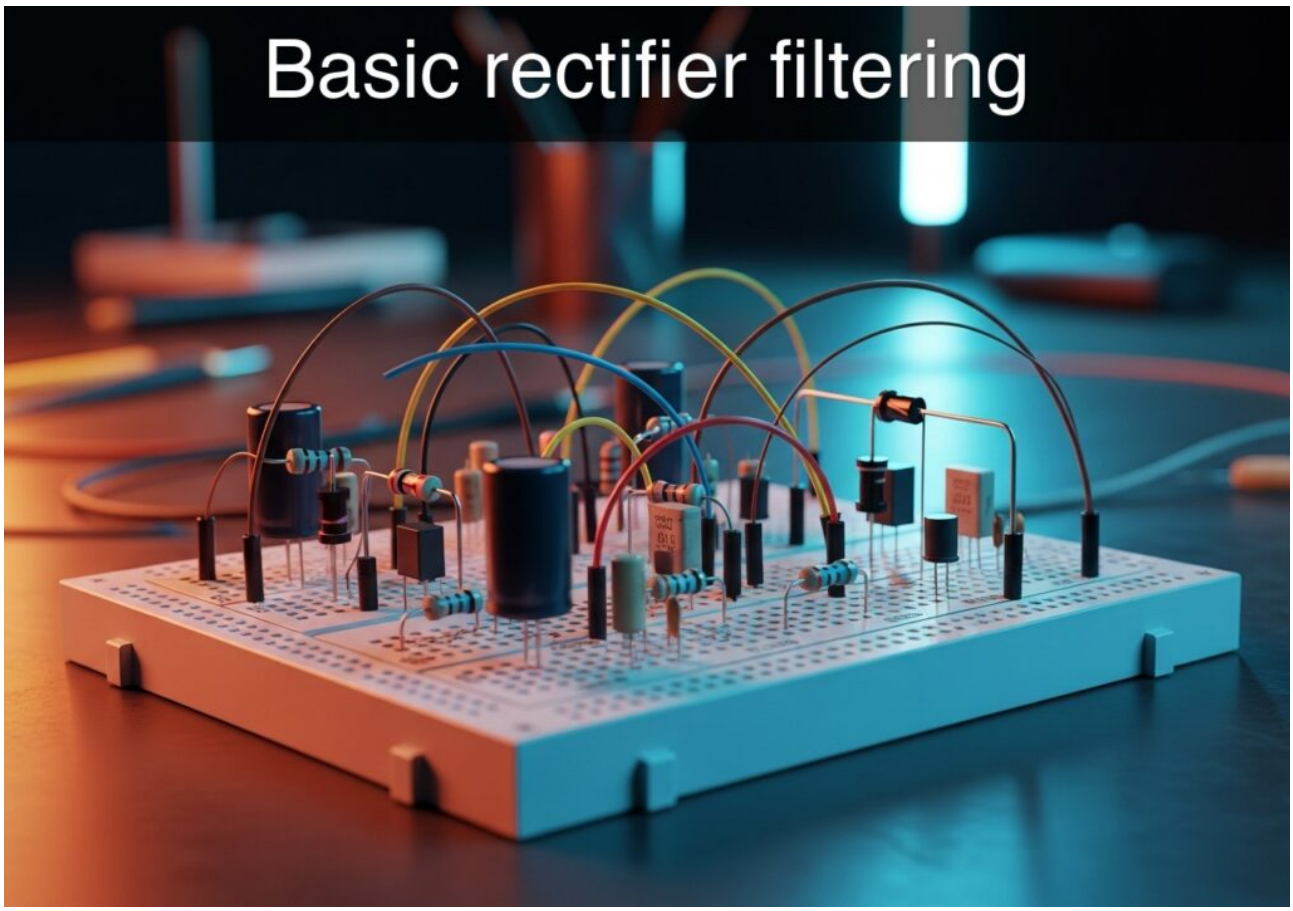
Learn Analog Electronics by building a practical off-delay timer. Use a Capacitor to control transistor switching and create custom lighting fade-out effects.

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.