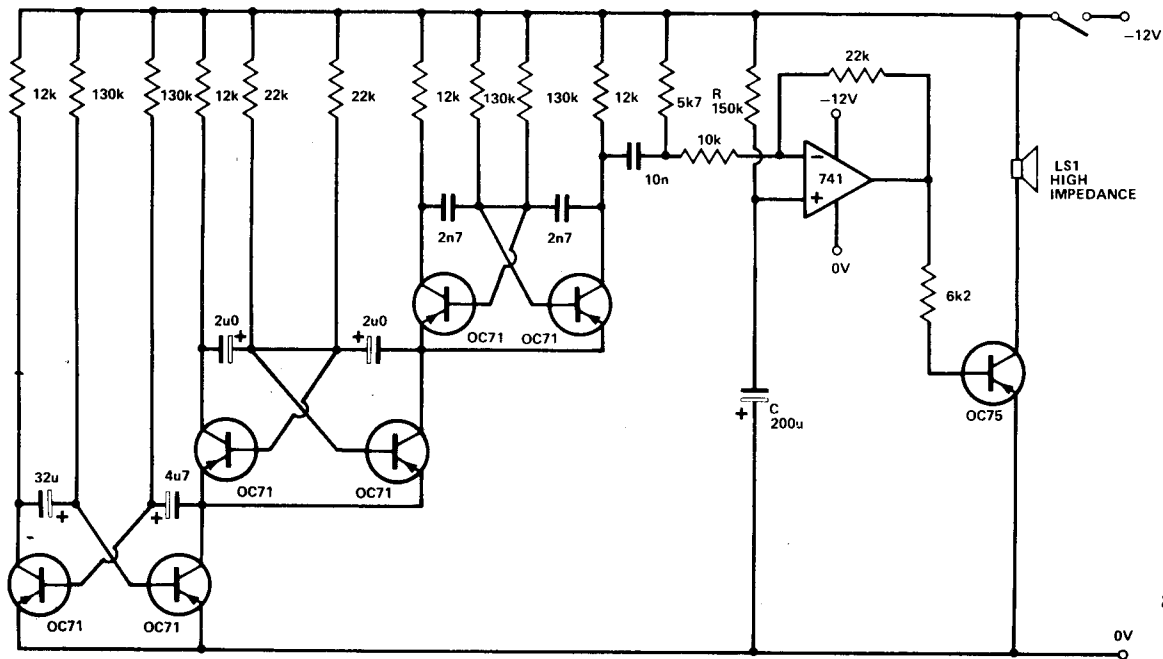


tech tips

Readers' Circuits



Gentle Clock Alarm

I. Hill-Smith

RING! RING! BUZZ! This is DLT
CLANG! PIP PIP PIP!

There are gentler ways to wake up. This circuit provides an alarm which builds up from being inaudible to loud over about one minute. As a result you are always woken by the minimum volume required to wake you; a far more comfortable experience than the usual trauma. The three multivibrators in cascade provide a signal like the sound of a warbler telephone. As C slowly charges through R a larger fraction of the signal is amplified by the op amp producing a louder output.