



LIQUID LEVEL ALARM

■ LOVELY T.P.

Here is a simple circuit for liquid level alarm. It is built around two BC547 transistors (T1 and T2) and two timer 555 ICs (IC1 and IC2). Both IC1 and IC2 are wired in astable multivibrator mode. Timer IC1 produces low frequency, while timer IC2 produces high frequency. As a result, a beeping tone is generated when the liquid tank is full.

Initially, when the tank is empty, transistor T1 does not conduct. Consequently, transistor T2 conducts and

pin 4 of IC1 is low. This low voltage disables IC1 and it does not oscillate. The low output of IC1 disables IC2 and it does not oscillate. As a result, no sound is heard from the speaker.

But when the tank gets filled up, transistor T1 conducts. Consequently, transistor T2 is cut off and pin 4 of IC1 becomes high. This high voltage enables IC1 and it oscillates to produce low frequencies at pin 3. This low-frequency output enables IC2 and it also oscillates to produce high frequencies. As a result, sound is produced from the speaker. Using preset VR1 you can

control the volume of the sound from the speaker.

The circuit can be powered from a 9V battery or from mains by using a 9V power adaptor.

Assemble the circuit on a general-purpose PCB and enclose in a suitable cabinet. Install two water-level probes using metal strips such that one touches the bottom of the tank and the other touches the maximum level of the water in the tank. Interconnect the sensor and the circuit using a flexible wire. ●

