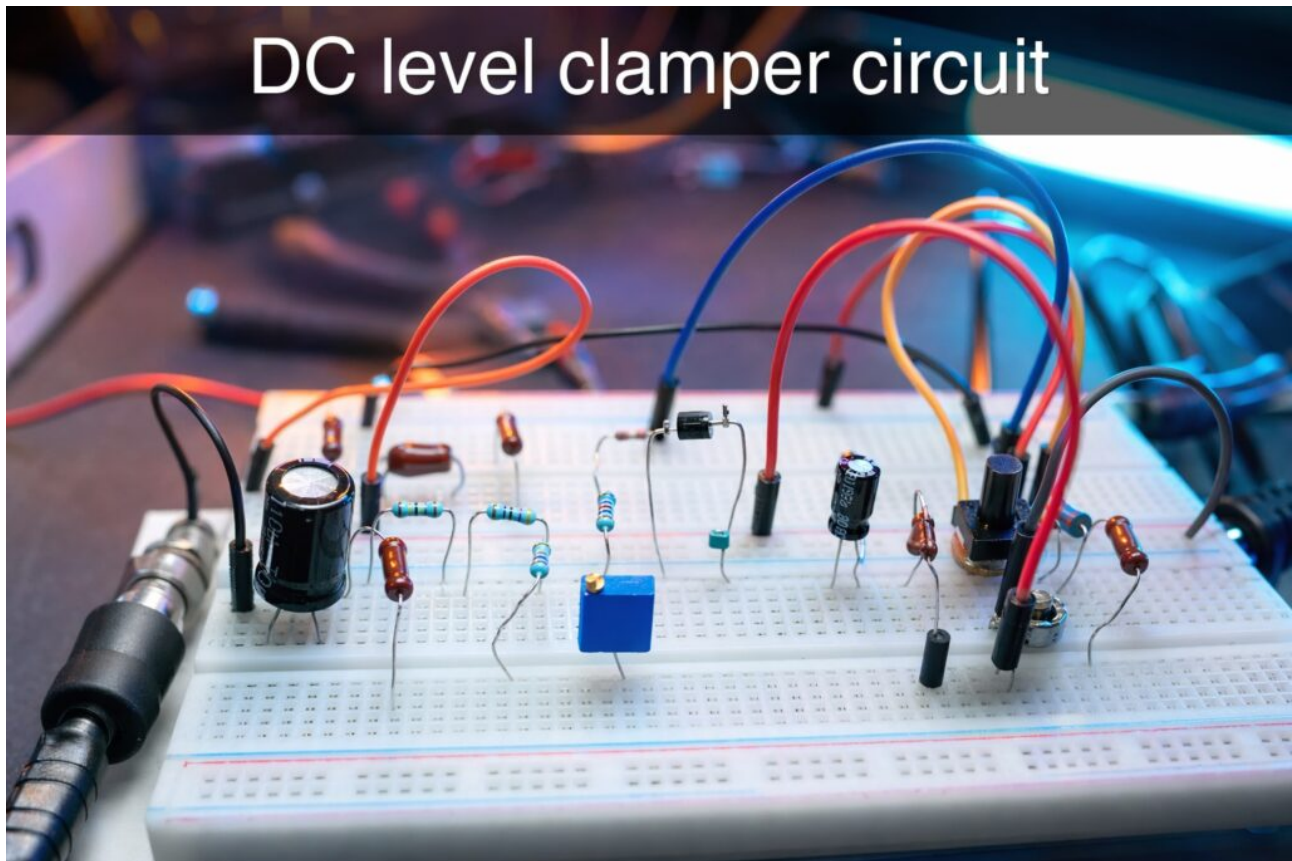


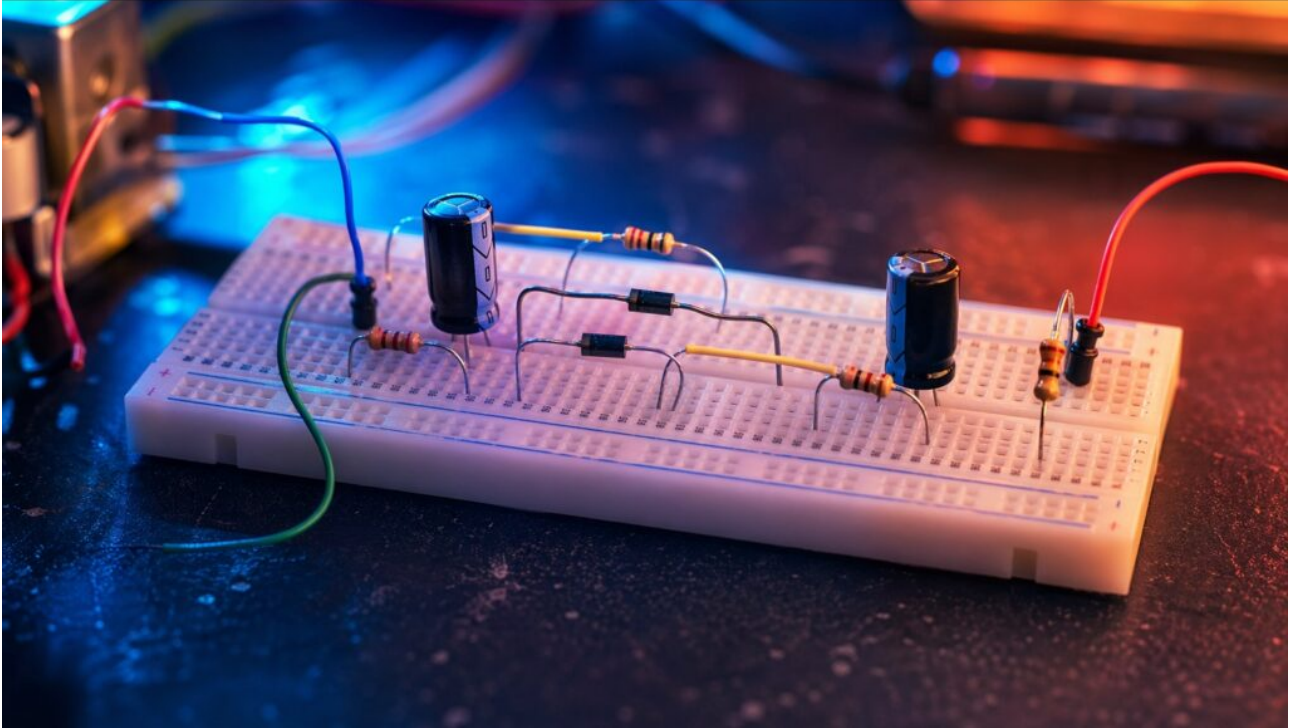
Practical case: DC level clamper circuit



Level: Medium | Understand the shifting of the DC level of an AC signal using a diode and a capacitor.

