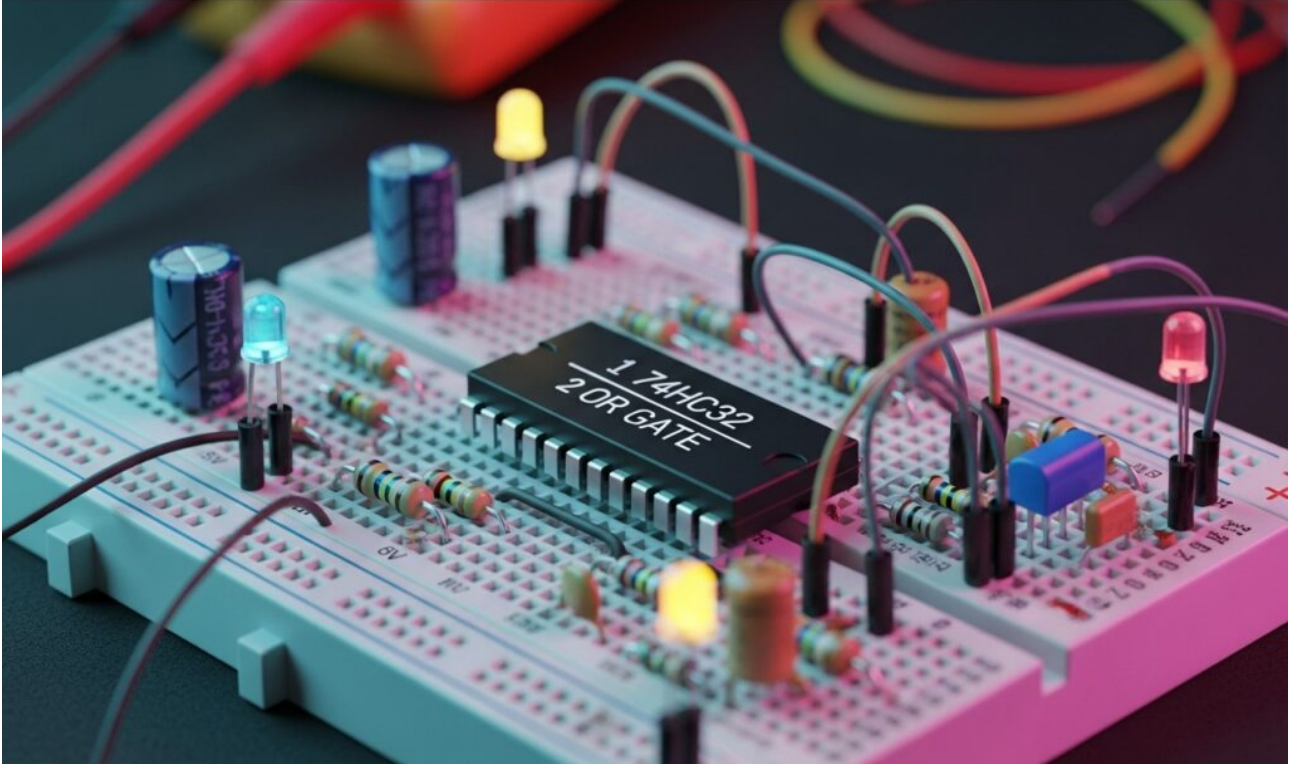


## Practical case: Production Line Fault Monitoring

# Production Line Fault Monitoring

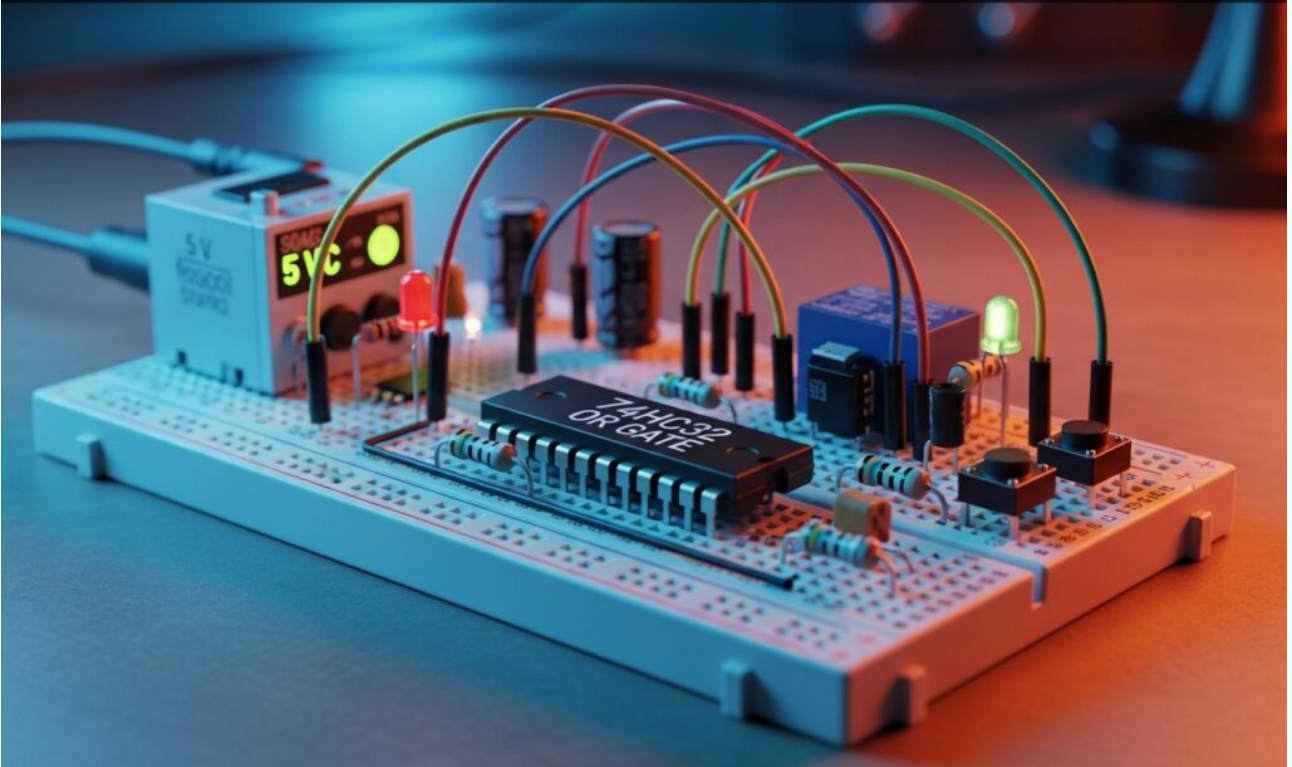


Master Digital Electronics by building a safety circuit with an OR gate. Stop a conveyor belt instantly when temperature or jam sensors detect faults.

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## Practical case: Redundant motor starter system

