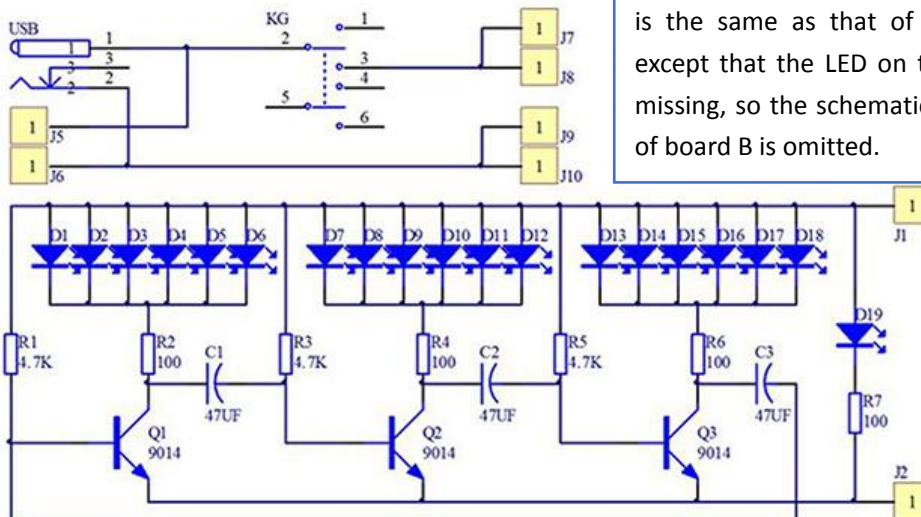


Instruction

Precautions:

1. There are silk screen marks of various components printed on the PCB board. Please weld according to the silk screen marks.
2. Resistors are not divided into directions, but have different resistance values. Please pay attention to the distinction when welding.
3. The long leg with legs is positive (+), and the short leg is negative (-); when soldering, pay attention to the direction of the silk screen on the PCB board;
4. When connecting the power cord to the terminal block, be careful to distinguish the positive and negative poles and do not connect them reversely.
5. The welding sequence is from low to high, from small to large, and from inside to outside.
6. Soldering iron soldering temperature 320. -380°. Weld for about 3-5 seconds. Do not weld for a long time! To avoid damaging the circuit board ground wire by soldering.
7. The circuit board identification VCC is positive and GND is negative.
8. Pay attention to static electricity and the size of the product's power supply to avoid burning out circuits and components.

Schematic diagram



The schematic diagram of board B is the same as that of board A, except that the LED on the top is missing, so the schematic diagram of board B is omitted.

Product List: (optional)

A board

Component name	Parameter	PCB Marking	Quantity	Component name	Parameter	PCB Marking	Quantity
Resistance	100	R2/R4/R6/R7	4	3mmLED light Optional	red/colorful	D1-D6	7
	4.7K	R1/R3/R5	3		green/colorful	D7-D12	6
Capacitance	47uf	C1/C2/C3	3		yellow/colorful	D12-D18	6
Triode	9014	Q1/Q2/Q3	3	PCB board Optional	Straight/curved leaves	A board	1

B board

Component name	Parameter	PCB Marking	Quantity	Component name	Parameter	PCB Marking	Quantity
Resistance	100	R2/R4/R6	3	3mmLED light Optional	red/colorful	D1-D6	6
	4.7K	R1/R3/R5	3		green/colorful	D7-D12	6
Capacitance	47uf	C1/C2/C3	3		yellow/colorful	D12-D18	6
Triode	9014	Q1/Q2/Q3	3	PCB board Optional	Straight/curved leaves	B board	1

Base plate

Component name	Parameter	PCB Marking	Quantity	Component name	Parameter	PCB Marking	Quantity
Battery Holder	3.5mm	DC5A	1	Toggle switch	5 PIN	P2	1
Monolithic capacitor	105	C1	1	Circuit board	60mm*60mm		1
Electrolytic capacitor	220uf	C10	1	LED light	colorful 5mm	LED1-LED4	4

Optional

Component name	Parameter	PCB Marking	Quantity	Component name	Parameter	PCB Marking	Quantity
Bluetooth Optional		Optional	1	Speaker Optional	4Ω 3W	With screws	1

6P female base		J3	1	Speaker Cable Optional	10cm		1
				Shell Optional	Acrylic	Optional (with screw bag)	1

Welding steps:

1. Solder the LED on board A

Note that the LED and board silk screen must distinguish between positive and negative poles.
The long leg is positive and the short leg is negative.



