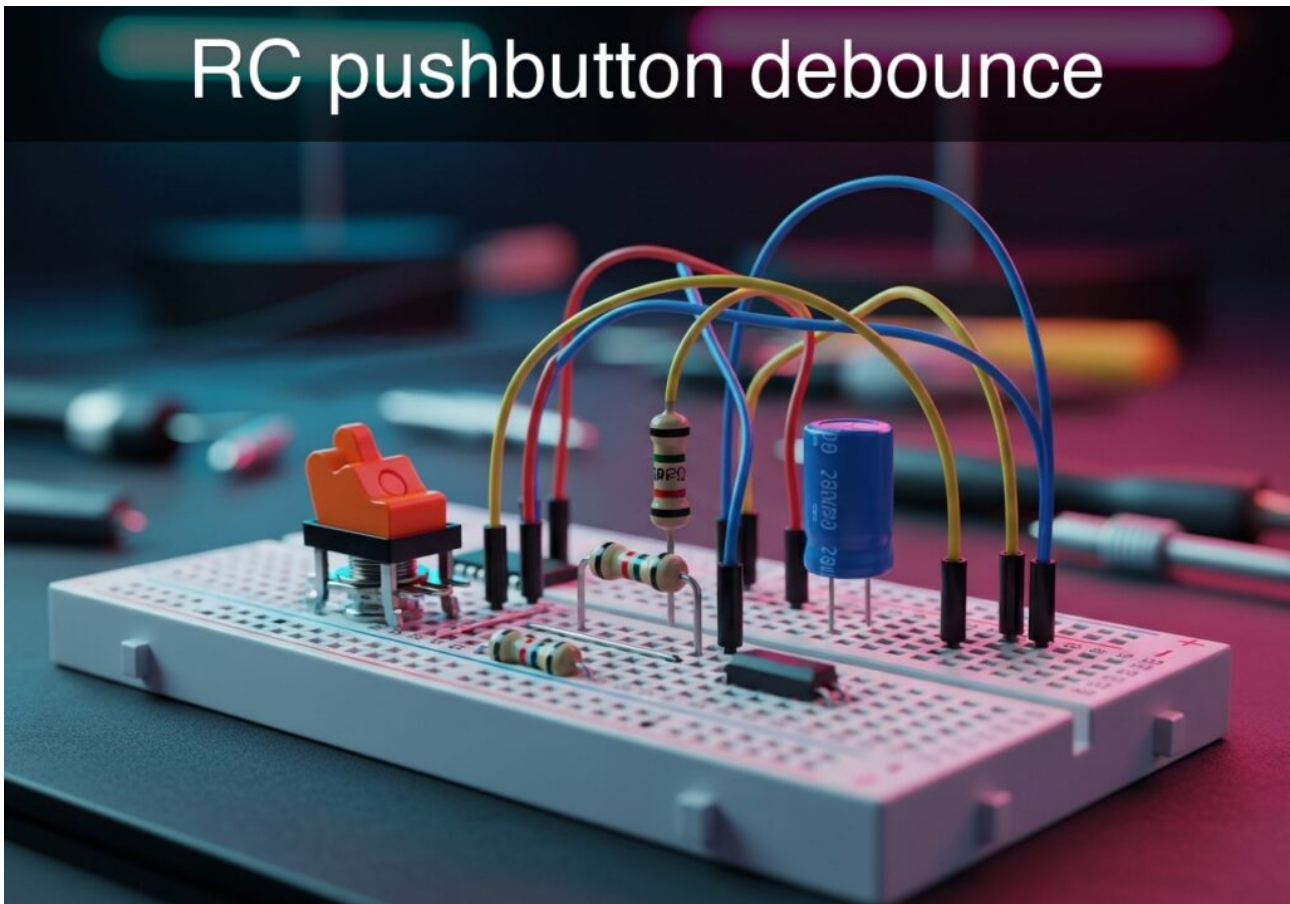


Practical case: RC pushbutton debounce



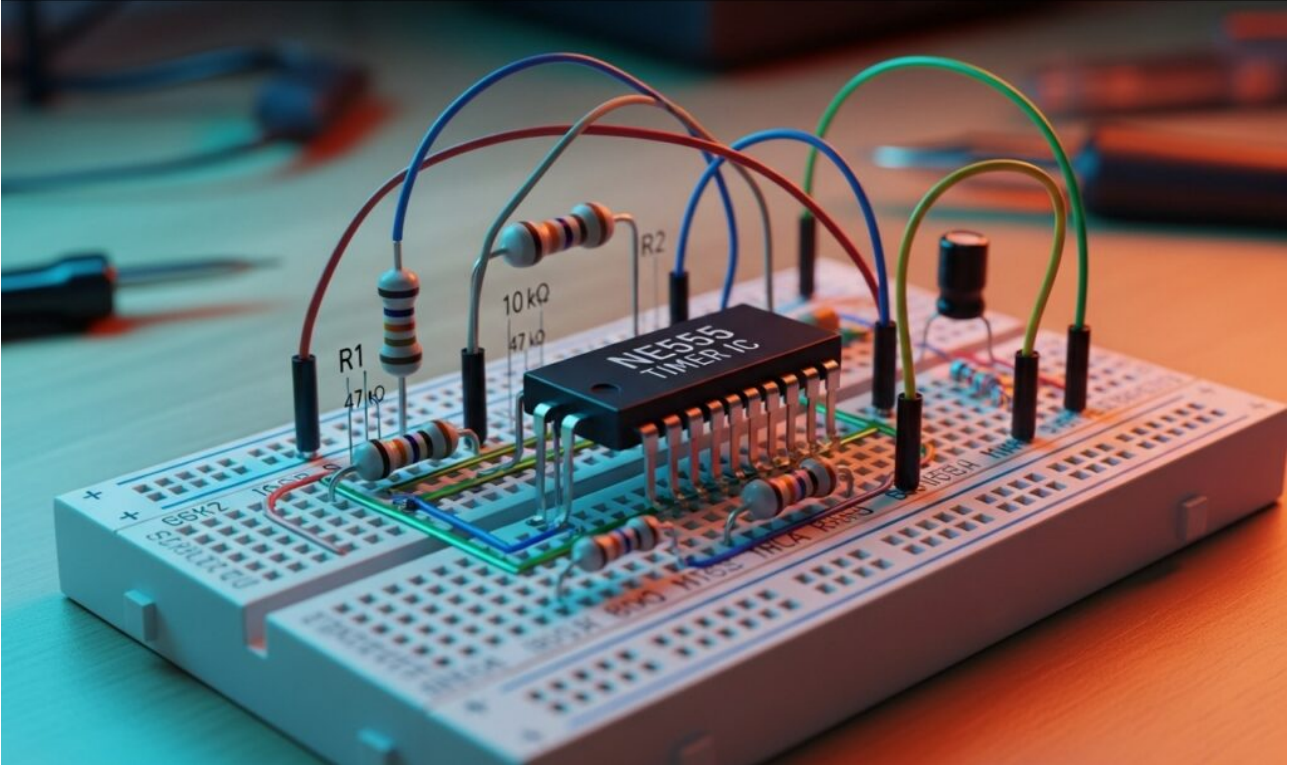
Level: Medium | Use a capacitor to mitigate mechanical noise when actuating a physical switch.

Objective and use case

In this practical case, you will...

