Heart-shaped Badge Project

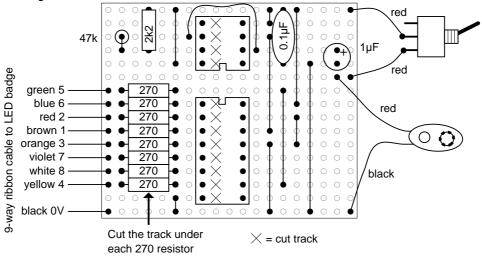
The badge consists of eight LEDs arranged in the shape of a heart. One LED is lit at a time and this 'chases' round the shape. It would be easy to adapt this project to create other shapes with the 8 LEDs.

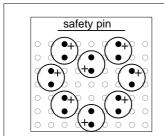
Parts Required

- resistors: 2.2k, 47k, 270 ×8
- capacitors: 0.1µF, 1µF 16V radial
- red LEDs ×8
- 555 timer IC
- safety pin to attach badge

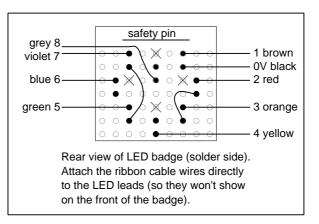
- 4017 counter IC
- DIL sockets for ICs: 8-pin, 16-pin
- on/off switch
- battery clip for 9V PP3
- ribbon cable 9-way about 1 metre (to connect badge to main circuit)
- stripboard: 16 rows \times 19 holes for circuit, 10 rows \times 9 holes for badge

Stripboard Layouts

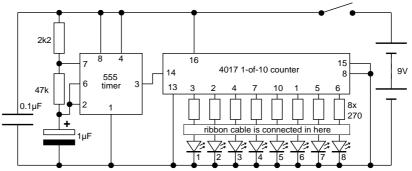




Arrange the 8 LEDs in a heart shape like this. Note that the two centre LEDs have their + (long) leads down, the other 6 LEDs have their long leads up.



Circuit diagram





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