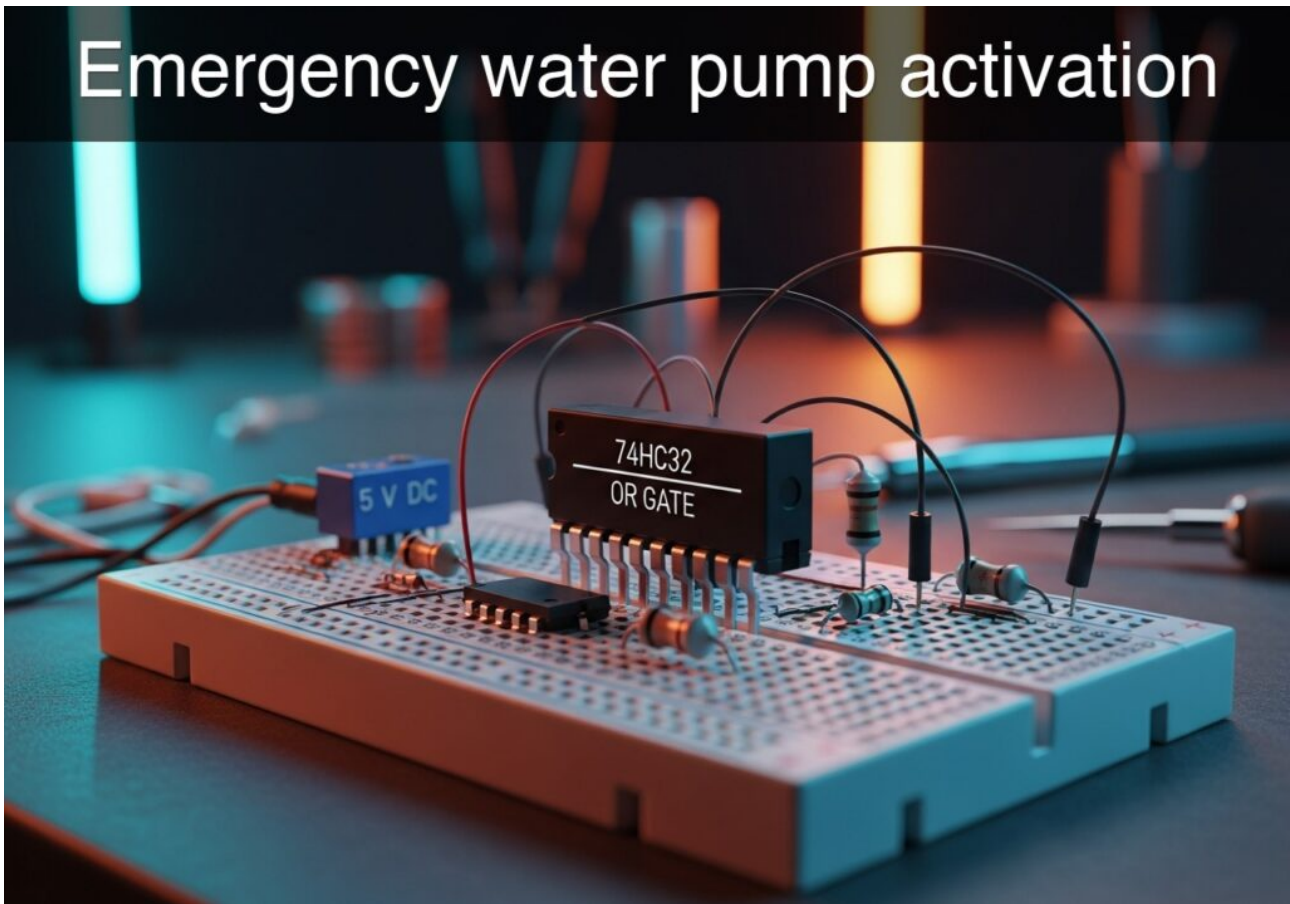


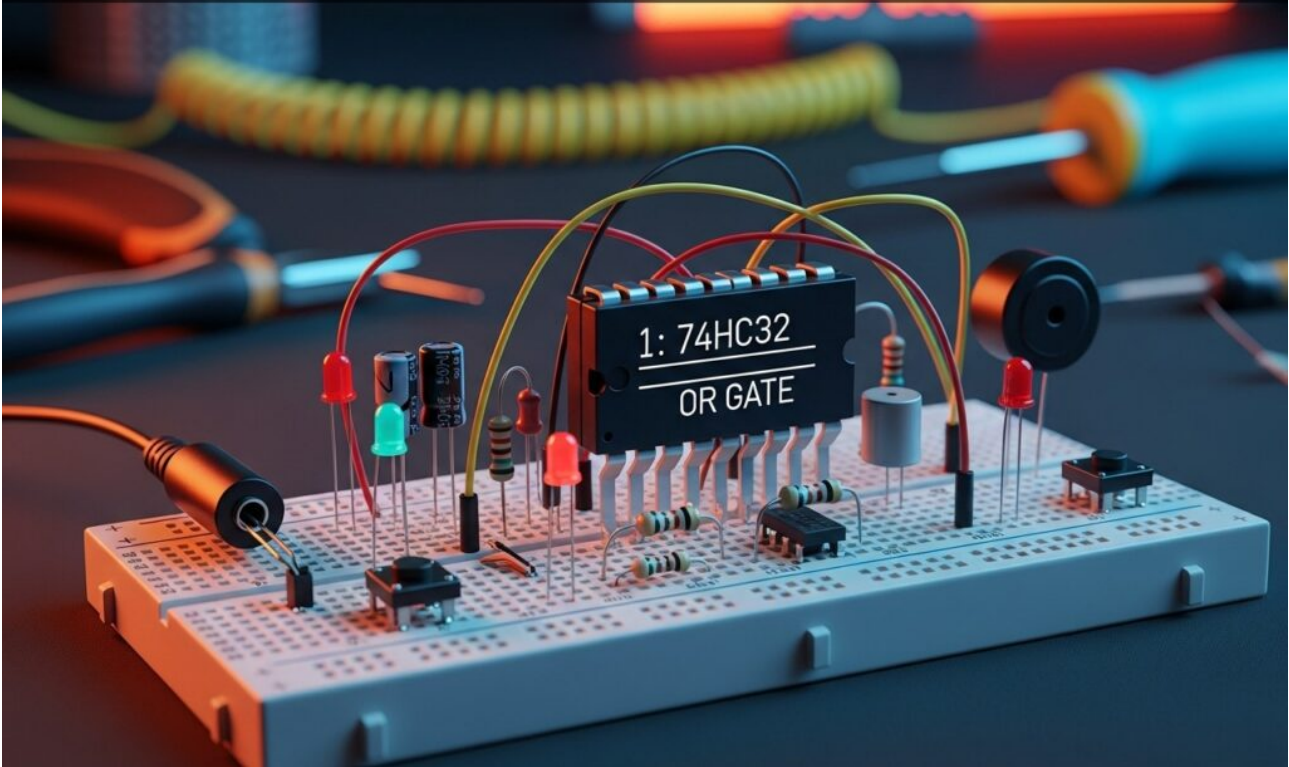
Practical case: Emergency water pump activation



Master Digital Electronics by building a flood prevention system. Use an OR gate to activate a drainage pump when water sensors trigger a 5V logic signal.

