

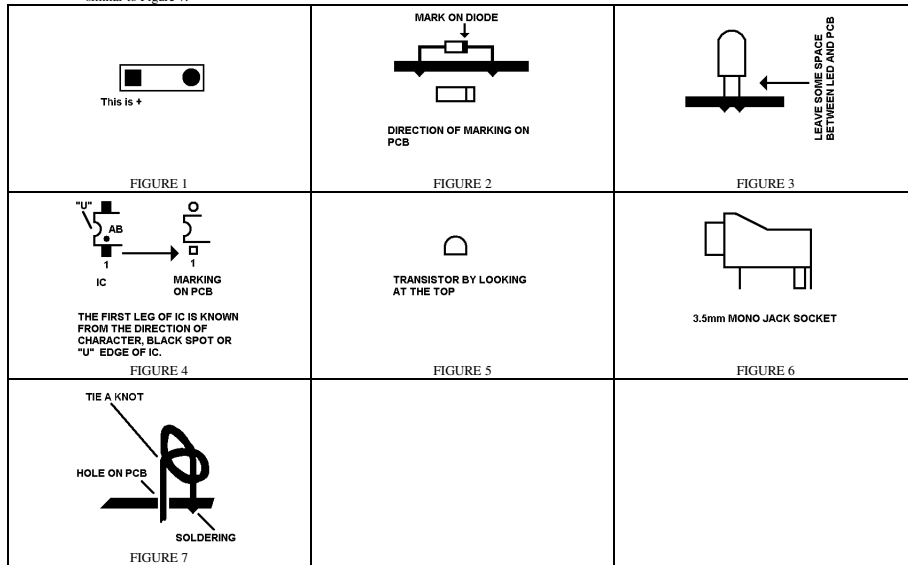
EMOTIONAL HEART

PRODUCT CODE: M00270018

DESCRIPTION: The flashing rate of LED would increase when a finger touch the middle of the heart in PCB. This is a good tool to date girl. Just to simulate the finger of girl touching the heart of boy.

READ BEFORE INSTALLATION:

- Put the component on the side of screen printing and solder on the back of PCB without printing.
- Placing direction of component
- On component, longer leg is "+".
- On PCB marking, square pad as Figure 1 is always "+".
- For diode, please install as Figure 2.
- Do not put the LED to very bottom, just install as Figure 3.
- For any IC, finding out which leg is first leg (FIGURE 4) is important. Also, solder the socket (chair) to the PCB and the IC sit on the top.
- For 9V Battery Adaptor, Red is B+ and Black is B-. Also, please tie a knot after the red and black wire has passed the neighbors hole before soldering. This is similar to Figure 7.



CIRCUIT EXPLANATION:

- Please read the below together with the circuit diagram in Figure 8.
- The function of D1 is to prevent reverse power supply.
 - Part 1 is for flashing of LED (L5, L1, L6) and LED (L7, L2, L8).
 - Part 1.1 is an oscillator circuit that generating a square wave so as to drive the circuit in Part 1.2 and part 1.3.
 - L5, L1 and L6 at part 1.2 would light on when the output of part 1.1 is at high and off at low (Square wave behaviors).
 - Because there is an inverter U1A, L7, L2, L8 of part 1.3 would flash also but out of phase with part 1.2.
 - Part 2 work in similar as part 1.
 - We now look back to part 1; the rate of flashing is mainly controlled by R9 and C1. The lower the resistance of R9, the higher the flashing rate. When a finger is touching the "TOUCH ME", 1 and 2 of "TOUCH ME" is now connected by the skin of finger. The resistance of R9 becomes lower. So that the flashing rate of (L5, L1, L6) and LED (L7, L2, L8) is also higher.
 - Part 2 work in similar as part 1.