Practical case: Half-wave voltage doubler

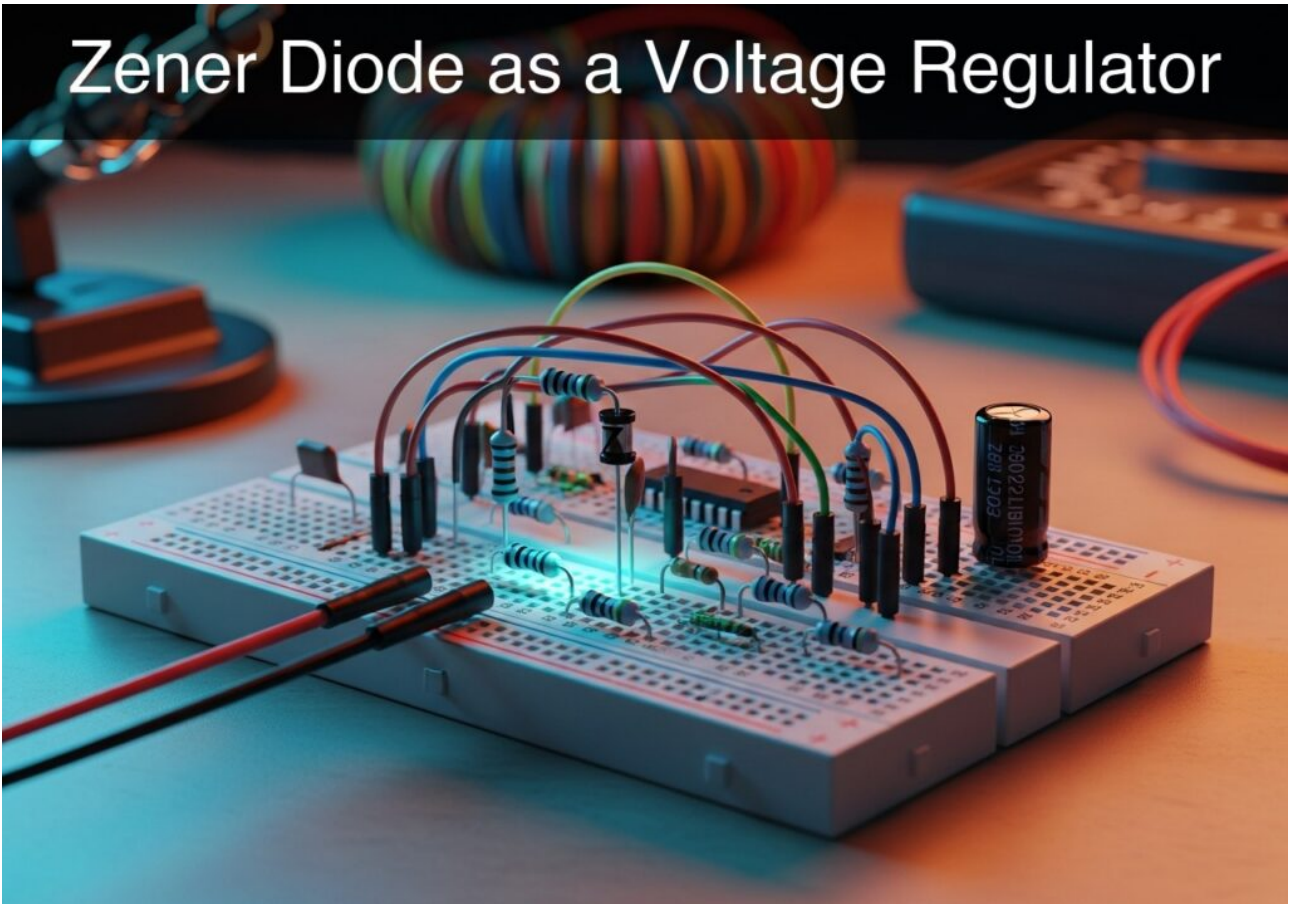
Half-wave voltage doubler



Level: Medium | Objective: Analyze and assemble a voltage doubler circuit to increase the peak voltage of an AC signal.