Practical case: Astable oscillator with NE555

Astable oscillator with NE555



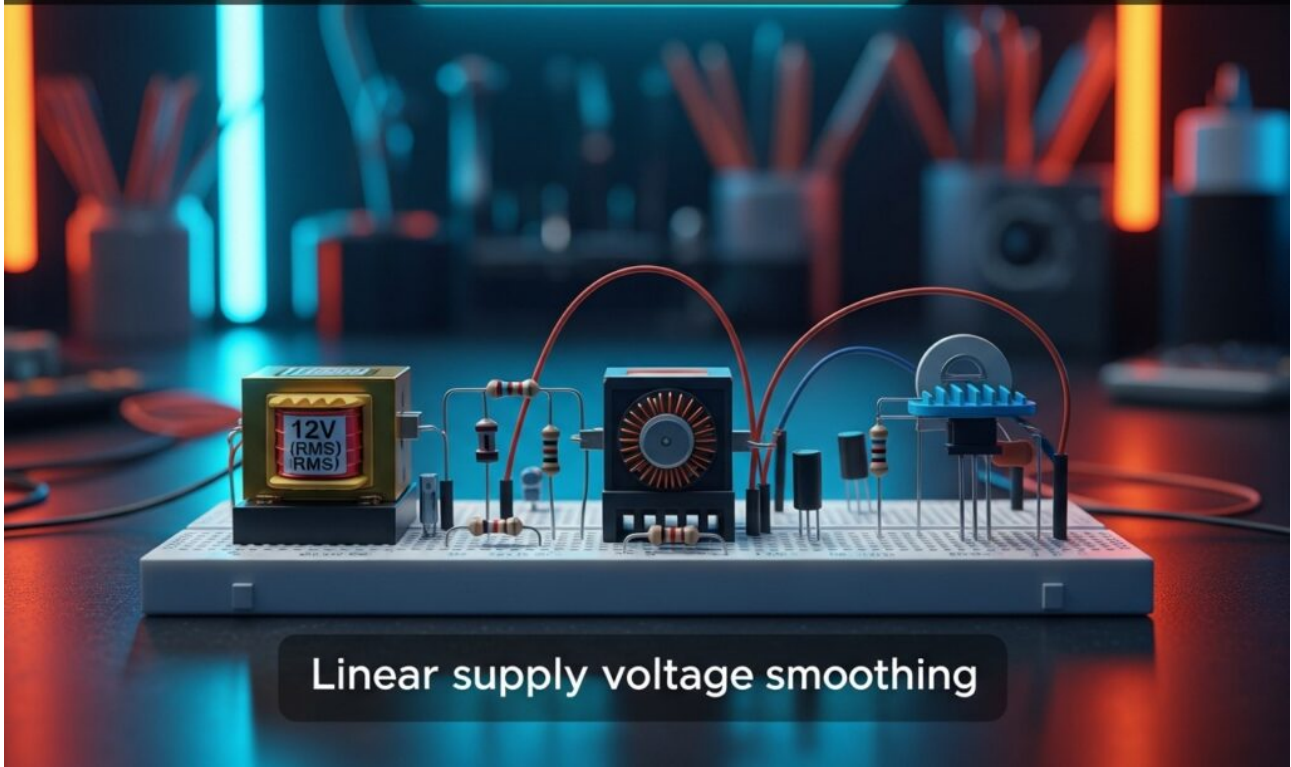
Level: Medium - Configure a capacitor in an NE555 circuit to control the oscillation frequency.

Objective and use case

In this practical case, you will...

