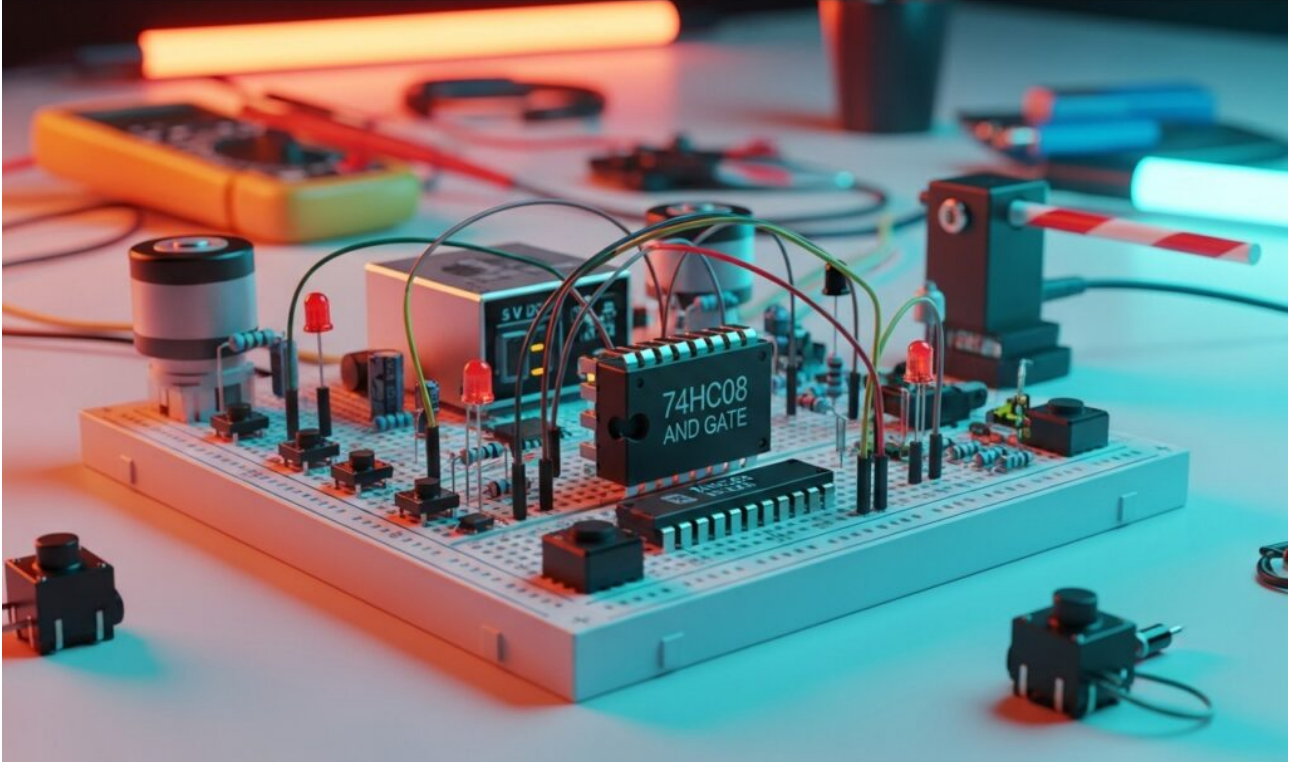


Practical case: Vehicle access control with barrier

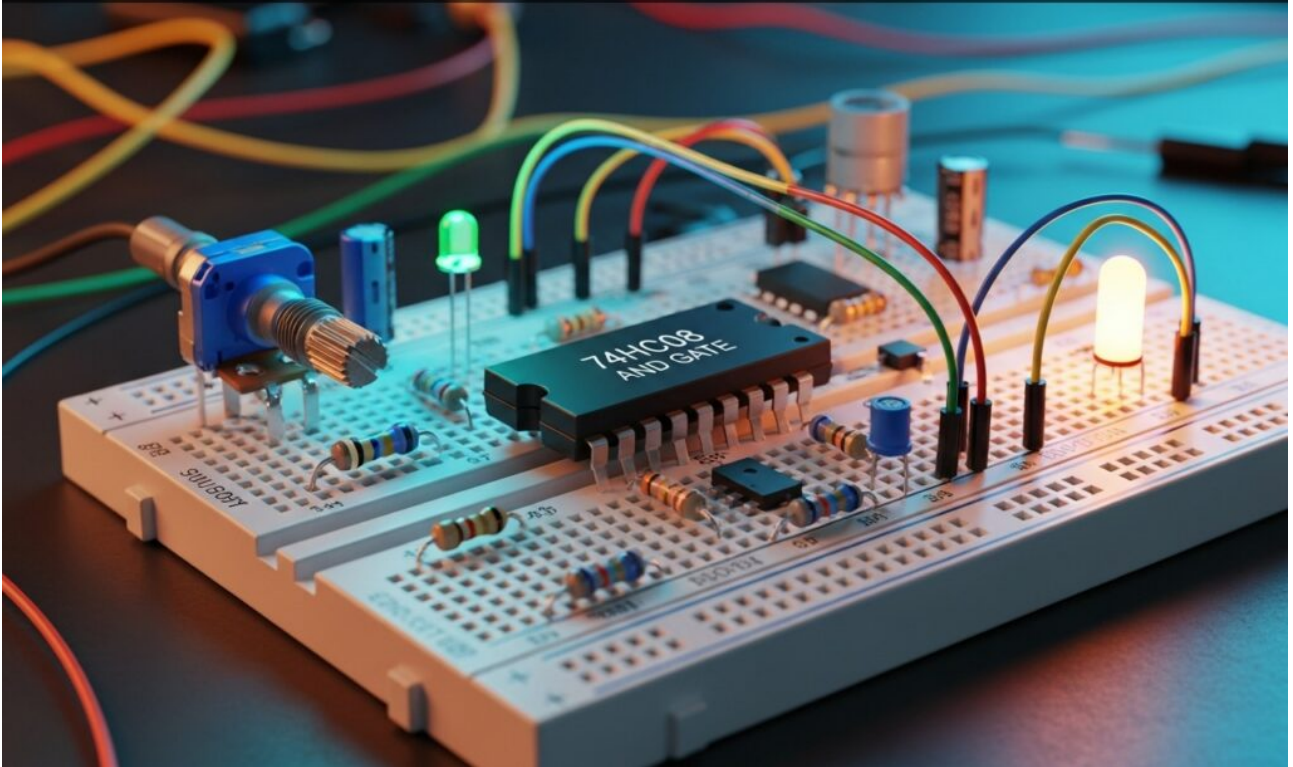
Vehicle access control with barrier



Master Digital Electronics by building a safety barrier circuit. Use a 74HC08 AND gate to trigger a 5V LED signal only when dual inputs activate simultaneously.