Red/color LED (red circle in the picture on the right)
Silk screen position on the board:
D1-D6 (6 in total)



Green/color LED (green circle in the picture on the right)
Silk screen position on the board:
D7-D12 (6 in total)

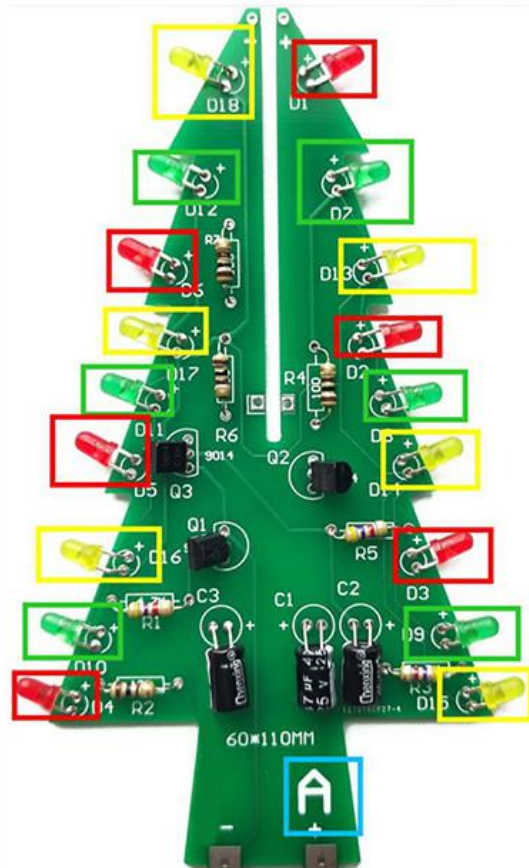


Yellow/color LED (yellow circle on the right)
Silk screen position on the board:
D13-D18 (6 in total)



Note that the silk screen position (+) is positive

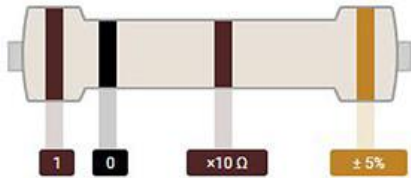
Note that the lamp beads need to leave about 1-0.5cm of feet when welding, 90.
Lay it down close to the board and solder (refer to the picture below)



The letters marked in blue distinguish A/B boards;

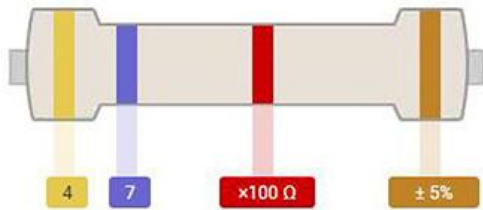
2. Solder the resistor of plate A

Pay attention to the corresponding welding of the component values and the silk screen values of the board