Practical case: Car Door Open Warning System

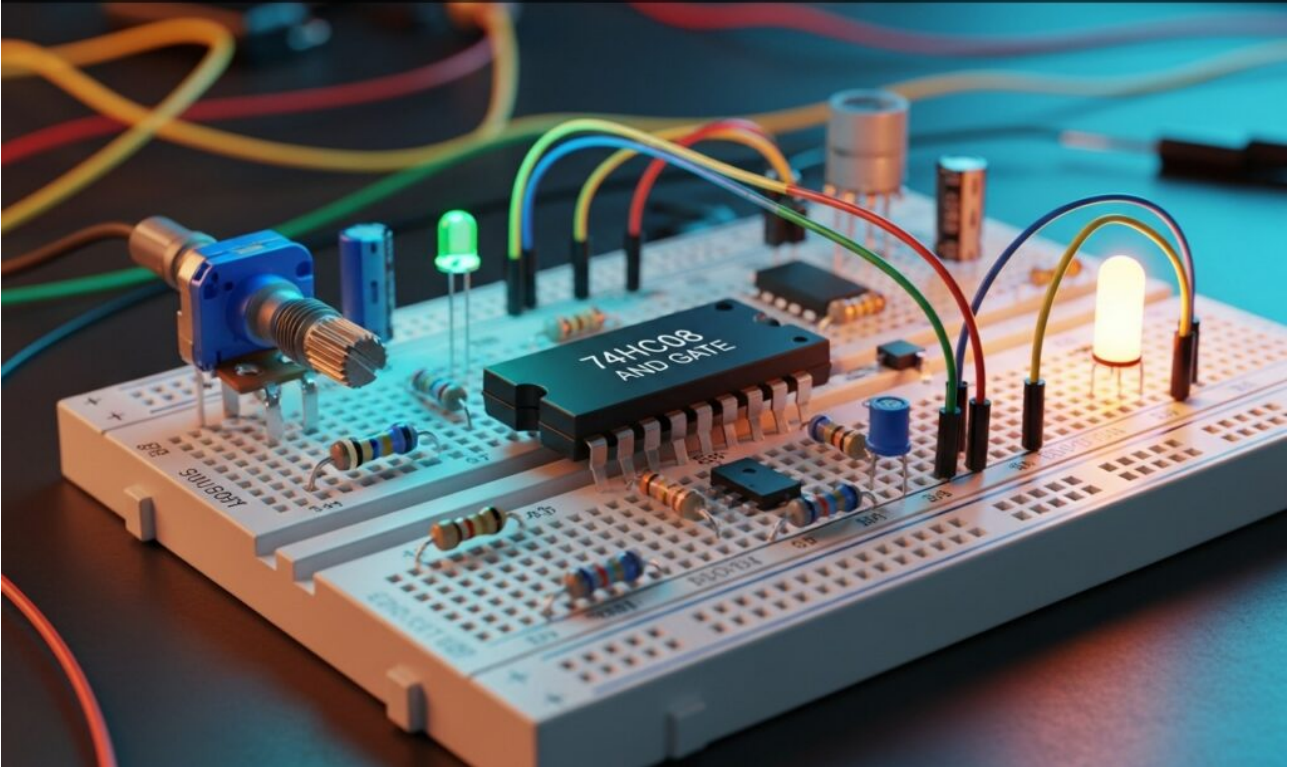
Car Door Open Warning System



Master Digital Electronics by building a car door alarm with a 74HC32 OR gate. Learn to detect open circuits and trigger LED alerts for safer security systems.

