

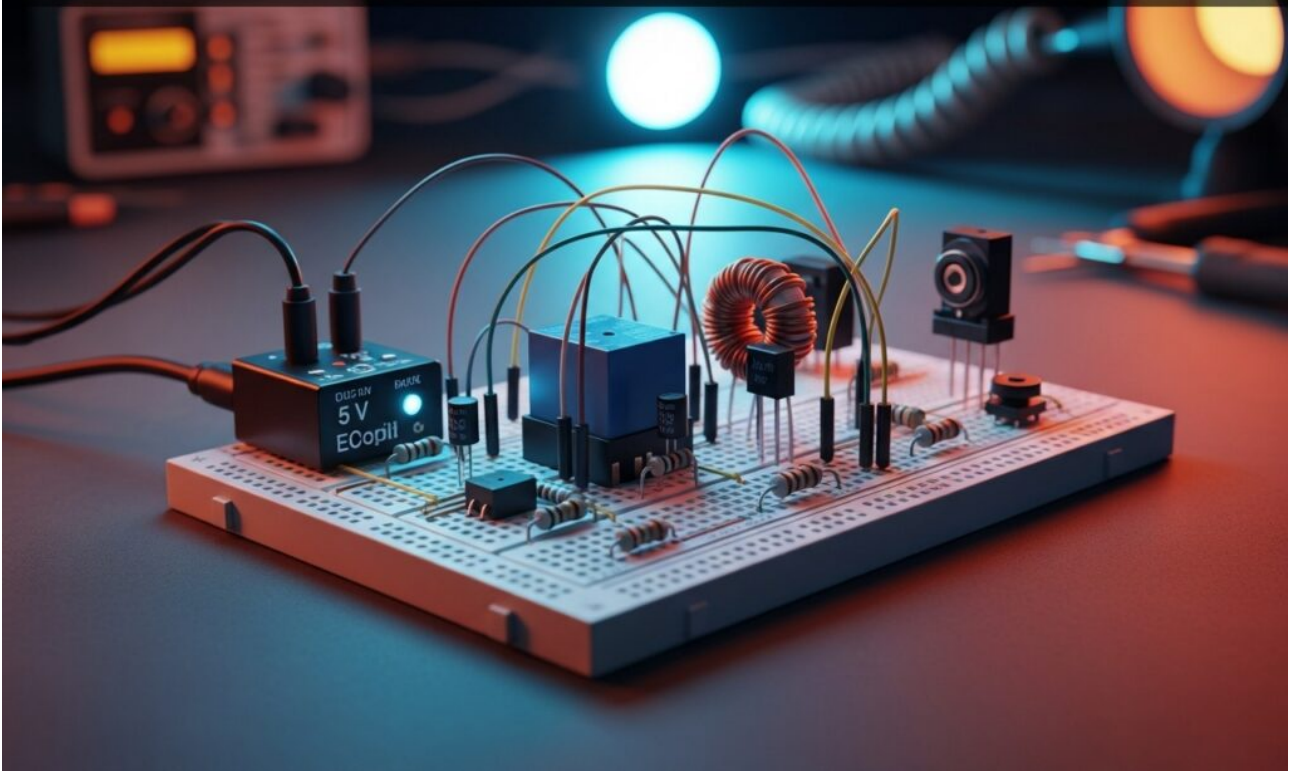
Practical case: Latching Alarm System



Master Analog Electronics by building a self-latching Relay circuit. Create a reliable alarm memory system that holds active states until manually reset.

