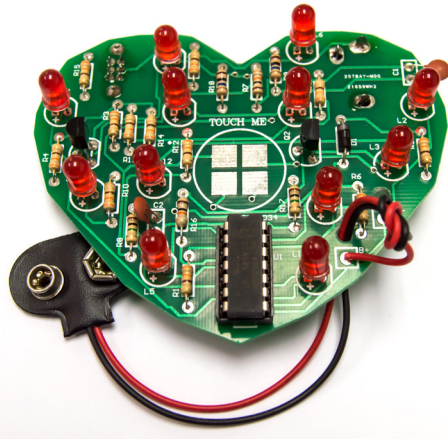


INTRODUCTION:

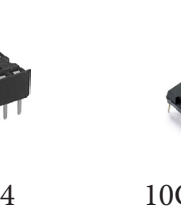
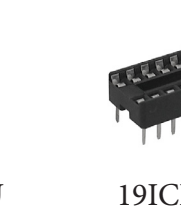


The Emotional Heart kit is a beginner soldering kit. This kit contains a heart-shaped pcb and 12 red LEDs that flash in a random pattern. A unique and interesting feature is in the center of the heart where the user can touch the board to increase the flashing rate of the LEDs. This kit would be a fun kit to play as a game. You can simulate the finger of a girl touching the heart of a boy and see the flashing rate of the LEDs speed up. All component parts are included with the kit.

A 9V battery is required, optional 9V/400mA wall adapter available.
(Not included)

PARTS LIST

Qty.	Symbol on PCB	Description	Part No.
12	R1-R6, R10-R15	Resistor: 330 ohms Color Code: Orange, Orange, Brown	13005330
2	R7, R16	Resistor: 10 Kohms Color Code: Brown, Black, Orange	1300510K
2	R8, R17	Resistor: 1 Mohm Color Code: Brown, Black, Green	130051M
2	R9, R18	Resistor: 10 Mohms Color Code: Brown, Black, Blue	1300510M
1	D1	Diode: 1N4001	111N4001
2	C1, C2	Capacitors: .1uF ceramic disk	14DK050.1U
1		Dip IC Socket (14 pin)	19ICL14
1	U1	IC 4069 (14 pins)	10CD4069
12	L1-L12	Red LEDs	08L53RD
2	Q1-Q2	Transistors: 9014	11S9014
1	Switch	Slide Switch (6 leads)	17PMWSS
1	DC Jack	3.5mm Mono Jack Socket	0703PMWDCJ
1	B+, B-	9V Battery Snap	2801BST
1		PCB for Kit	97PCB270018



TOOLS/EQUIPMENT NEEDED:

1. Solder iron/stand – Recommended solder iron:
 - RSR High Performance 3-wire iron w/conical tip (060509)
 - Stand w/sponge (060841)
2. Soldering station - Recommended soldering station:
 - RSR Economy Model w/conical tip (0603ZD98)
3. 60/40 solder or unleaded solder
4. Desolder pump
5. Wire Cutter

OPTIONAL ITEMS (RECOMMENDED):

1. RSR Fume Extractor or economy model smoke/fume absorber (0608426DLX, 0608ZD153)
2. RSR Helping Hand complete set (060834)

YOU MAY BE INTERESTED IN THESE RELATED PRODUCTS/KITS:

BEGINNER TO INTERMEDIATE LEVEL KITS:

- Funlight Kit – RSR Part No. 3200FUNLIGHT
- Flashing Heart Kit – RSR Part No. 32VK101
- SMD Flashing Heart Kit – RSR Part No. 32VKMK144
- Love Tester Kit – RSR Part No. 32VKMK149
- Reaction Tester Kit – RSR Part No. 32EKI2007
-

SOLDERING AIDS:

- Tip Cleaner – RSR Part No. 0603460
- Tip Tinner – RSR Part No. 0603WTT
- Solder Aid Kit – RSR Part No. 060830
- Solder Paste Flux – RSR Part No. 0608ZD170

ASSEMBLY INSTRUCTIONS:

- A.) Take an inventory and make sure all parts are included in the kit.
- B.) Identify and locate on the pcb (97PCB270018) resistors R1-R6 and R10-R15. Solder to pcb and cut resistor leads at solder point.
- C.) Identify resistors R7 and R16. Solder to pcb and cut leads.
- D.) Identify resistors R8 and R17. Solder to pcb and cut leads.
- E.) Identify resistors R9 and R18. Solder to pcb and cut leads.
- F.) Locate D1 on the pcb. Be careful to observe proper orientation of the diode and solder to pcb and cut leads.
- G.) Locate C1 and C2 on the pcb. Solder to pcb and cut leads.
- H.) Identify 14-pin IC socket and find notched end of the socket. Carefully orient socket to pcb and solder to board.
- I.) Take CD4069 IC and locate small notch in chip. Place the IC in the socket lining up the notch in the chip with the socket.
- J.) Identify red LEDs L1-L12, solder to pcb and cut leads.
- K.) Take Q1 and Q2 and solder to pcb observing transistor orientation.
- L.) Identify slide switch and solder to pcb.
- M.) Place DC jack on the board to solder to pcb.
- N.) Solder 9V battery snap to pcb, observe proper polarity.

For tips on soldering techniques and safety information, please visit the Better Soldering page on our website at www.elexp.com/soldering

NOTE: For additional component parts, please go to our website at <http://www.elexp.com> or contact one of our customer reps for assistance at 1-800-972-2225.