Practical case: Conditional automatic irrigation system

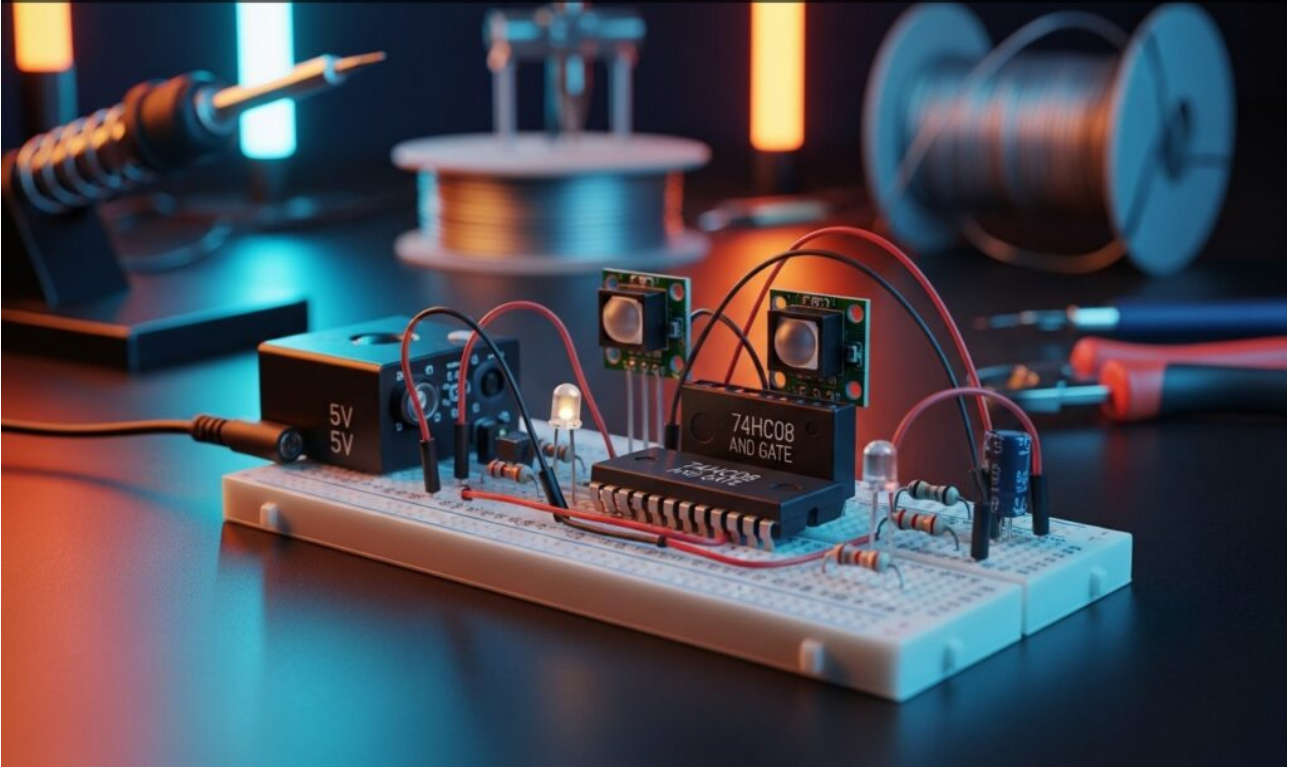
Conditional automatic irrigation system



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

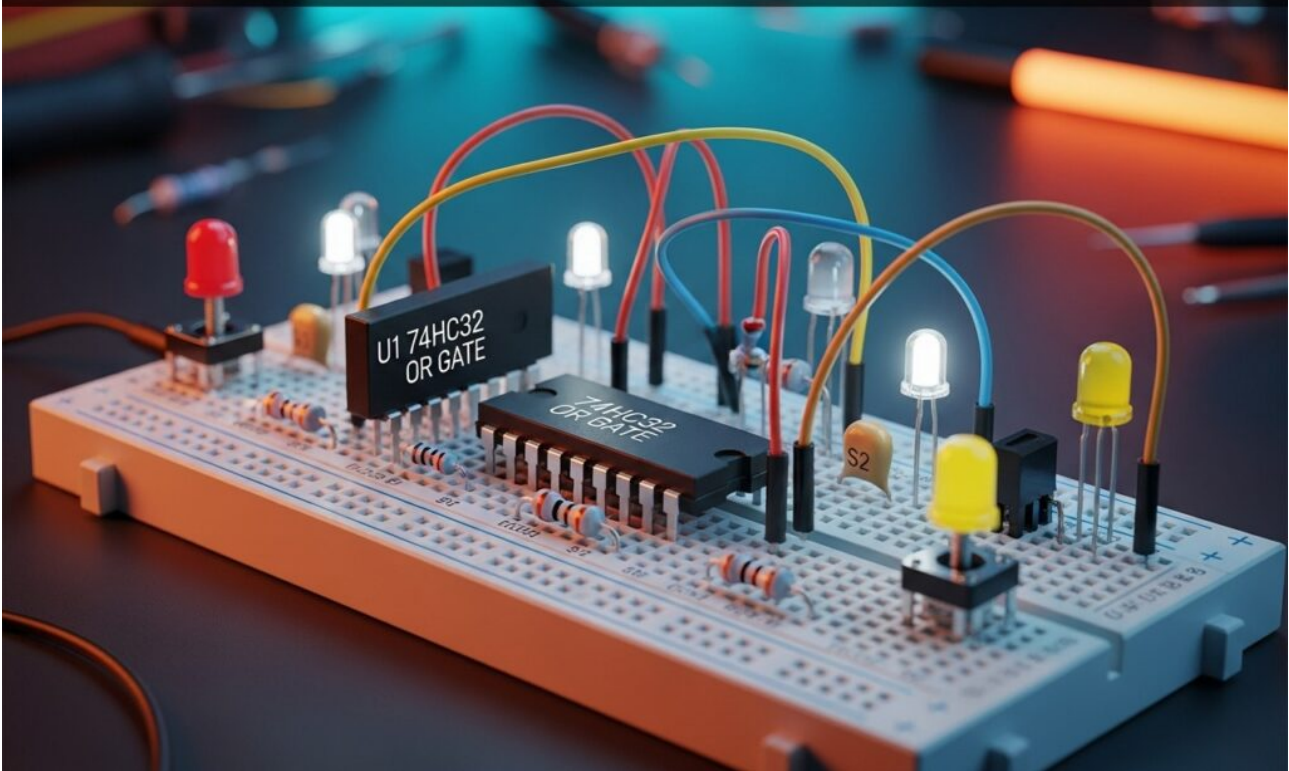
