

# 7 winter weekend warmers

Looking for a fun way to warm a cold February weekend? One answer could be curling up with a hot soldering iron and a handful of parts from your local electronics store. Build one or all of our quick-seven projects this weekend and have a ball!

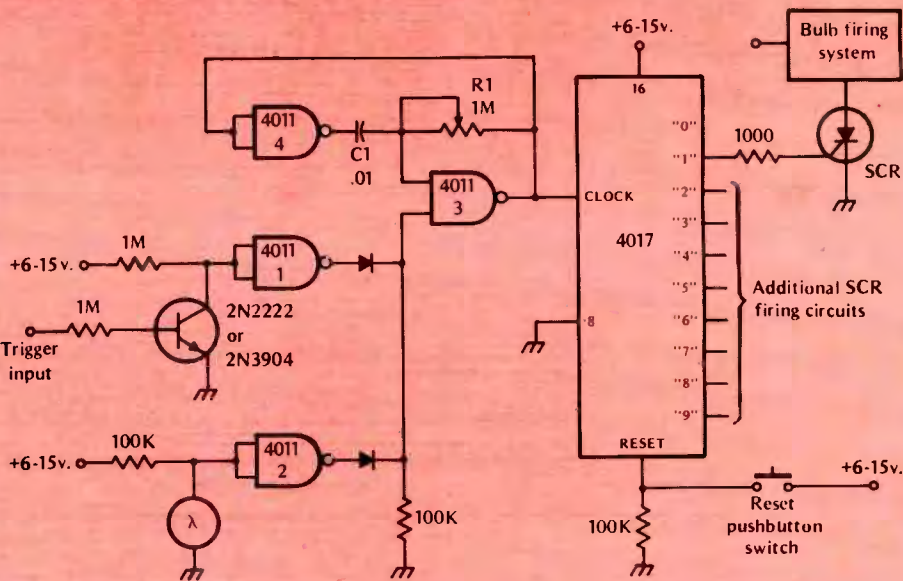
by Jeffrey A. Sandler

## photo stop action

This handy circuit lets you create multiple "stop-action" photographic effects, like showing a bouncing ball in up to nine locations in a single photograph.

All you do is connect this circuit to your strobe or flash units, set the camera to *bulb*, and shoot. The circuit will automatically fire the bulbs sequentially with the time between each firing variable.

Though the circuit is functionally complete, you will have to provide the actual firing system. In many cases, a simple SCR will work, as shown in the diagram. In others, the SCRs can be



used to provide a triggering pulse through a bulb trigger coil.

The firing can be initiated in one of two ways. A trigger pulse can be applied to the Trigger Input terminal through a capacitor, or you can operate the unit as a slave. Light from your cam-

era-mounted flash will activate the circuit through its built-in photocell pickup. The time period between each successive flash is determined by  $C_1$  and  $R_1$ , which is variable. After firing the circuit, it must be reset by momentarily depressing the reset button.