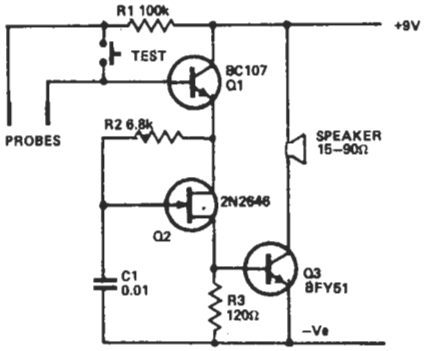
WATER LEVEL ALARM



The disadvantage with battery operated alarm circuits is the quiescent current that they draw. The circuit shown above draws so little current that the shelf-life of the battery is the limiting factor - the only current drawn is the leakage of the transistors.

The circuit is shown in the form of a water level alarm but by using different forms of probe can act as a rain alarm or shorting alarm; anything from zero to about 1MΩ between the probes will trigger it.

Q1 acts as a switch which applies current to the unijunction relaxation oscillator Q2. Alarm signal frequency is controlled by values and ratios of C1/R2. Pulses switch Q3 on and off, applying a signal to the speaker.

Almost any NPN silicon transistors can be used for Q1 and Q3 and almost any unijunction for Q2.