Dual sensor alarm activation



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

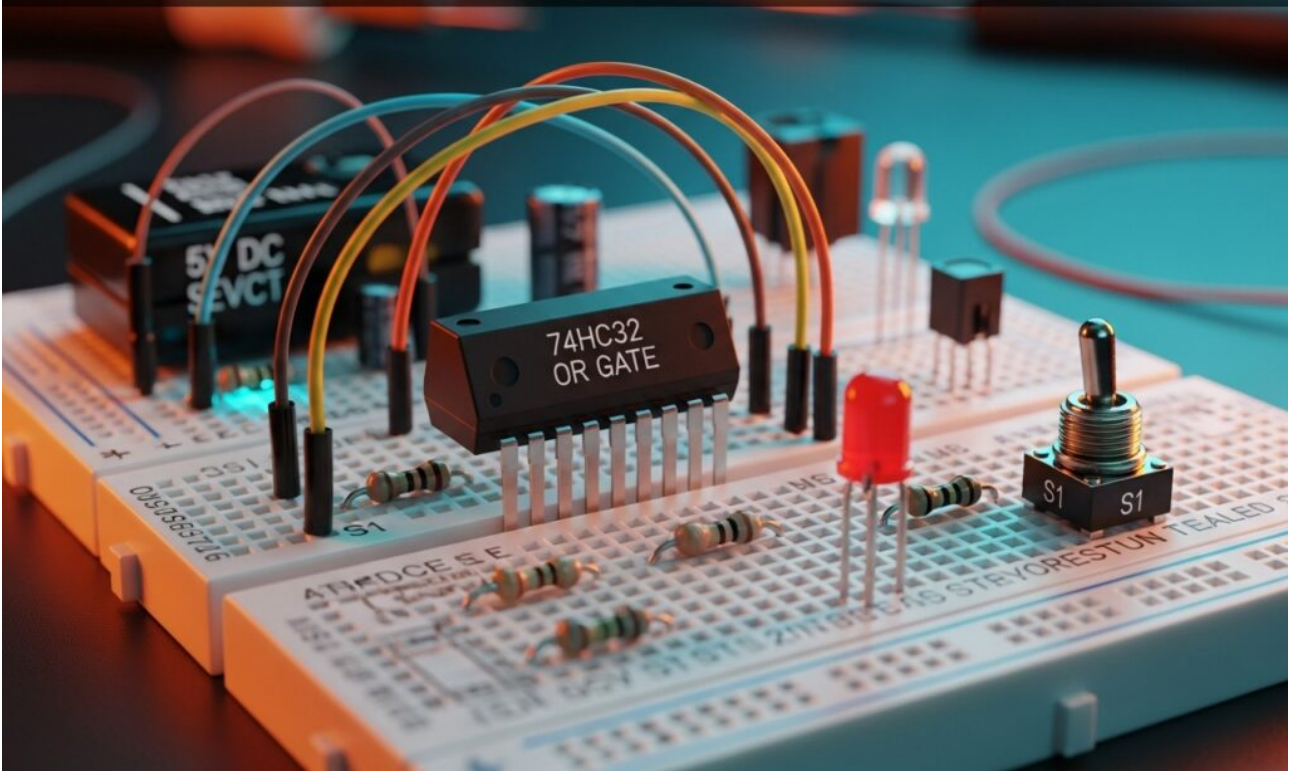
Lighting control from two points



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.