



# Mr. CIRCUIT<sup>®</sup>

## Solderless Electronic Kit

### BURGLAR ALARM

#### LAB KIT A12

\*\*\* START HERE \*\*\*

#### (A) PURPOSE OF THIS PROJECT.

The purpose of this project is to build a useful Burglar Alarm.

*KGA*

#### (B) CIRCUIT DESCRIPTION

This burglar alarm is designed to be used with normally open (S1) or normally closed (S2) switches. If after the alarm is armed (battery connected) the normally closed switch (S2) is opened, or the normally open switch (S1) is closed, a positive voltage will be applied to the gate of the SCR causing it to conduct.

To learn more about the operation of an SCR refer to Mr. Circuit Lab Kit A7.

When the SCR conducts, the LED turns on, indicating that the alarm was activated.

In order to have an audible signal, an optional 9-volt buzzer can be connected in points 1 and 2 of the circuit (see schematic diagram).

Once the alarm is triggered (LED on) the only way to stop it is by disconnecting the battery from the circuit.

Before connecting the battery, be sure that the two wires labeled S2 are connected together, and the two labeled S1 are not touching one another.

Now you are ready to assemble this project.