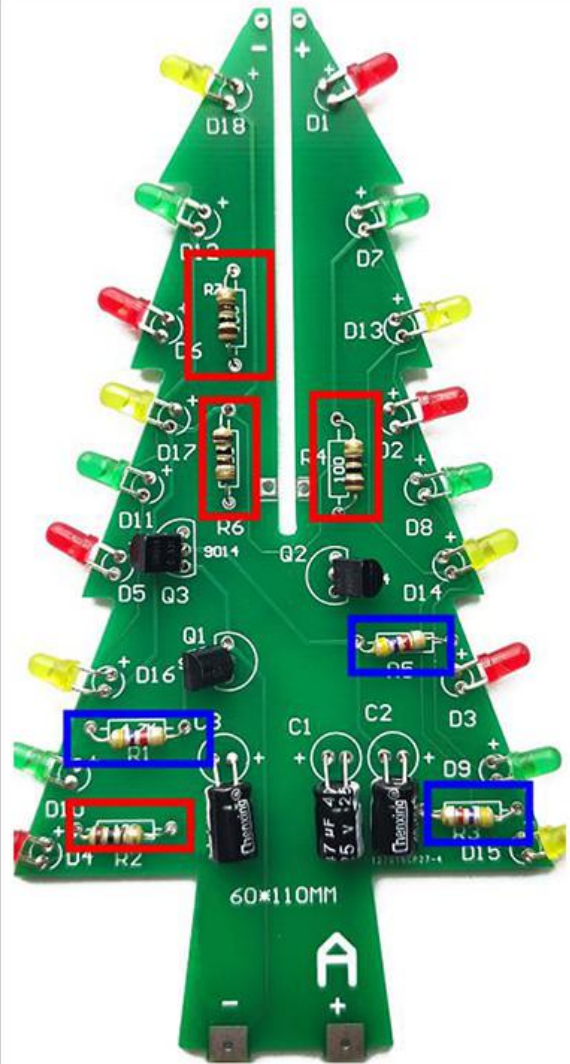
100 resistor (brown black brown gold)
(marked in red on the right)

Silk screen position on the board:
R2/R4/R6/R7 (4 in total)



4.7K resistor (yellow purple red gold)
(marked in blue on the right picture)

Silk screen position on the board:
R1/R3/R5 (3 in total)



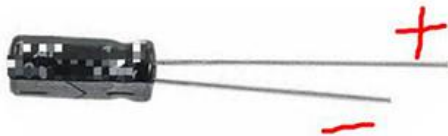
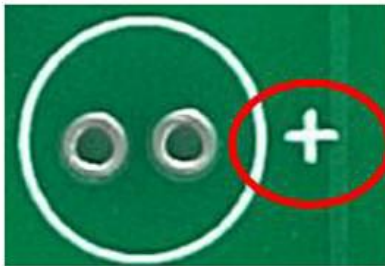
3. Solder A-board transistor/ electrolytic capacitor

Pay attention to the corresponding
welding of the component values and
the silk screen values of the board.



Transistor 9014
(marked in red on the right)
Silk screen position on the board:
Q1/Q2/Q3 (3 in total)

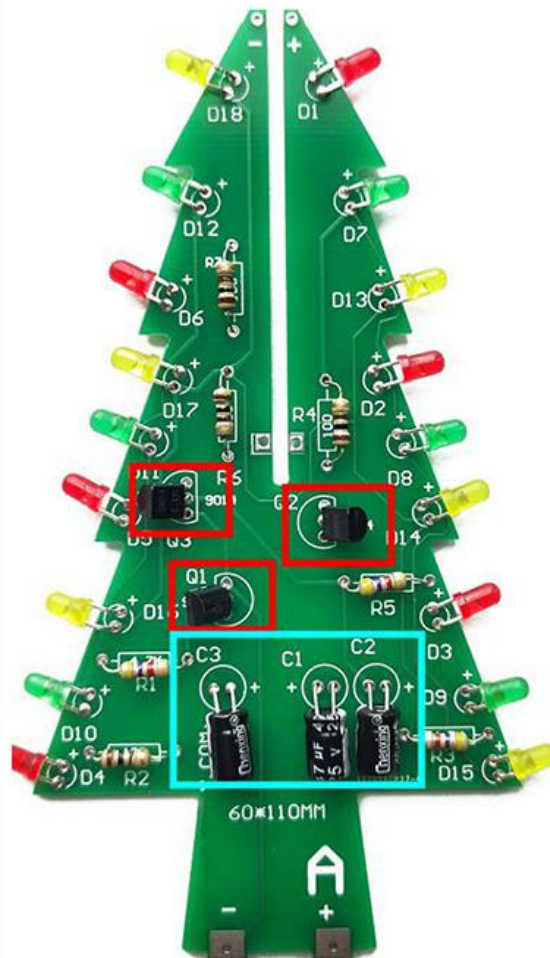
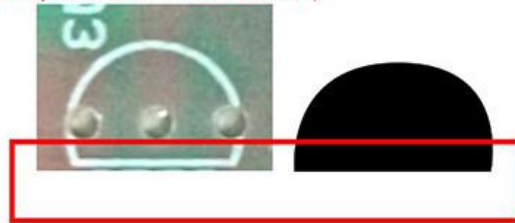
Note that electrolytic capacitors are
divided into positive and negative,
long positive and short negative.
Please refer to the picture below
(+ direction is positive)



47UF electrolytic capacitor
(marked in blue on the right)
Silk screen position on the board:
C1/C2/C3 (3 in total)

The electrolytic capacitor must reserve
1CM feet and lay it down at 90° close to
the board after soldering.