Practical case: Linear supply voltage smoothing

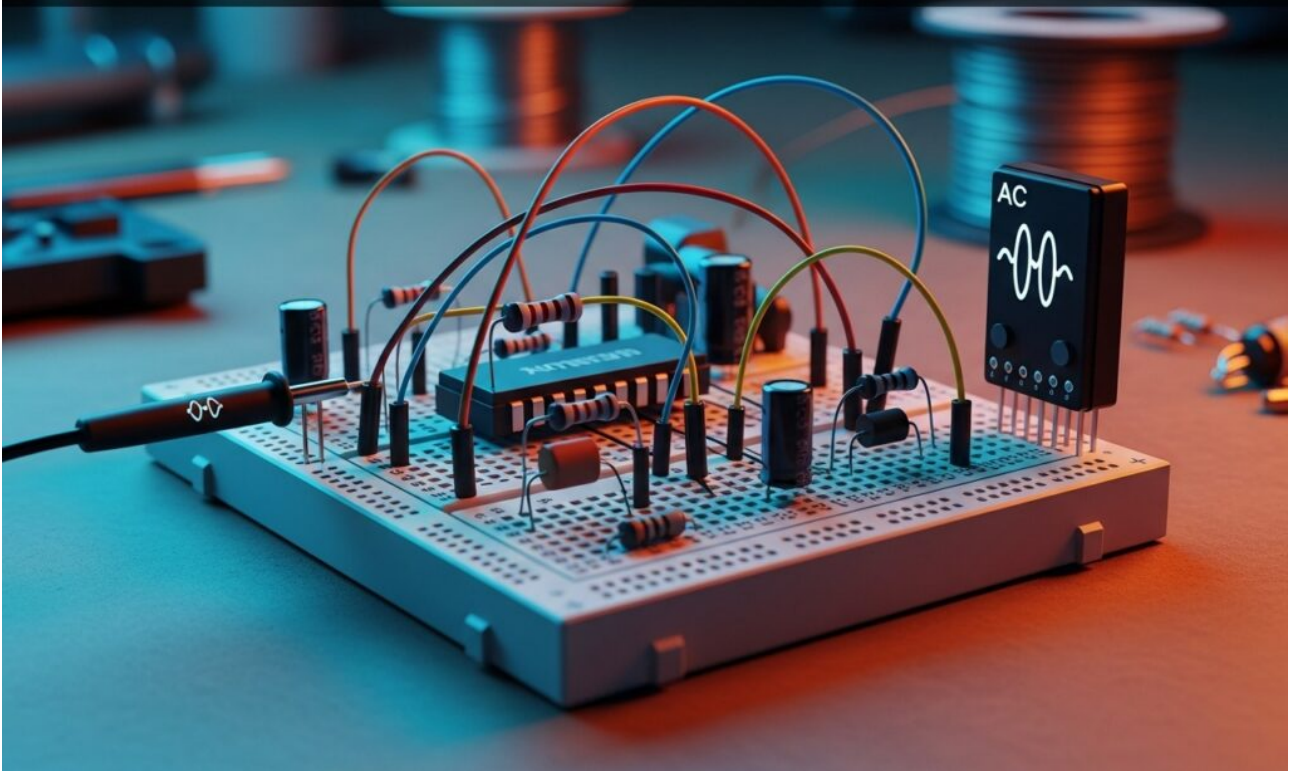
Linear supply voltage smoothing



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

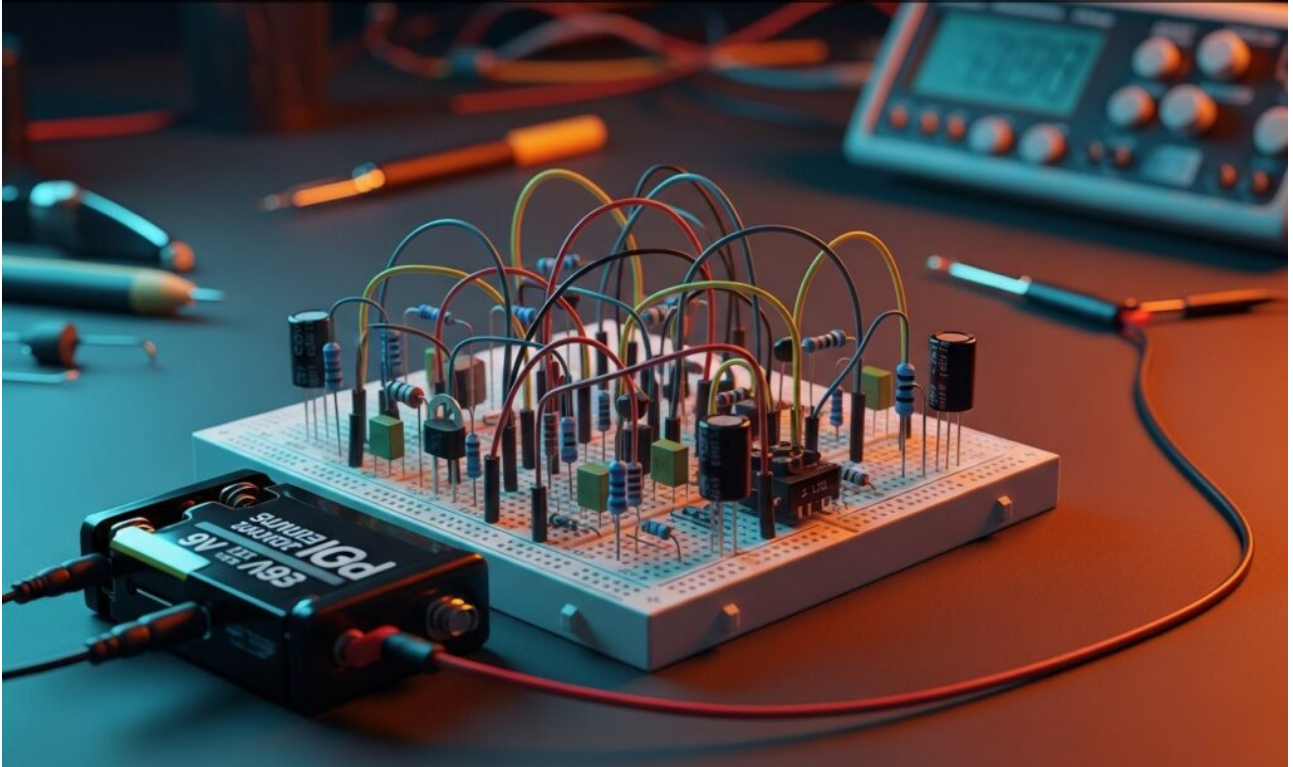
RC audio low-pass filter