# Redundant motor starter system

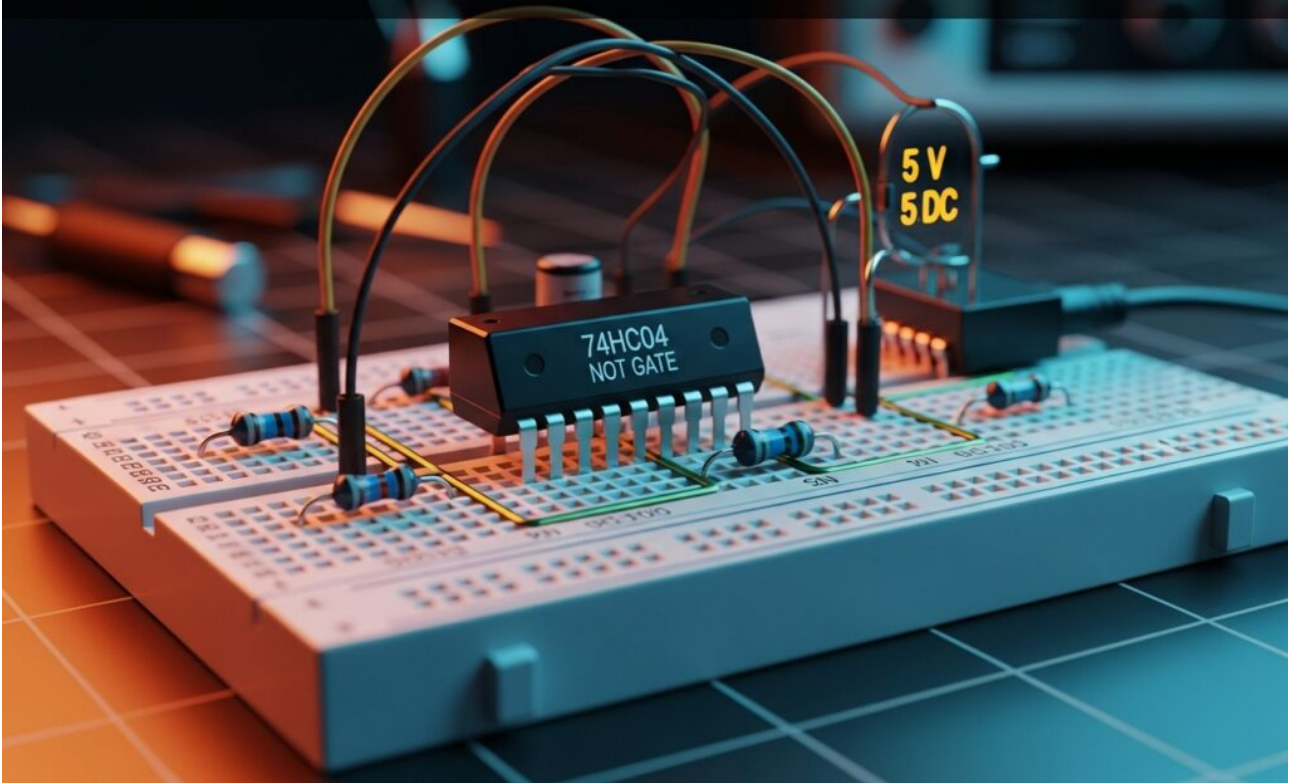


Master Digital Electronics by building a dual-start motor control circuit. Use an OR gate to trigger a relay and drive heavy loads from two distinct locations.

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**Practical case: Safety control with inverse logic**

