## LOW-COST ADDITION FOR MUSIC BOX PERIPHERAL

By Robert Briggs

Produces randomly generated music without a computer

F YOU HAVE built or are planning to build the "Computer Music Box Peripheral" (POPULAR ELECTRONICS, April 1978), here is a low-cost (under \$2) addition that allows it to be used without a computer. The combination permits experimentation with electronic music at low cost.

The complete circuit is shown in the schematic diagram. The oscillator is essentially the same as that shown on page 84 of the same April 1978 issue in the "Experimenter's Corner." Output leads are randomly connected to the input leads of the Music Box.

The audio output is a variety of notes, chords and strange sequences. Some sound like a harpischord, while others sound like an instrument playing in an echo chamber. To change the effects, simply interconnect the leads in a different way.

In the original Music Box, make sure

that +5-volts is connected to pin 4 of both flip-flops and the ground circuit to both pins 11.