Practical case: DC motor control with relay and pushbutton

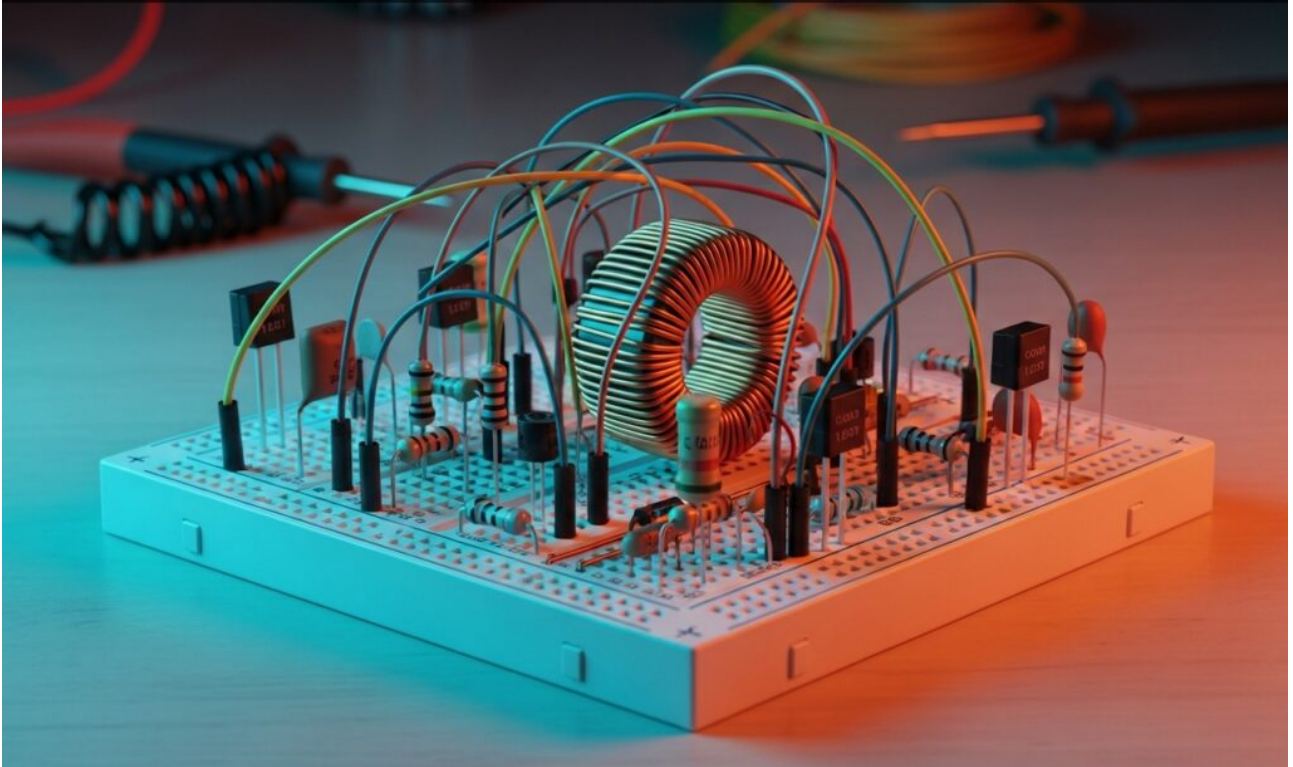
DC motor control with relay and pushbutton



Master Analog Electronics by building a Relay circuit to safely control high-power motors. Learn to isolate signals and achieve reliable switching protection.