Practical case: Conditional automatic irrigation system

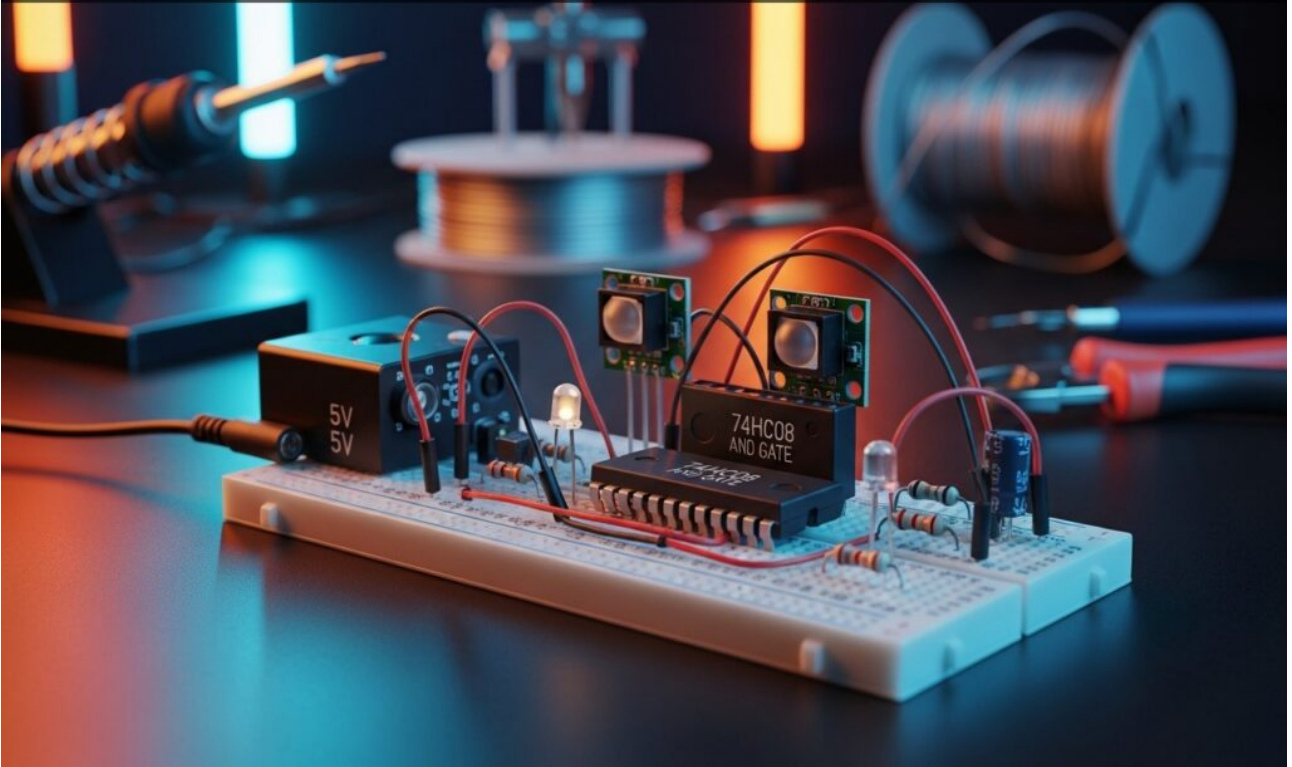
Conditional automatic irrigation system



Master Digital Electronics by building a smart irrigation controller with a 74HC08 AND gate. Create a safety circuit that activates a pump only when safe.

