

Circuit : Rev Thomas Scarborough

Email : scarboro@iafrica.com

Description:

A cheap and simple gate alarm made from a single CMOS Integrated Circuit.

Gate Alarm.

Figure 1.

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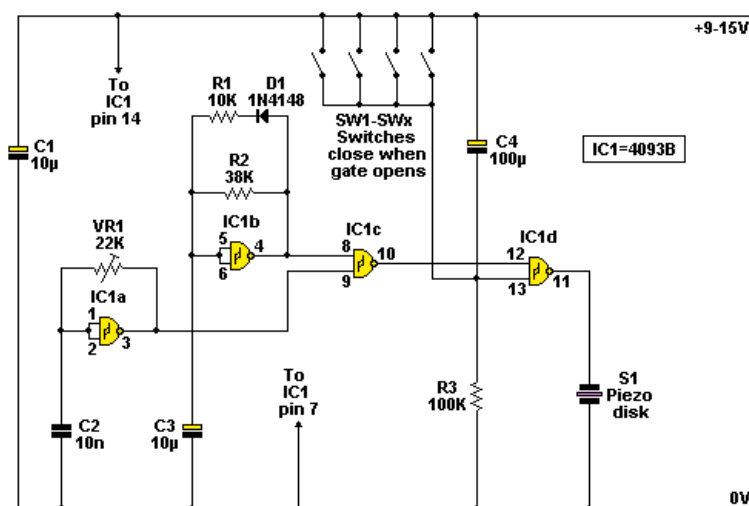
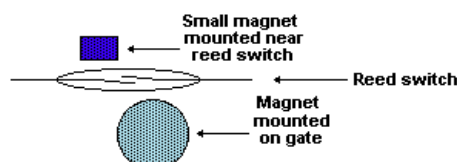


Figure 2.

"Normally closed" reed switch



Circuit Notes

Figure 1 represents a cheap and simple Gate Alarm, that is intended to run off a small universal AC-DC power supply.

IC1a is a fast oscillator, and IC1b a slow oscillator, which are combined through IC1c to emit a high pip-pip-pip warning sound when a gate (or window, etc.) is opened. The circuit is intended not so much to sound like a siren or warning device, but rather to give the impression: "You have been noticed." R1 and D1 may be omitted, and the value of R2 perhaps reduced, to make the Gate Alarm sound more like a warning device. VR1 adjusts the frequency of the sound emitted.

IC1d is a timer which causes the Gate Alarm to emit some 20 to 30 further pips after the gate has been closed again, before it falls silent, as if to say: "I'm more clever than a simple on-off device." Piezo disk S1 may be replaced with a LED if desired, the LED being wired in series with a 1K resistor.

Figure 2 shows how an ordinary reed switch may be converted to close (a "normally closed" switch) when the gate is opened. A continuity tester makes the work easy. Note that many reed switches are delicate, and therefore wires which are soldered to the reed switch should not be flexed at all near the switch. Other types of switches, such as microswitches, may also be used.