Practical case: Zener Diode as a Voltage Regulator

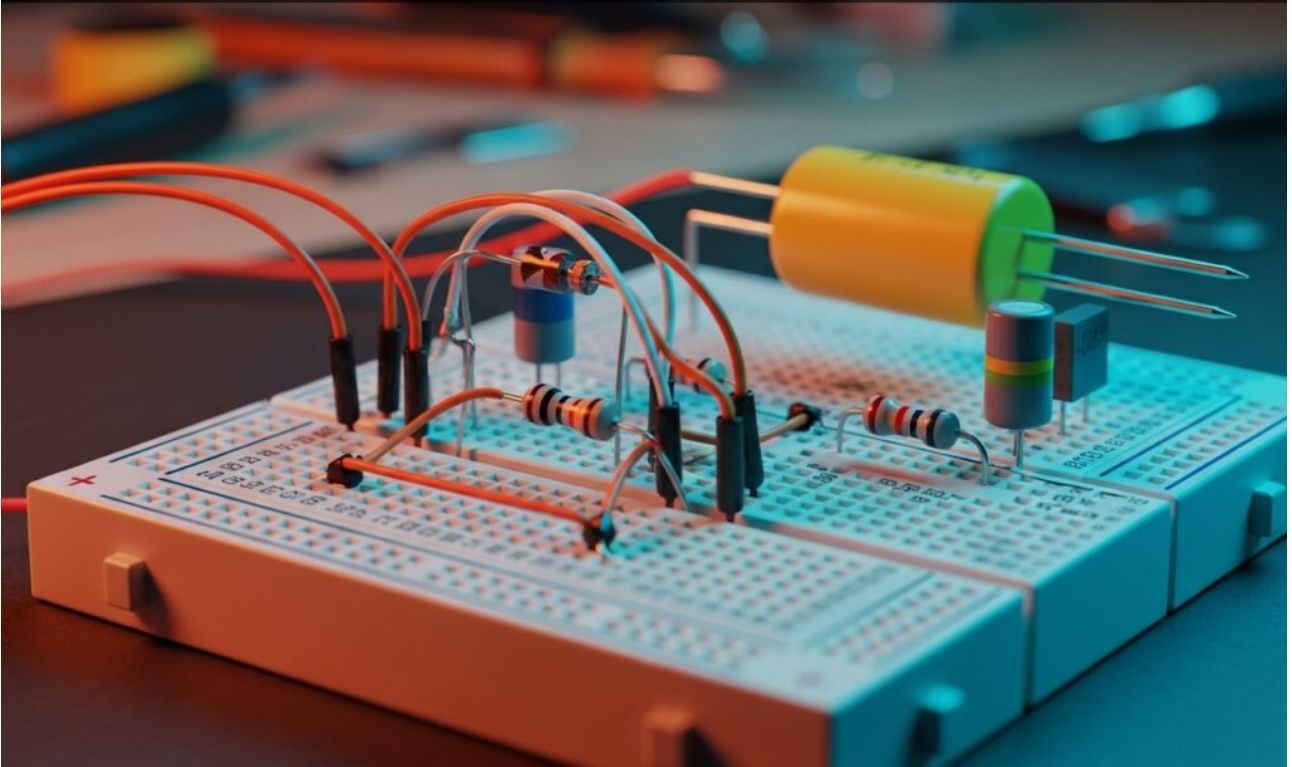
Zener Diode as a Voltage Regulator



Master Analog Electronics by designing a Zener Diode voltage stabilizer. Build a circuit to clamp output at 5.1V and protect loads from voltage spikes.