Practical case: Dual sensor alarm activation

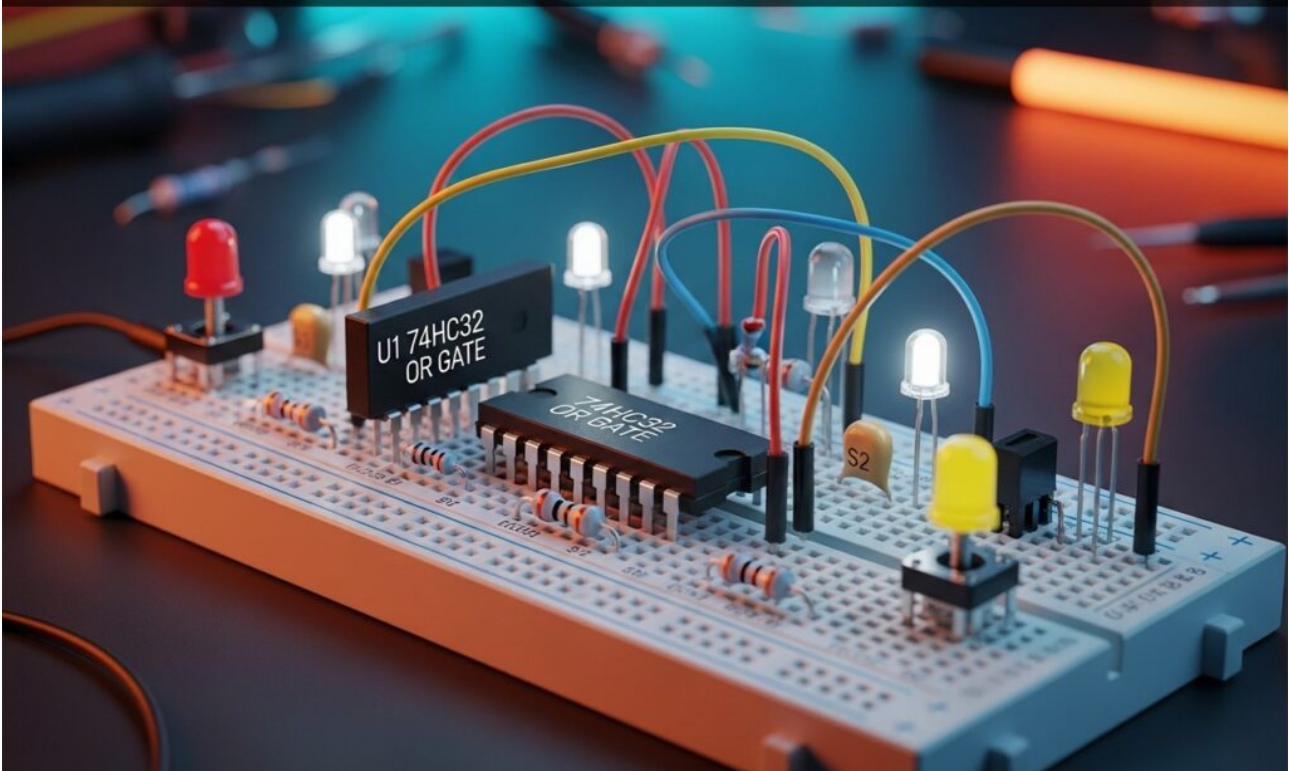
Dual sensor alarm activation



Master Digital Electronics by building a dual-sensor security alarm. Learn how an AND gate validates simultaneous inputs to trigger a verified output signal.