Pay attention to the direction of the welding
position of the transistor and the silk screen
of the board (refer to the picture below that
the plane is in one direction)



The electrolytic capacitor must reserve
1CM feet and lay it down at 90° close to
the board after soldering.

4. Solder B board

Note: The welding steps are the same with board A, but pay attention: Be sure to refer to the following tips.

First Step LED Welding Tips

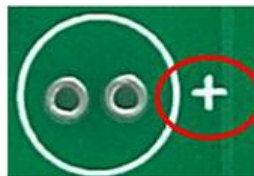
Note that the lamp beads need to leave about 1-0.5cm of feet when welding, and tilt them at 90° close to the board for welding (refer to the picture below)



In the second step, the resistance value corresponds to the silk screen value.

Step 3 Electrolytic Capacitor Welding Tips

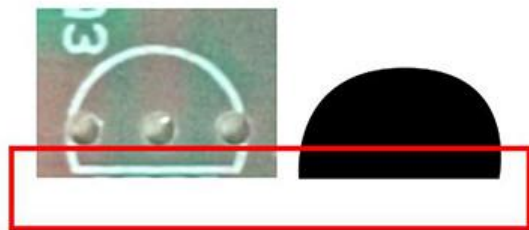
Note that electrolytic capacitors are divided into positive and negative poles, long positive and short negative. Refer to the picture below for the positive and negative poles printed on the board. (+ direction is positive and vice versa)



There is no need to tip the electrolytic capacitor on board B, weld it normally (The installation will get stuck if the AB board is tilted down)

Step 3 Transistor Welding Tips

Pay attention to the direction of the welding position of the transistor and the silk screen of the board (refer to the picture below that the plane is in one direction)



5. Solder the base plate socket/switch

Pay attention to the corresponding welding of the component values and the silk screen values of the board.

Power socket

(marked in red on the right)

Silk screen position on the board: DV5V

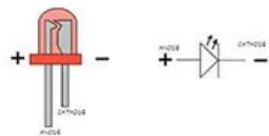
Switch (marked blue on the right)

Silk screen position on the board: P2

LED light (marked yellow on the right)

Silk screen position on the board:

LED1-LED4



105 monolithic capacitor

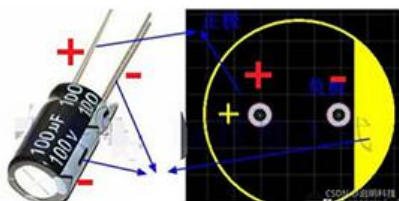
(marked in pink on the right)

Silk screen position on the board: C1

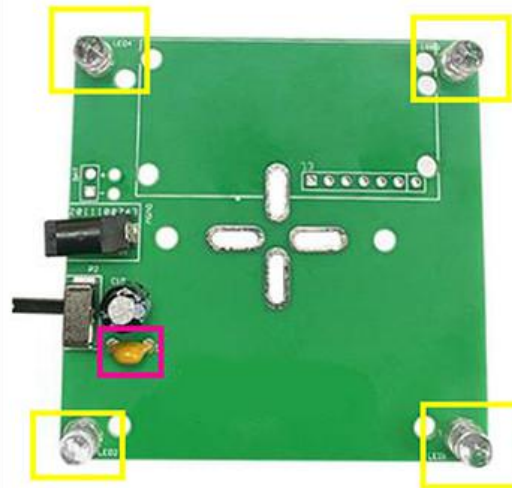
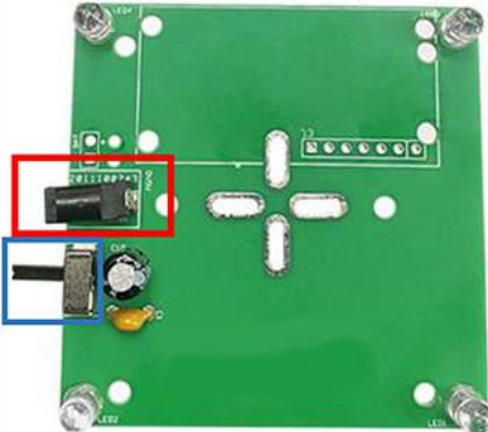
Electrolytic capacitor 220uF

