

EQUIPMENT THEFT ALARM

As an electronics hobbyist, you very likely own one or more pieces of expensive equipment, and these can be very tempting targets for thieves or vandals. To protect your investment, why not install the simple alarm pictured here in some of your more valuable possessions? Things like Amateur or CB transceivers, computers, oscilloscopes and stereo equipment are all excellent candidates.

In the schematic, mercury switch S1 is normally open. However, should the equipment in which the alarm has been installed be picked up and tilted, S1 closes and thereby supplies gate current to the SCR. Q1 then latches in a conducting state, causing current to flow through buzzer BZ1. The buzzer will sound until pushbutton S2 is pushed to reset the circuit. For best results, use an electromechanical, rather than piezoelectronic buzzer, since it will emit more noise.

PARTS LIST FOR EQUIPMENT THEFT ALARM

- B1**—6,9, or 12-volt battery
- BZ1**—6,9, or 12-volt buzzer
- D1**—1N4002 diode
- Q1**—2N5060 SCR
- R1, R2**—4,700-ohm, 1/2-watt resistor
- S1**—normally open SPST mercury switch
- S2**—normally closed pushbutton switch
- S3**—SPST toggle switch

