

C.m.o.s. touch switch

BECAUSE this c.m.o.s. touch switch does not rely on mains hum for switching, it can be used with battery powered circuits. The design is also immune to noise spikes. Schmitt trigger IC_1 forms a 100kHz oscillator and IC_{2a} , which is biased into the linear region, amplifies the output and charges C_1 via the diode. IC_{2b} acts as a level detector. When the sensor is touched the oscillator signal is severely attenuated which causes C_1 to discharge and IC_{2b} to cleanly change state.

The sensor can be constructed from two capacitors or a piece of double sided printed circuit board etched as shown. Because the oscillator can drive several switches, a multiple sensor can also be constructed. If necessary, the output from IC_{2b} can drive a latch circuit. N. Sunderland, Reading, Berks.

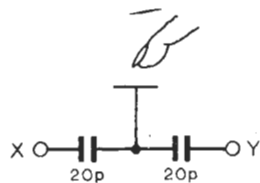


Fig. 1

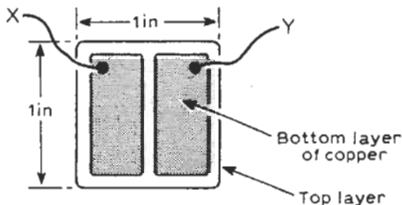
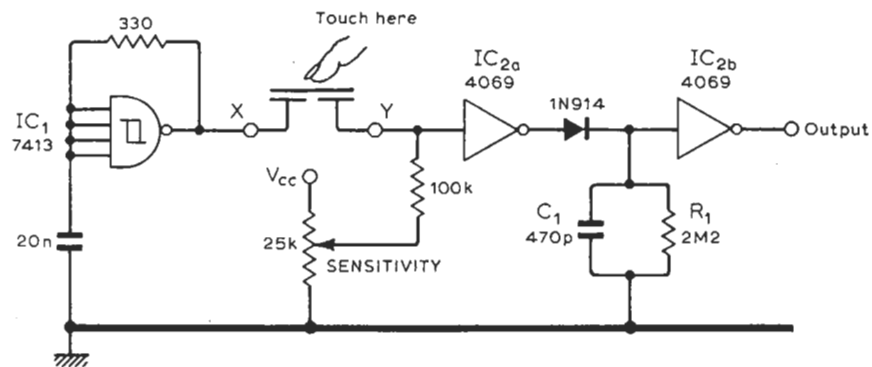


Fig. 2

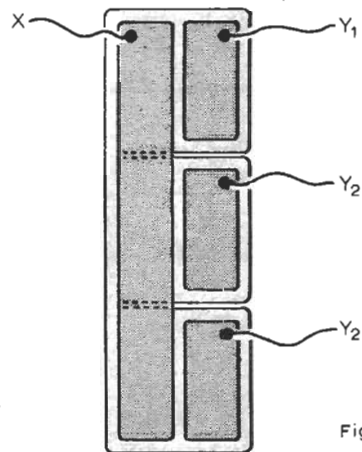


Fig. 3