(marked in black on the right)

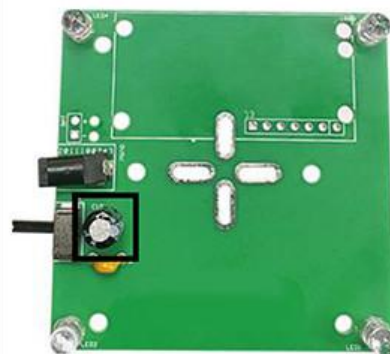
Silk screen position on the board: C10



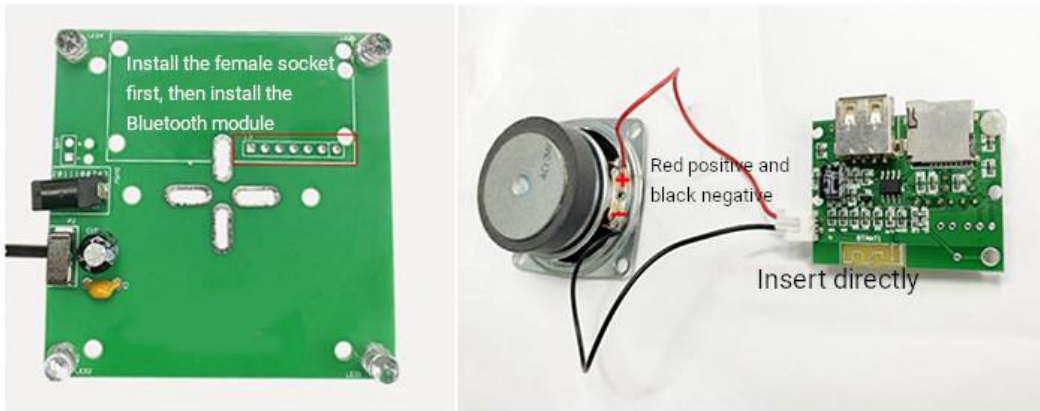
The picture below shows the Bluetooth module version (Bluetooth module optional)



The long leg of an electrolytic capacitor is positive and the short leg is negative.

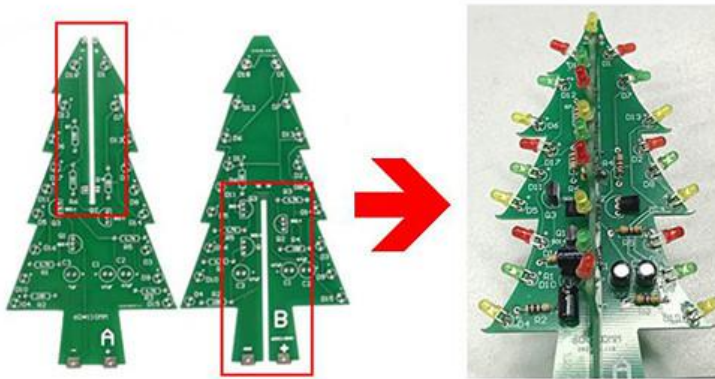


Baseboard Bluetooth module speaker installation (MP3 module installation method is the same)