Practical case: Full-wave bridge rectifier

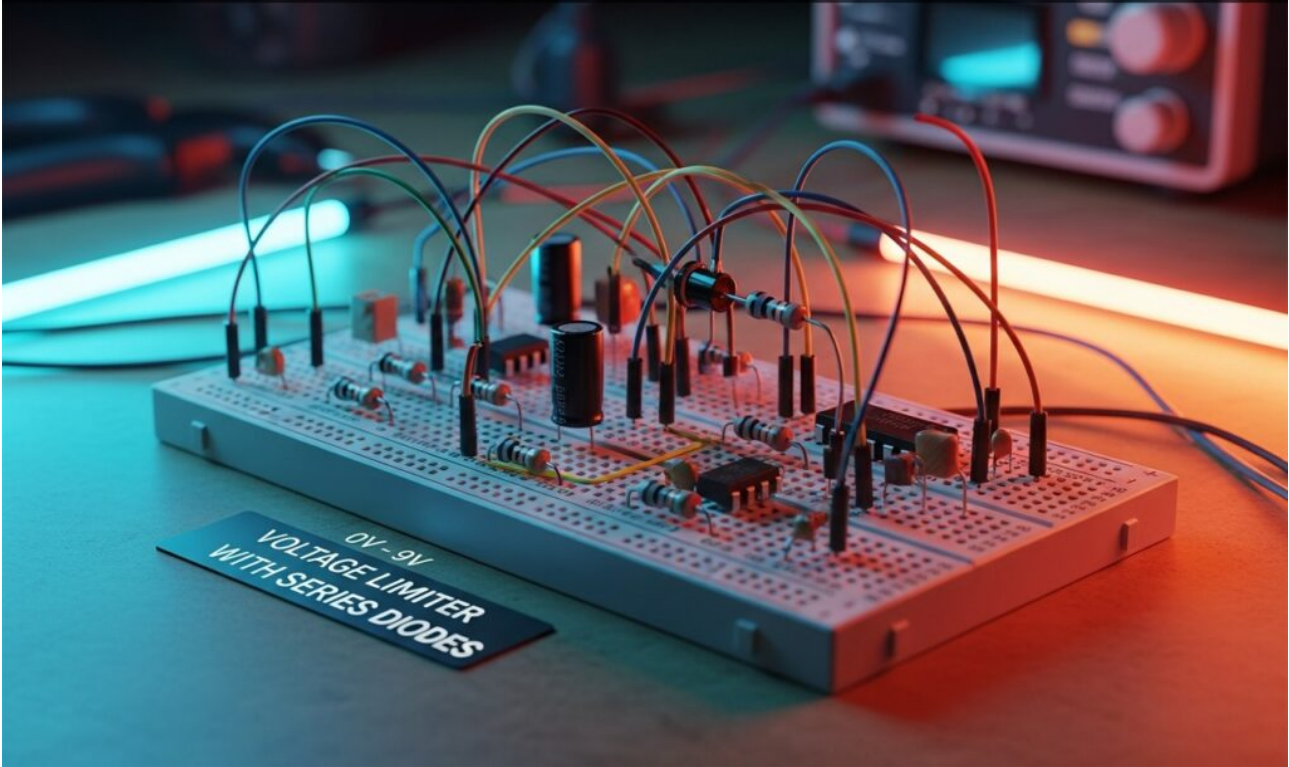
Full-wave bridge rectifier



Master Analog Electronics by building a Diode Graetz bridge. Convert AC to pulsating DC, double the frequency to 120Hz, and measure real voltage drops.

Practical case: Voltage limiter with series diodes