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

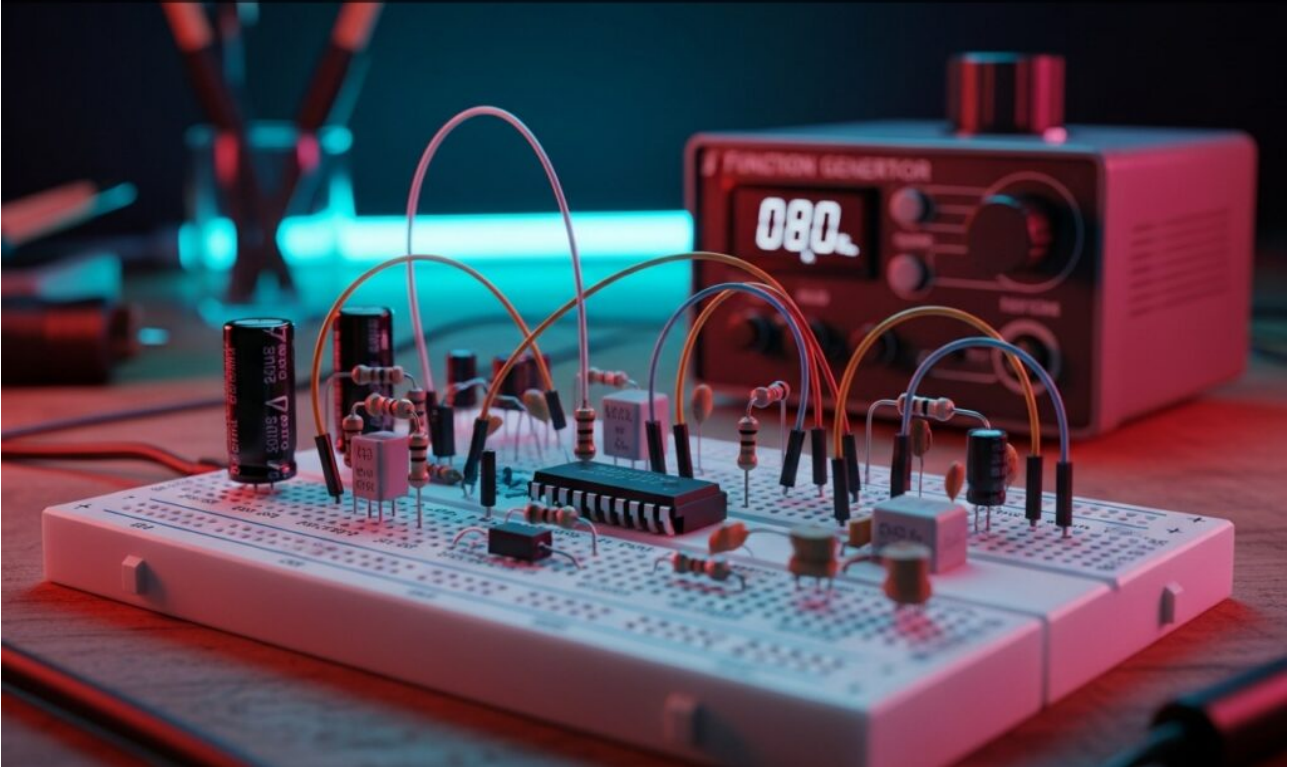
Simple Transistor Timer



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

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.