

HOBBY CORNER

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tor to get a forbidden snack, time dark-room processes and signal the opening of any type of door or cover

Do a bit of experimenting and let us know what uses you find for this circuit

"Littlest oscillator" addenda

There were a number of late arrivals in the oscillator contest. Even so, each one was appreciated. There were two, however, that I think you will want to know about

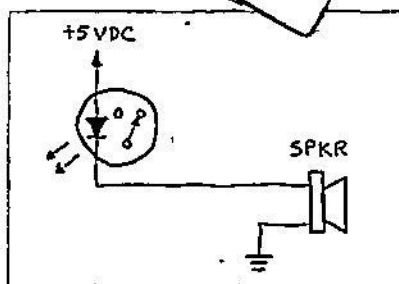


FIG. 4

The first is from Dale Nassar in Amite, CA. He uses a flasher LED in series with a speaker (Fig. 4) to produce a tone. That tone leaves something to be desired, but it

does work. So Dale came up with a parts count of one small part—except for the speaker, of course.

After suggesting some conventional circuits, Joseph D. Airo of N. Massapequa, NY, told of a "no-parts" oscillator. I can't even figure out how to draw a schematic of his non-circuit, but Fig. 5 and the following account should give you the idea.

One speaker contact is grounded. A stiff wire is attached to the speaker frame with the end bent in such a manner that it just contacts the voice-coil lead on the speaker cone. A voltage is applied to that wire.

You have a 50-50 chance of success the first time you wire the "oscillator." If you are lucky, the speaker cone will jump forward and break the contact. Obviously, with no voltage applied, the cone will then fall back and make contact with the wire once again, which will cause it to jump back out. As that happens over and over, a sound will be produced. Adjusting the wire a bit will even allow the sound to be changed somewhat.

If you are not lucky, the cone will jump backward the first time voltage is applied. In that case, contact will not be broken, and no vibration—and, consequently, no sound—will be produced. To correct a "wrong-way" cone, all you have to do is reverse the voltage polarity, or reverse the speaker connections.

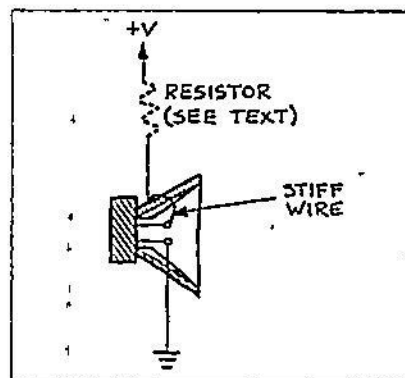
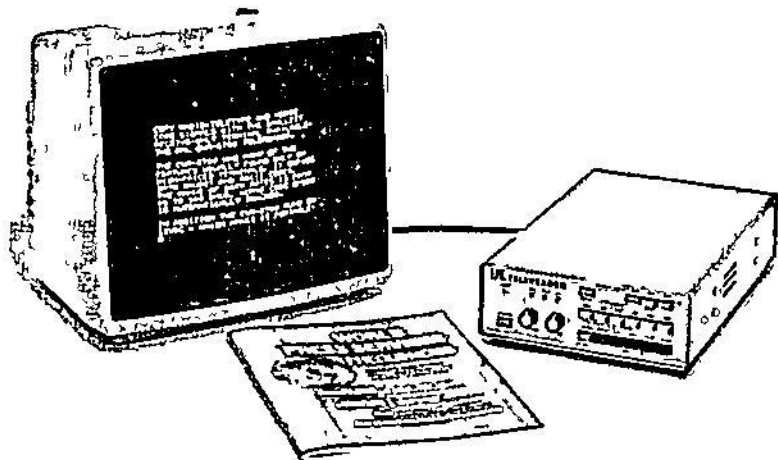


FIG. 5

That is a neat no-parts circuit if the speaker and the voltage are compatible. Fig. 5 shows that you may need to use a series resistor if the voltage is too great for the speaker in order to prevent over-excitation of the cone (or to lower the volume of the sound). With a five-volt supply, start out with a 100-ohm resistor just to play it safe.

Now that's an "oscillator." Joe! Thanks to you, and to everyone who sent in an idea, for sharing your circuits. R-E

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