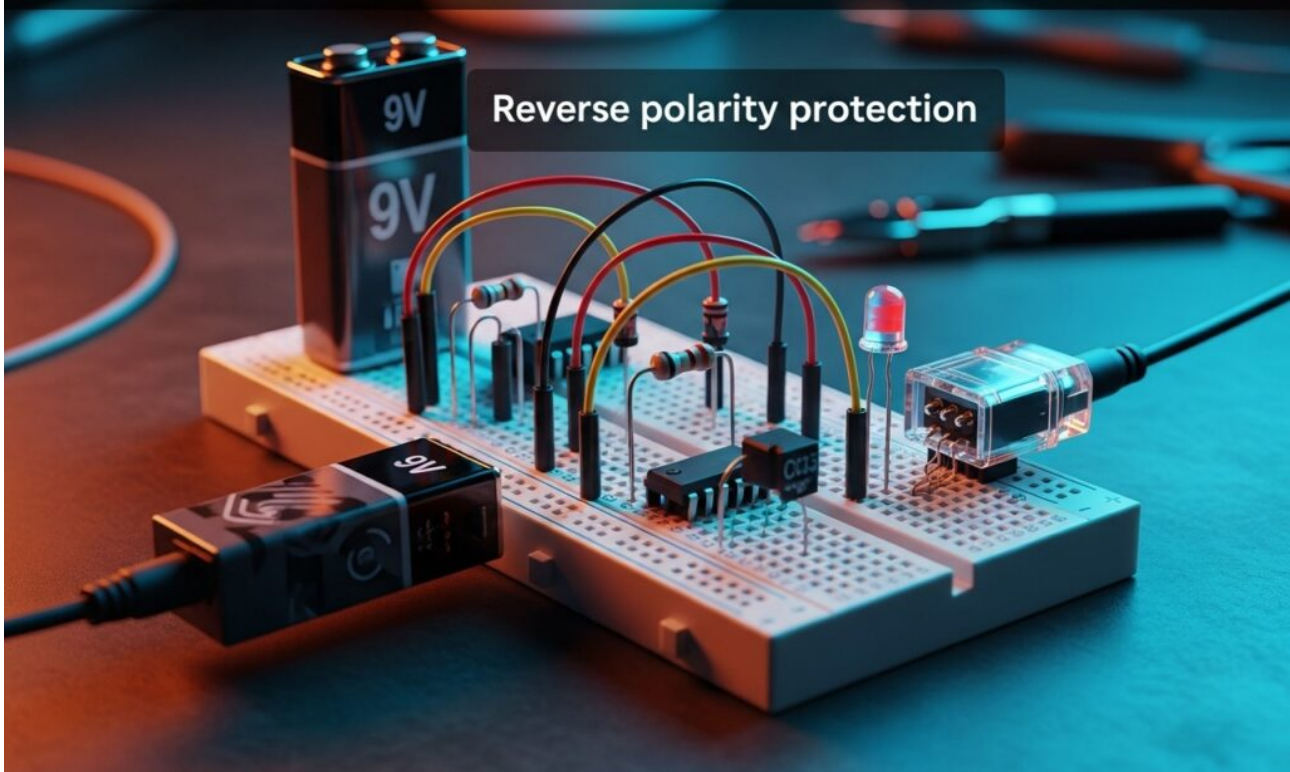
Voltage limiter with series diodes



Master Analog Electronics by building a voltage limiter with a simple Diode circuit. Protect inputs and clamp signals to 2.1V for safe, stable output results.

Practical case: Reverse polarity protection

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.