# Safety control with inverse logic

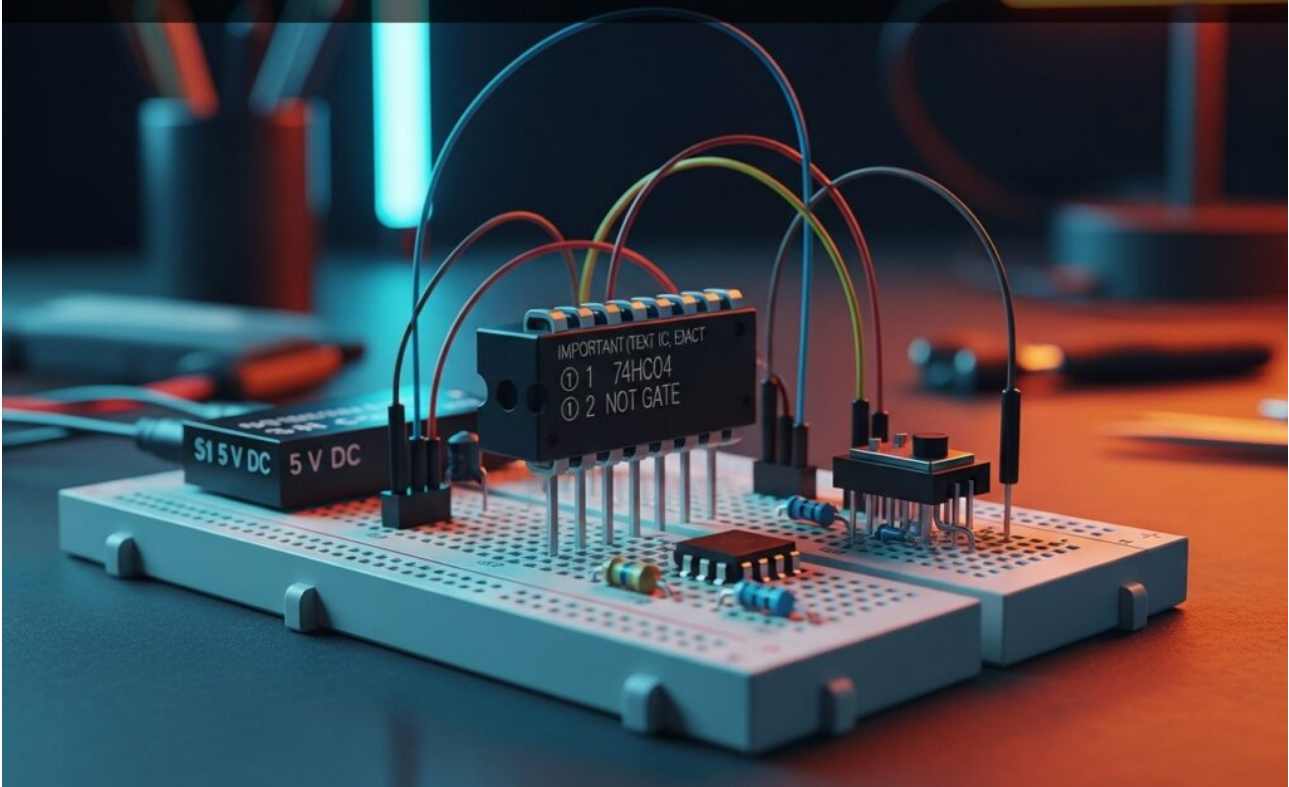


Master Digital Electronics by building an emergency stop circuit. Use a NOT gate to invert sensor signals and instantly halt a motor when a limit is reached.

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**Practical case: Signal inverter with indicator LED**

