

If you're worried about a flooded basement, or your swimming pool overflowing, you'll really like this inexpensive flood alarm.

The alarm is built around two audio oscillators, each using two NAND gates. The detection oscillator, shown at the top of the schematic, is gated on by a pair of remote probes, which you locate in the area you want to protect. One of the probes is connected to the battery supply, the other to the input of one of the gates. When water flows between the probes, the detection oscillator is gated on.

The alarm oscillator, shown at the bottom of the schematic, is similar in design and is gated on by the output of the detection oscillator. The values given produce an audio tone of about 3000 Hz. The detection oscillator gates this audio tone at a rate of about 3 Hz. The result is a unique pulsating note, sure to draw your attention. You can change the audio tone by changing the values of R5 and C2, and the bleep speed by changing the values of R1 and C1.

You can use any small eight-ohm speaker to sound the alarm. The 2N3904 can be replaced by any similar NPN transistor.

The circuit will work from any six to 12-volt supply—a standard nine-volt transistor battery is ideal. Current drain in the off condition is negligible, so battery life should be well over a year.