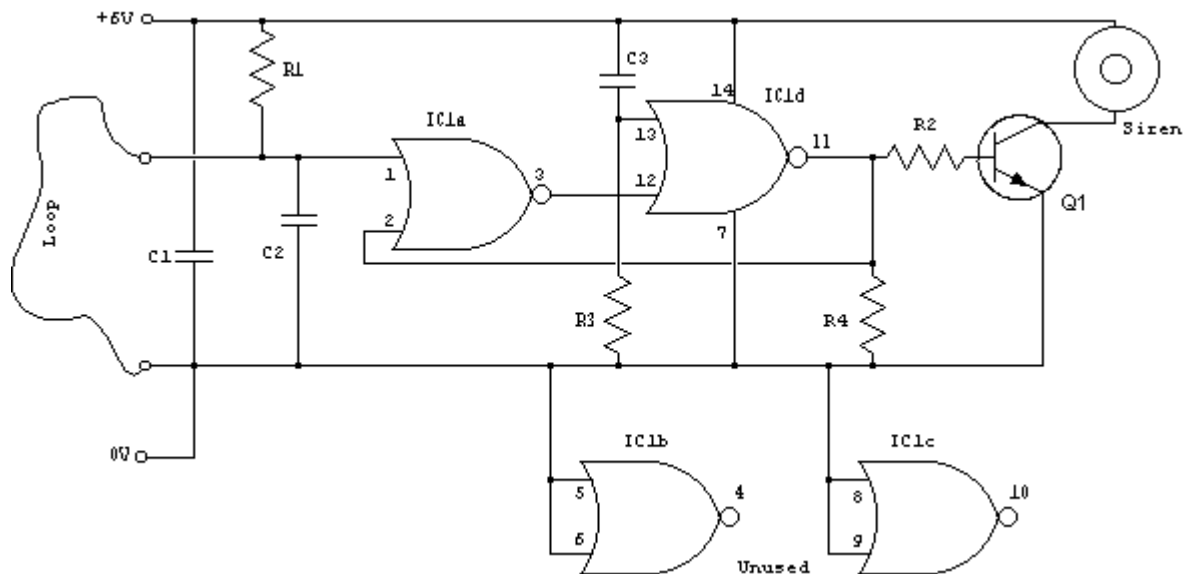


# Wire Loop Alarm

By **Alex Meaden**

This circuit is a simple wire loop alarm that can be used in doorways, hallways, or any other place the tripwire will be broken by intruders. The circuit has a built in siren, but it can be replaced by a relay to drive an external siren, commercial alarm, etc.

## Schematic



## Parts:

Part	Total Qty.	Description	Substitutions
R1	1	100K 1/2W 1% Resistor	
R2, R4	2	10K 1/2W 1% Resistor	
R3	1	1 Meg 1/2W 1% Resistor	
C1, C3	2	0.1uF Ceramic Disc Capacitor	
C2	1	0.01uF Ceramic Disc Capacitor	
IC1	1	4001UBE Quad 2-i/p NOR Gate	
Q1	1	MPSA14 Low Power NPN Transistor	
SIREN	1	Micro piezo siren 12V DC 150mA, 110dB @ 1M	
LOOP	1	See "Notes"	
MISC	1	Board, Wire, Socket For IC1	

## Notes:

1. The loop can be any type of hookup wire, with a maximum resistance of about 90K. Using very thin wire (40AWG, for example) will make a very sensitive trip wire, but will shorten the distance it can be strung due to the high resistance.

2. The siren can be replaced with a relay to drive external loads.