# Signal inverter with indicator LED

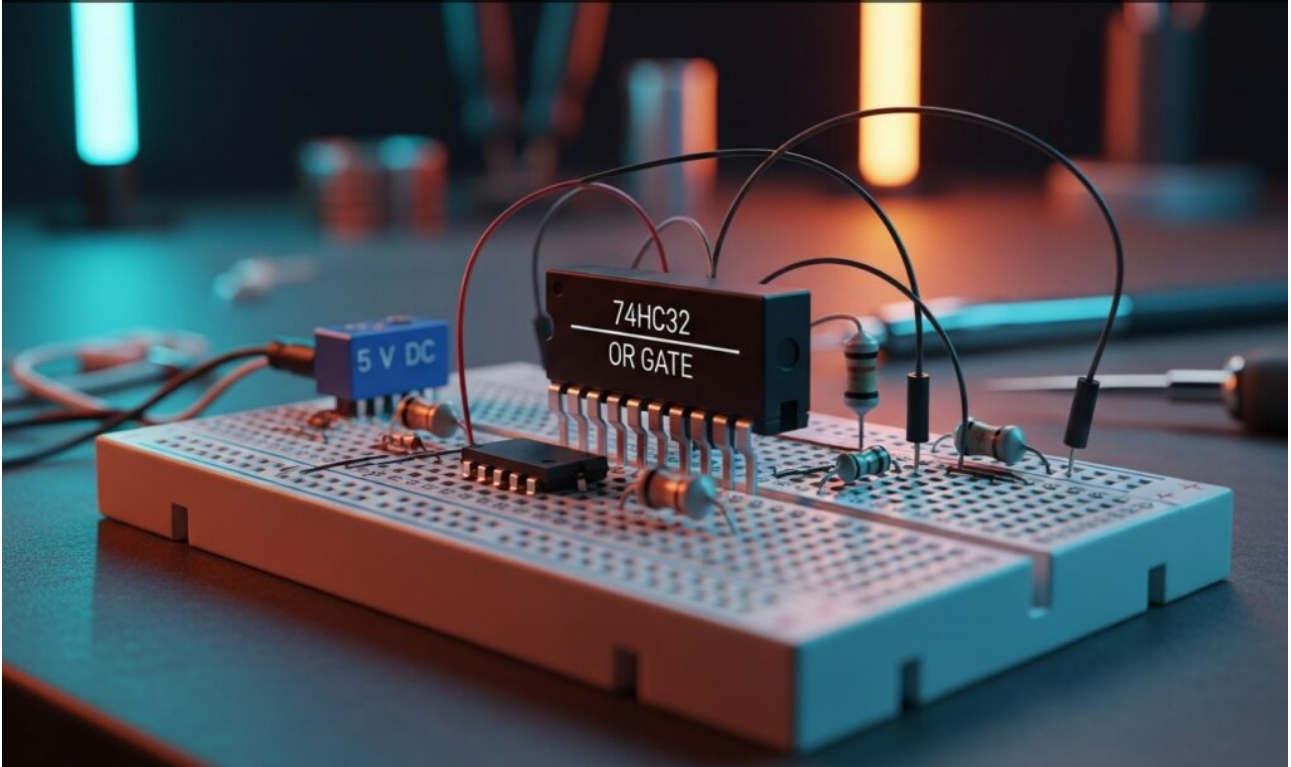


Master Digital Electronics by building a safety interlock circuit with a NOT gate. Learn to invert logic signals and control LED indicators for real-world...

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**Practical case: Emergency water pump activation**

