## PARTS LIST AND INSTRUCTION FOR LEDKIT

READ ALL INSTRUCTION BEFORE STARTING THE PROJECT!

Your kit should include the following parts:

- 1 each P.C. BOARD
- 1 each 555 timer I.C.
- 1 each 33K ohm resistor (orange, orange, orange)
- 1 each 120K ohm resistor (brown, red, yellow)
- 1 each 4.7 MFD capacitor with radial (P.C. leads)
- 2 each L.E.D. (assorted colors)
- 1 each 9 volt battery snap (battery not included)
  - **STEP 1** (see figure 1)

Insert and solder the **555 I.C.** to P.C. Board paying close attention to the notch edge. Notch edge indicates pin one on the I.C. and should match with pin one on the P.C. board trace. Insert and solder the **120K ohm resistor** so that the resistor faces the notch edge of the 555 timer. Insert and solder the **33K ohm resistor** as indicated.

• STEP 2 (see figure 2)

Insert and solder the 1 mfd capactior paying close attention to polarity.

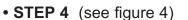
• STEP 3 (see figure 3)

Locate the flat side of the RED **L.E.D.** From the top of the L.E.D. look down around the edge or run you finger along the edge of the L.E.D. until you feel the flat part. This is the negative side of the L.E.D. Insert and solder this L.E.D. over the 120K ohm resistor with the flat side of the L.E.D. facing the outside of the board (not facing the 555 timer).

Remove the 2nd L.E.D from the black holder.

Look at the LED.

It should look something like this. Insert and solder this L.E.D. over the 33K ohm resistor with the negitive side facing the inside of the board (facing the 555 timer).



Insert and solder the battery snap paying close attention to the RED and BLACK wire as per figure 4. Connect a 9 volt battery (not supplied with this kit) and the L.E.D.s should start to flash.

## IF THE PROJECT DOES NOT FUNCTION Check the following ...

 $\bullet$  Is the 555 I.C. inserted correctly? Check the location of pin 1  $\ldots$ 

- Is the 1 mfd capacitor inserted correctly? Check plus and minus ...
- Are both L.E.D.'s inserted correctly? Check the notch position ...
- Is the battery snap inserted correctly? Check the plus and minus ...

Are the solder connections well done? Check to see none overlap traces on the P.C. board and that you do not have any cold solder jounts.
Is your battery good?

## \* \* \* REVIEW STEPS 1 THRU 4 \* \* \*

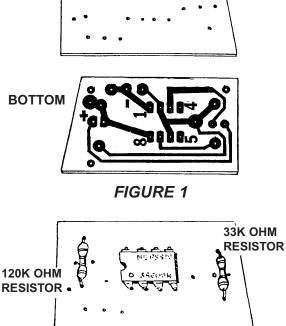
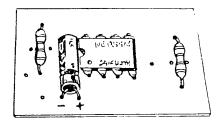


FIGURE 2





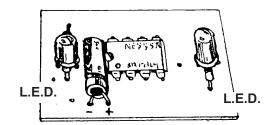
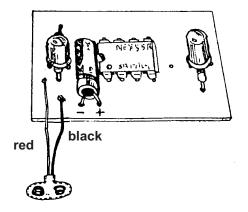


FIGURE 4



ТОР