INSTALLATION:

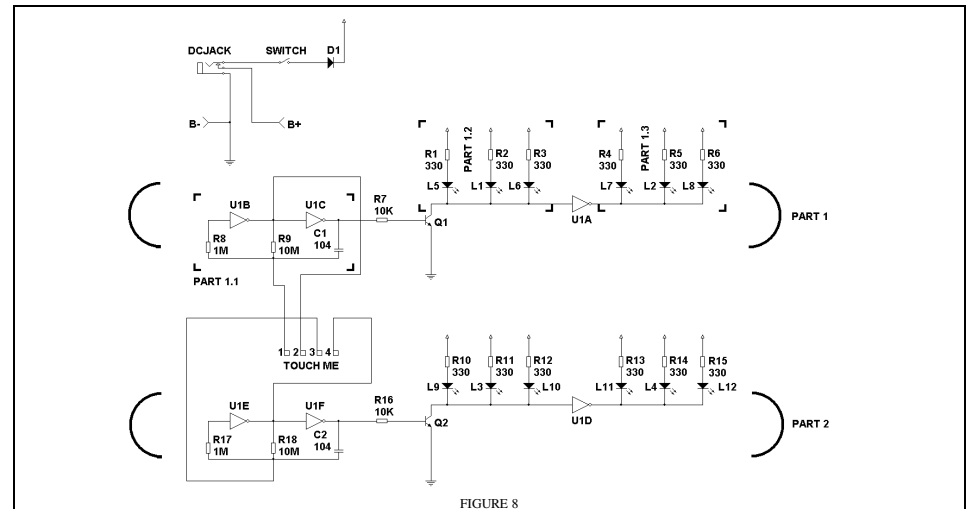
Just install the component to the PCB M00260034 according to below table.

ITEM	SYMBOL ON PCB	DESCRIPTION	OUTLOOK	DIRECTION IS IMPORTANT?
1	R1	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
2	R2	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
3	R3	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
4	R4	RESISTOR, 330ohms	ORANGE, ORANGE BROWN </td <td>NO</td>	NO
5	R5	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
6	R6	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
7	R7	RESISTOR, 10K ohms	BROWN, BLACK, ORANGE	NO
8	R8	RESISTOR, 1M ohms	BROWN, BLACK, GREEN	NO

9	R9	RESISTOR, 10M ohms	BROWN, BLACK, BLUE	NO
10	R10	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
11	R11	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
12	R12	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
13	R13	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
14	R14	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
15	R15	RESISTOR, 330ohms	ORANGE, ORANGE BROWN	NO
16	R16	RESISTOR, 10K ohms	BROWN, BLACK, ORANGE	NO
17	R17	RESISTOR, 1M ohms	BROWN, BLACK, GREEN	NO
18	R18	RESISTOR, 10M ohms	BROWN, BLACK, BLUE	NO
19	D1	DIODE, IN4001	FIGURE 2	FIGURE 2
20	C1	CAPACITOR, 100nF	MARK WITH 104 OR SAME MEANING OF VALUE	NO
21	C2	CAPACITOR, 100nF	MARK WITH 104 OR SAME MEANING OF VALUE	NO
22	U1	DIP 14 SOCKET	14 LEGS	NO
23	L1	LED	ONE LONG LEG AND ONE SHORT LEG	YES
24	L2	LED	ONE LONG LEG AND ONE SHORT LEG	YES
25	L3	LED	ONE LONG LEG AND ONE SHORT LEG	YES
26	L4	LED	ONE LONG LEG AND ONE SHORT LEG	YES
27	L5	LED	ONE LONG LEG AND ONE SHORT LEG	YES
28	L6	LED	ONE LONG LEG AND ONE SHORT LEG	YES
29	L7	LED	ONE LONG LEG AND ONE SHORT LEG	YES
30	L8	LED	ONE LONG LEG AND ONE SHORT LEG	YES
31	L9	LED	ONE LONG LEG AND ONE SHORT LEG	YES
32	L10	LED	ONE LONG LEG AND ONE SHORT LEG	YES
33	L11	LED	ONE LONG LEG AND ONE SHORT LEG	YES
34	L12	LED	ONE LONG LEG AND ONE SHORT LEG	YES
35	Q1	TRANSISTOR, NPN	FIGURE 5	YES
36	Q2	TRANSISTOR, NPN	FIGURE 5	YES
37	SWITCH	SLIDE SWITCH	6 LEGS	NO
38	DCJACK	3.5mm MONO JACK SOCKET	FIGURE 6	YES
39	B+, B-	9V BATTERY ADAPTOR	RED WIRE, BLACK WIRE	YES
40	ON THE TOP OF ITEM 22	IC, 4069	14 LEGS	YES

- After installation, you can use external DC adaptor as power sources. You can use our product M00270013 or other similar adaptor.

CIRCUIT DIAGRAM:



- After installation, you can use external DC adaptor as power sources. You can use our product M00270013 or other similar adaptor.