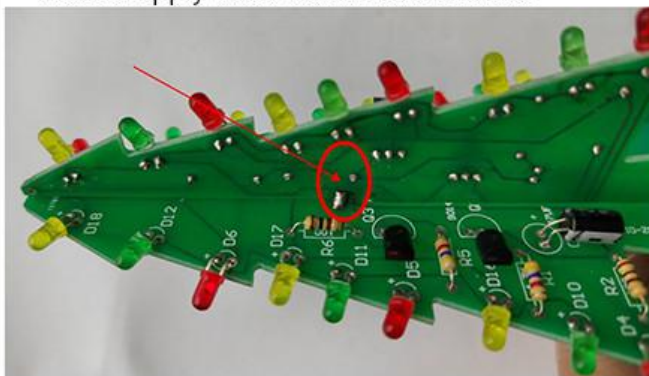


6. Install the A/B boards

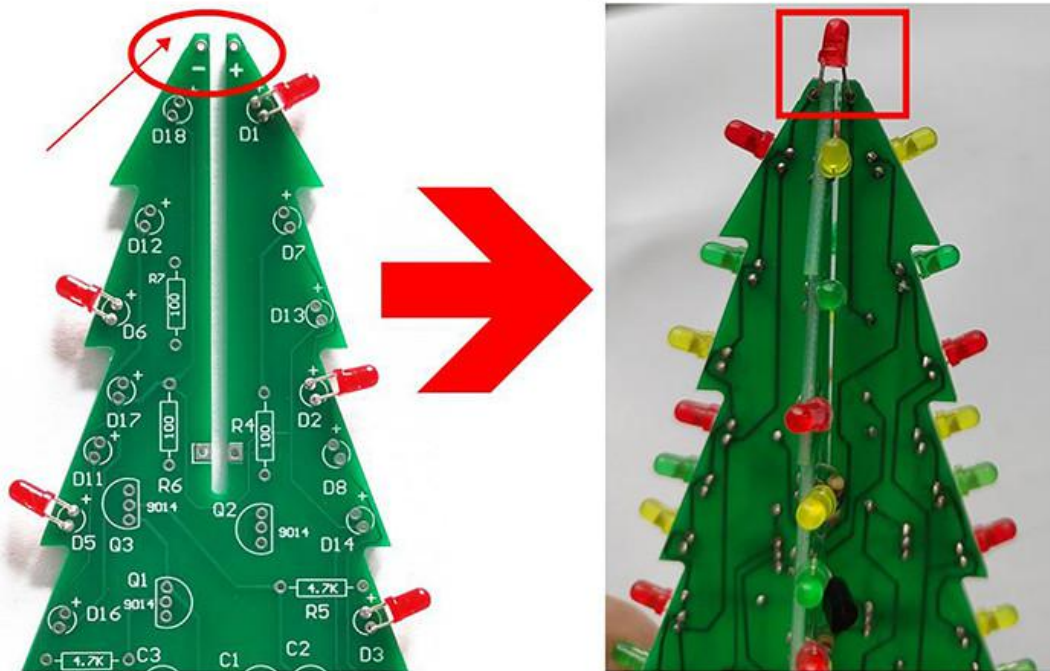
Step 1: Snap the red position on board B into the red position on board A



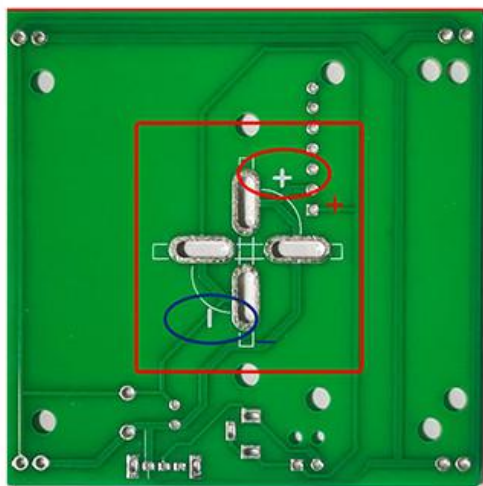
Step 2: There are solder pads where the A/B board is inserted. Please apply tin to fix the two boards.