Practical case: Voltage induction by magnetic movement

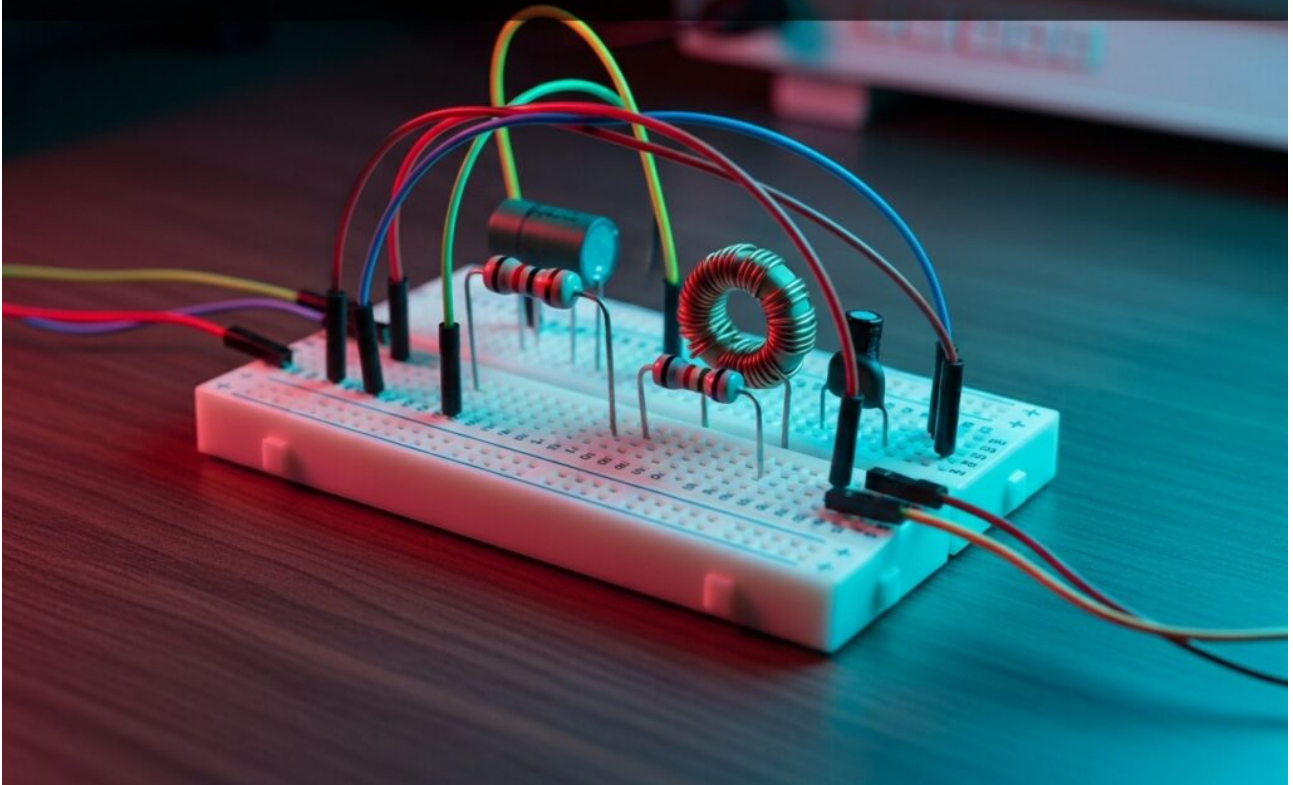
Voltage induction by magnetic movement



Learn Analog Electronics by building a generator with an Inductor and a magnet. Observe real voltage spikes and light an LED using Faraday's Law of Induction.

