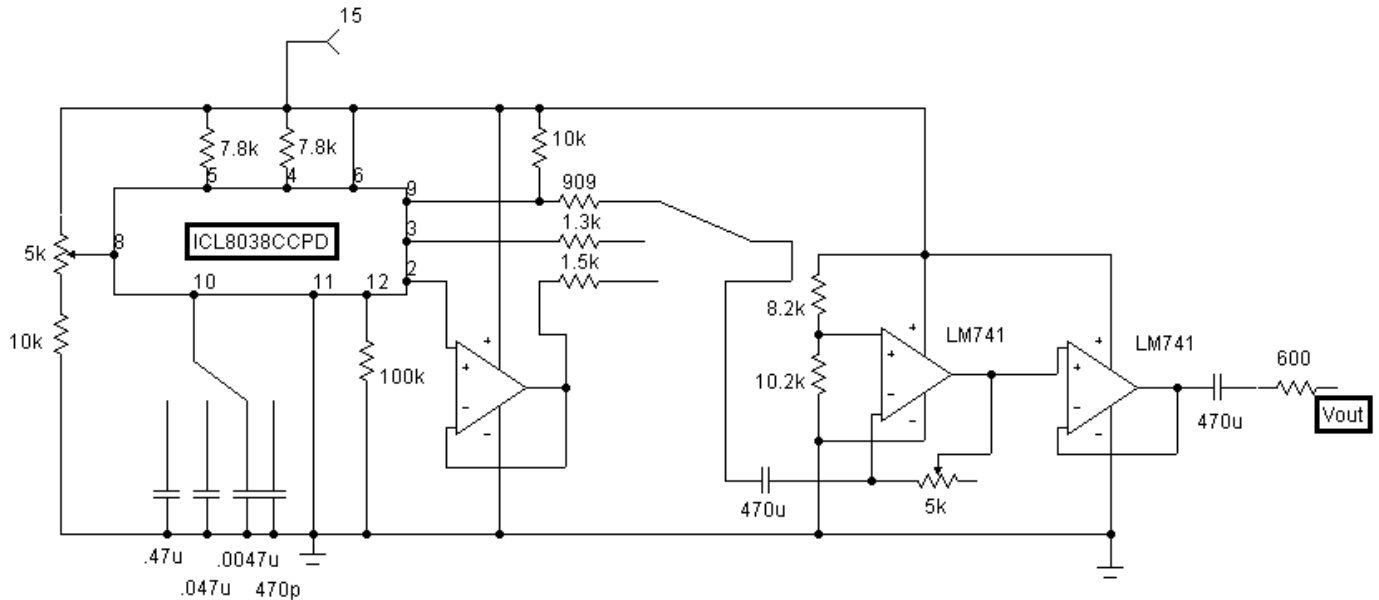


Matthew Vernon
E lab 3 Module
3-26-01

Crazytek Signal Generator Model A



- Input Voltage: 15V**
- Output Across 600Ω Load: 2.65V peak**
- Frequency Range: 4Hz to 73.5kHz**
- Output Impedance: 605.5Ω**
- Unit Cost: \$25**

This unit is simply an ICL8038 signal generator with extended support circuitry and complete packaging. A switch selects the timing capacitor used, allowing multiple ranges. The frequency resistors are held constant and the frequency is adjusted by the sweep input. A three way switch connects one of the outputs to a gain stage followed by a voltage follower. The buffer allows the output impedance to be selected as the output resistor. The sine signal is also buffered before the gain stage.

This circuit performs best at frequencies below 10kHz. This is due entirely to the slow rate of the op-amps used. Additional bandwidth could be obtained by using higher frequency op-amps (a.k.a. more expensive and harder to find). The triangle wave is only slightly affected by the slewing.