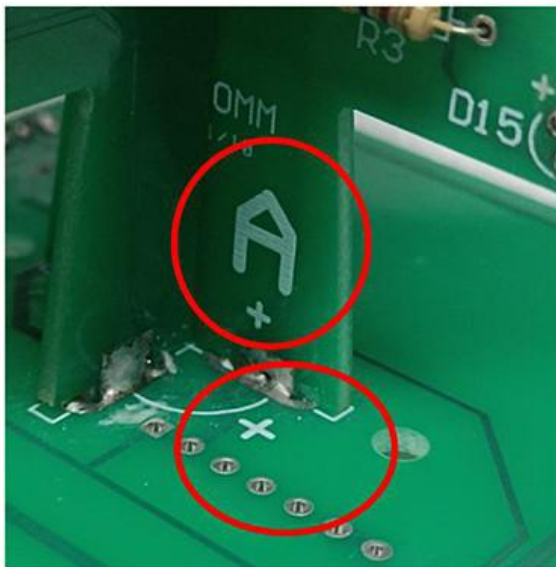
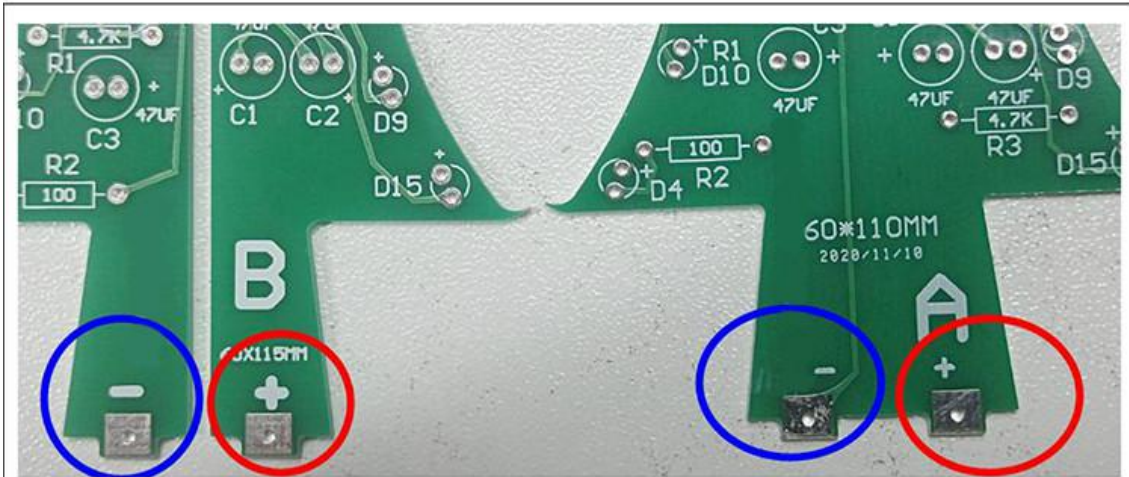


Step 3: After A/B are stuck together, take out the remaining lamp beads and select the color you like and solder them to the red position on the top of board A (pay attention to the positive and negative poles)

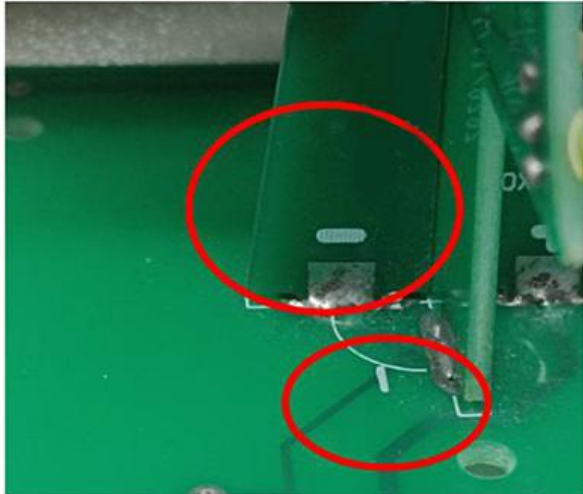


Step 4: After A/B are stuck together, solder them to the base board (Pay attention to the positive and negative poles)
Refer to the picture below and pay attention to distinguish the positive and negative electrodes of the welding positions of the bottom plate and the A/B board, and weld positive to positive and negative to negative.





The positive electrode of plate A is installed on the positive electrode of the bottom plate and fixed by welding (refer to the picture on the left)



The negative electrode of plate B is installed on the negative electrode of the bottom plate and fixed by welding (refer to the picture on the left)

Solder completed