Practical case: Simple RL Low-Pass Filter

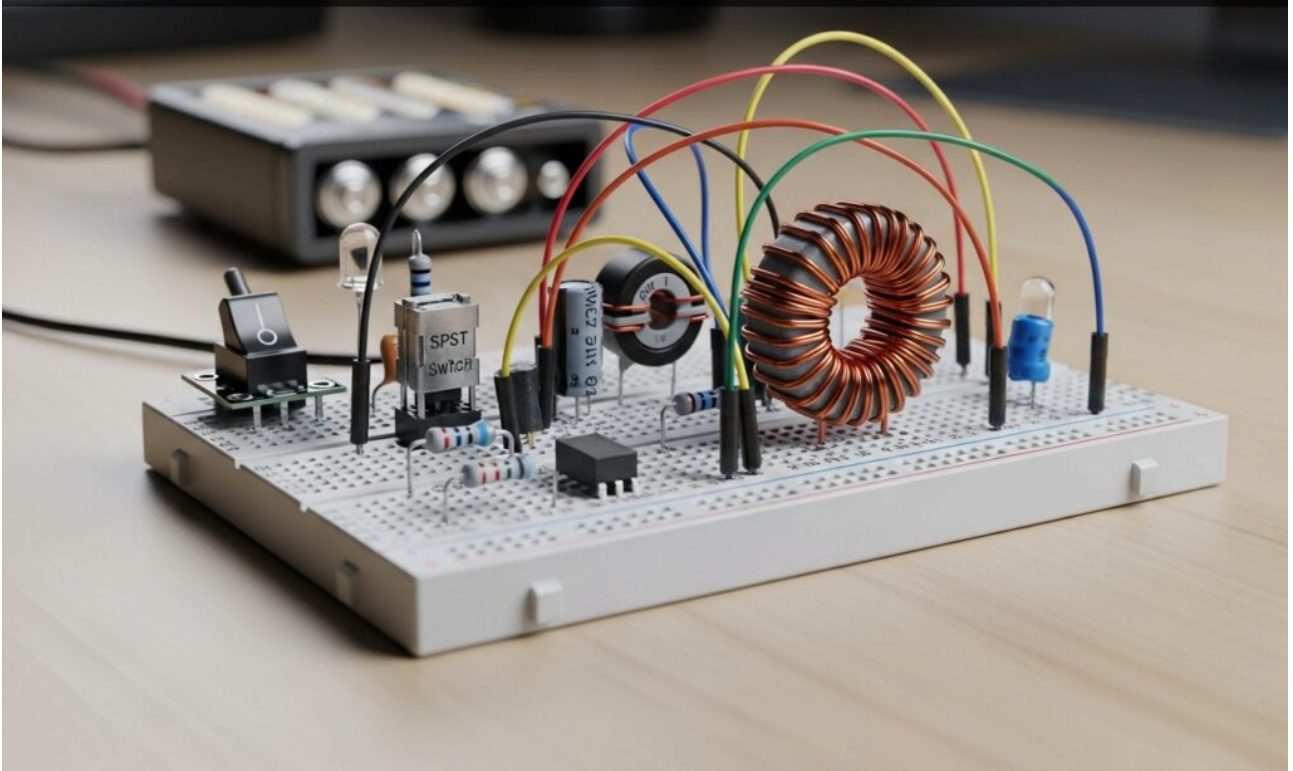
Simple RL Low-Pass Filter



Master Analog Electronics by building an RL low-pass filter with an Inductor. Observe signal attenuation and block high frequencies to reduce noise effectively.

Practical case: Opposition to DC current change

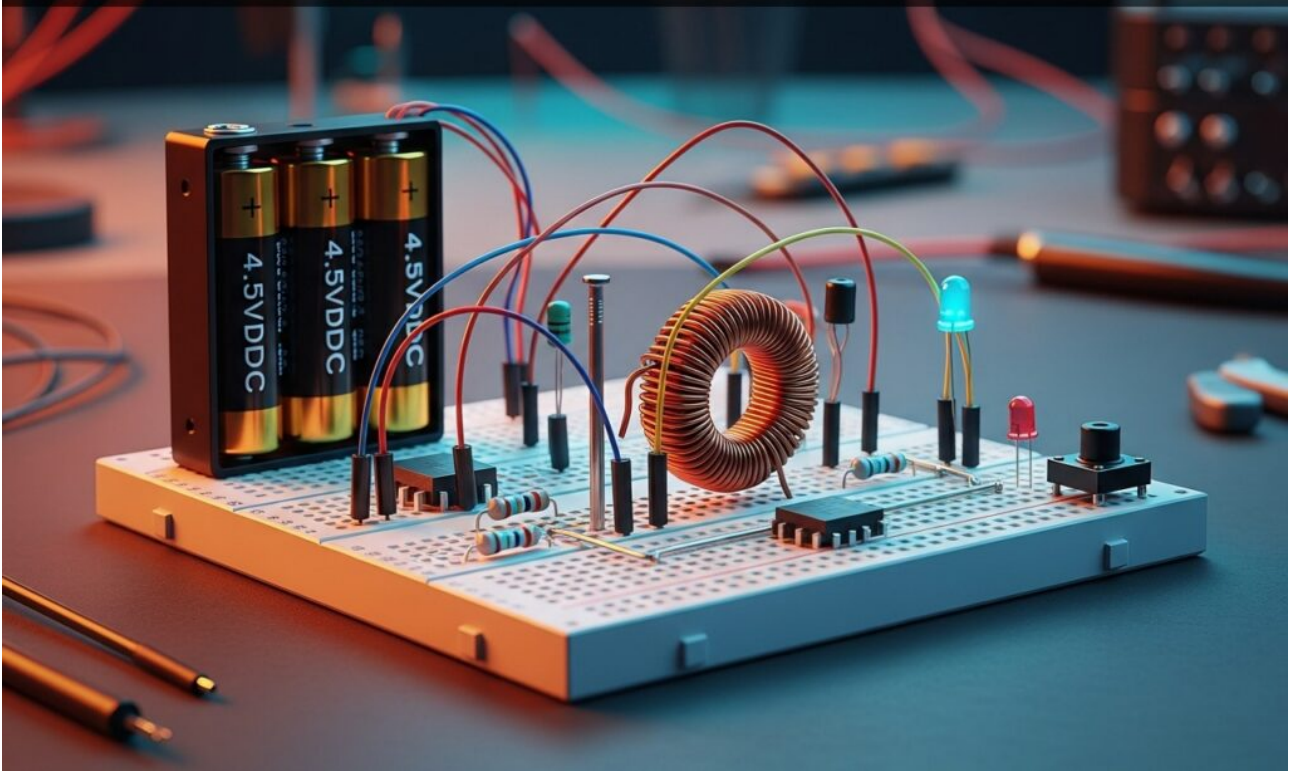
Opposition to DC current change



Master Analog Electronics by building a soft-start circuit with an Inductor. Visualize current delay as a lamp gradually brightens to limit inrush current.

Practical case: The coil as a simple electromagnet

The coil as a simple electromagnet



Master Analog Electronics by building a powerful electromagnet using a simple Inductor. Learn to control magnetic fields and lift metal objects with DC current.