# Emergency water pump activation

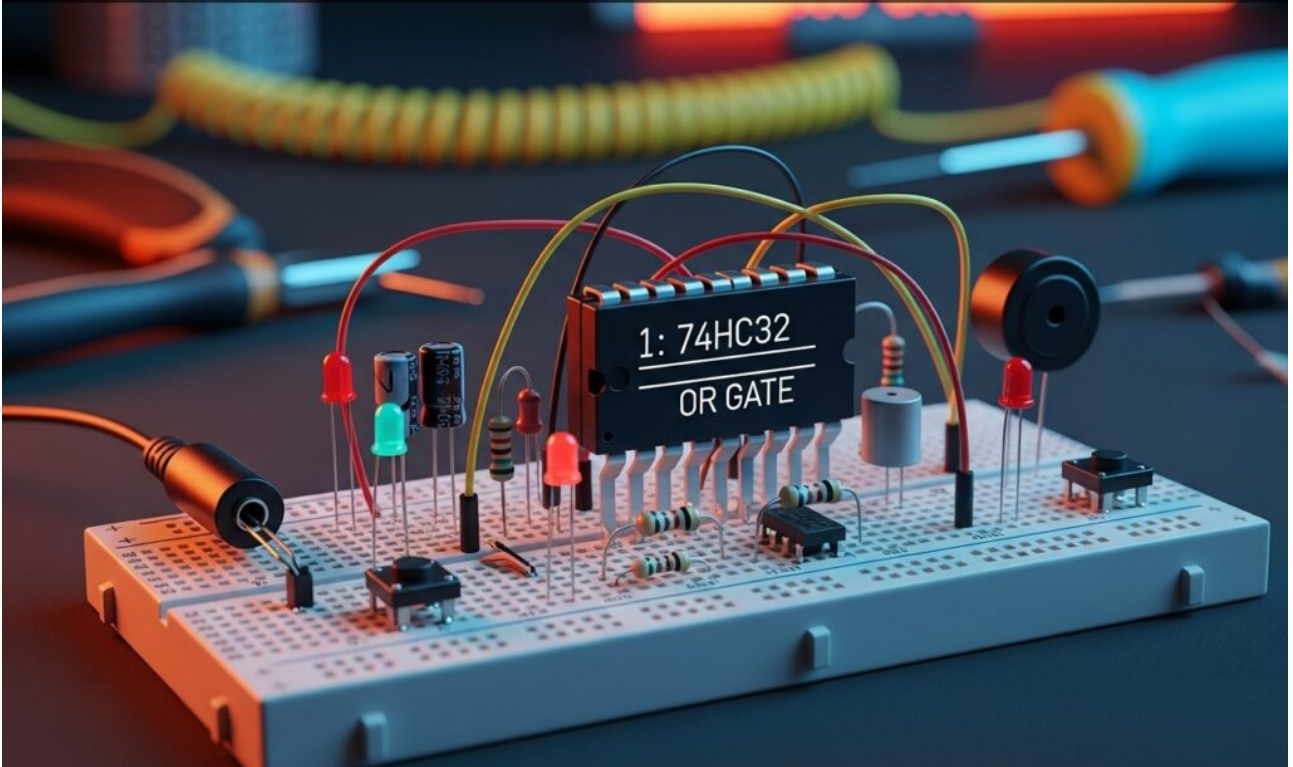


Master Digital Electronics by building a flood prevention system. Use an OR gate to activate a drainage pump when water sensors trigger a 5V logic signal.

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## **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.