Practical case: Lighting control from two points

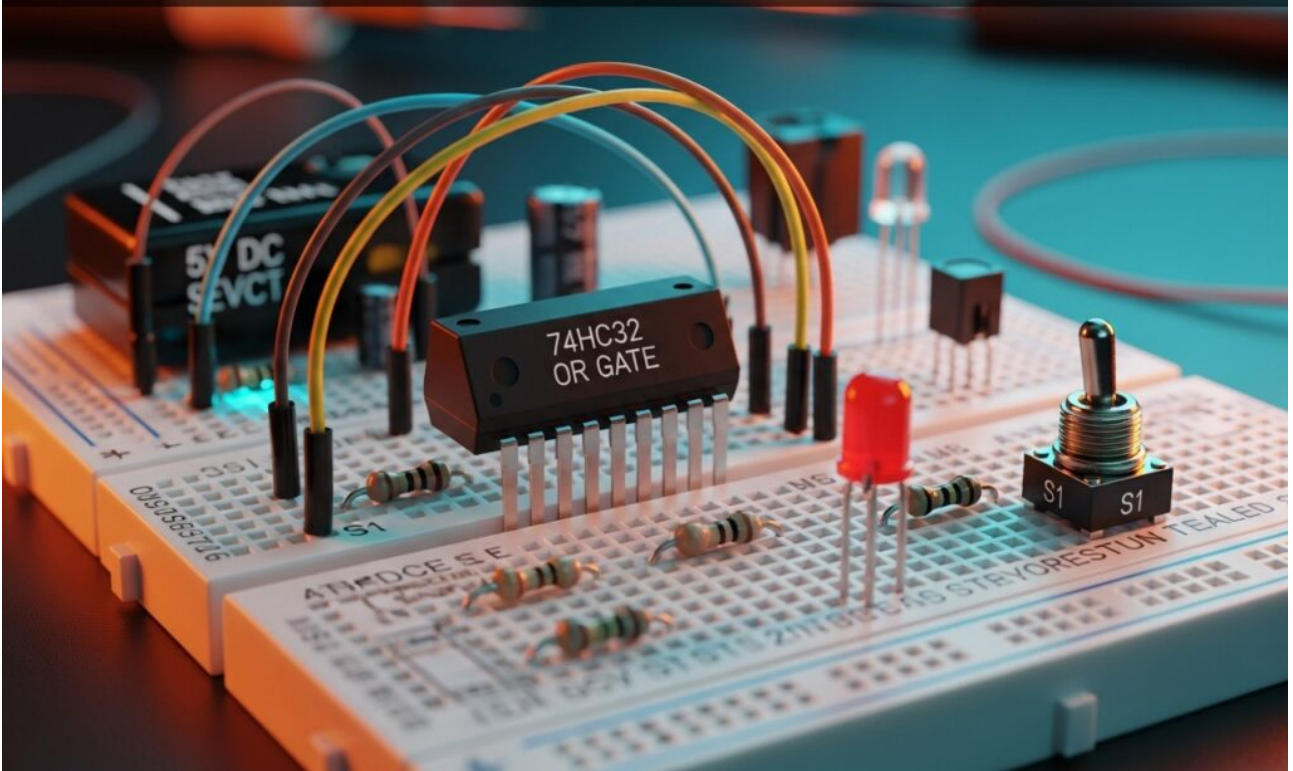
Lighting control from two points



Master Digital Electronics by building a dual-switch control circuit. Use an OR gate to trigger an LED signal from independent inputs, simulating alarm systems.

