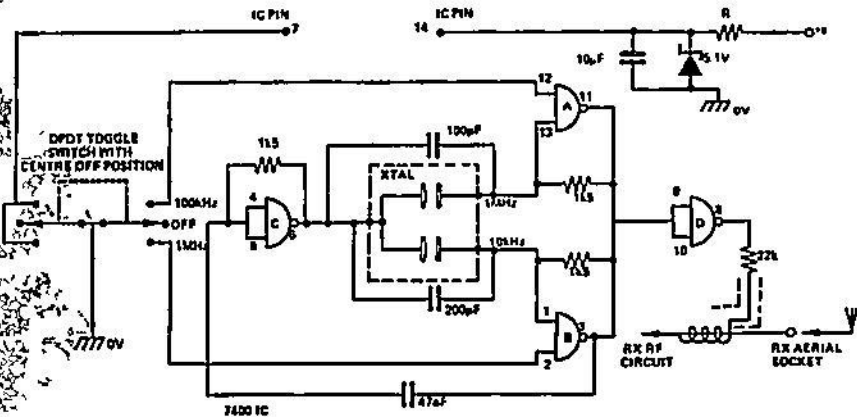
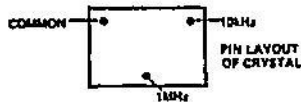


# TTL CRYSTAL MARKER



This circuit was designed to make use of an old 100kHz–1000kHz 10X, 3 pin twin crystal, which are available from Henry's Radio.

With the switch in the 100kHz position the 0V line is applied to pin 7 of the 7400 (connecting i.e. to supply) and also to pin 12 which disables gate A. This allows gates B and C to operate as an oscillator at the crystal frequency of 100kHz.

With the switch in the 1MHz position the 'inhibit' line is fed to pin 2. This disables gate B and allows gates A and C to operate as a 1MHz oscillator.

As DC switching is employed the switch can be remote from the oscillator unit. Gate D is used as a buffer/shaper stage.

The output of the unit is loosely coupled to the aerial input lead providing adequate marker amplitude well above 30MHz.