Practical case: Dual Sensor Alarm System

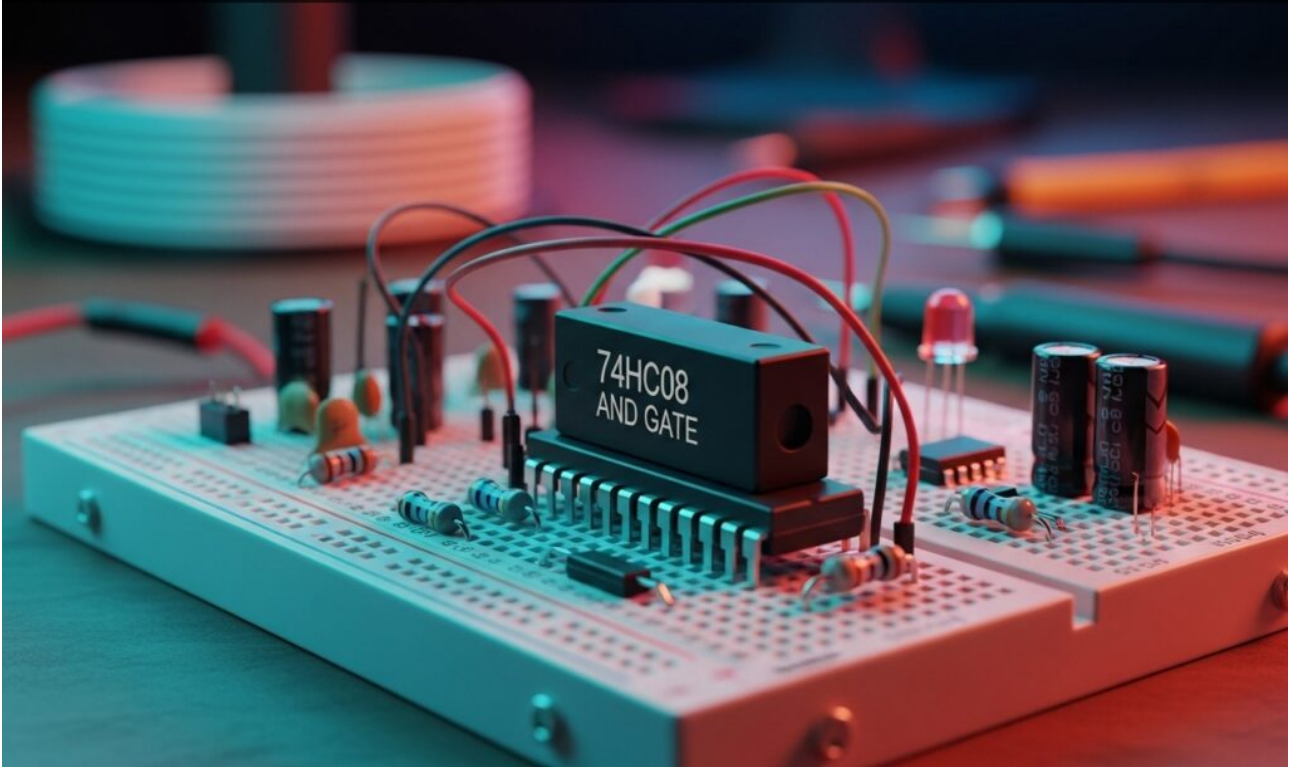
Dual Sensor Alarm System



Learn Digital Electronics by building a home security alarm using an OR gate. Create a circuit where two sensors trigger a real LED warning signal.

Practical case: Safe Hydraulic Press Control

Safe Hydraulic Press Control



Master Digital Electronics by building a two-hand safety circuit using an AND gate. Ensure the LED load activates only when two inputs trigger simultaneously.