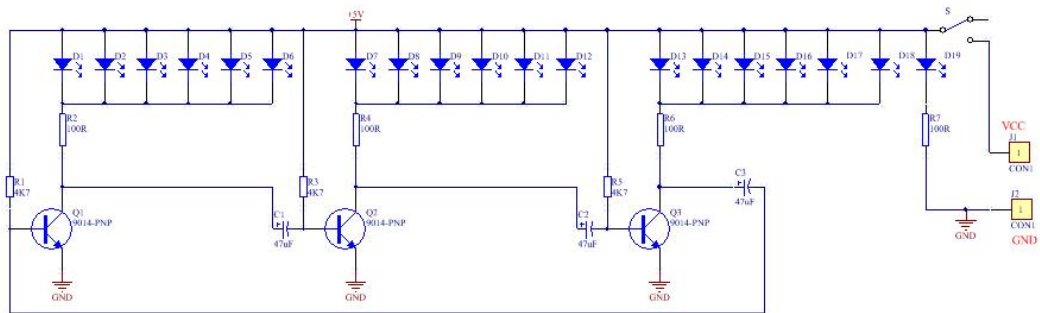


## Instruction

**Special Note: When soldering LED, iron can not soldering LED' two pins at the same time, otherwise it is easy to burn led.**

Christmas tree kit consists of three circuit boards, you need to soldering it by yourself, so 36 LEDs flash alternately, showing a three-dimensional outline of a Christmas tree in the space (viewing environment better at night).

Circuit principle:



Element list:

Christmas tree A board:

Name	Type	Num.	Qua.	Name	Type	Num.	Qua.
Resistance	100R	R2/R4/R6/R7	4	LED	Red	D1-D6	7
Resistance	4.7K	R1/R3/R5	3	LED	Green	D7-D12	6
Capacitance	47uf	C1/C2/C3	3	LED	Blue	D12-D18	6

Christmas tree B board:

Name	Type	Num.	Qua.	Name	Type	Num.	Qua.
Resistance	100R	R2/R4/R6	3	LED	Red	D1-D6	6
Resistance	4.7K	R1/R3/R5	3	LED	Green	D7-D12	6
Capacitance	47uf	C1/C2/C3	3	LED	Blue	D12-D18	6
Transistor	9014	Q1/Q2/Q3	3	PCB	1	B board	1

Christmas backplane:

Name	Type	Num.	Qua.	Name	Type	Num.	Qua.
Switch	Self-locking	S	1	Screw nut	3mm	4	4
Power Block	USB Block	P1	1	Power cable	USB to DC	1	1
Pillars	1	4	4				

## 1. Christmas tree A, B board soldering (two boards soldering method is the same, compared to the A board , B board does have R7)

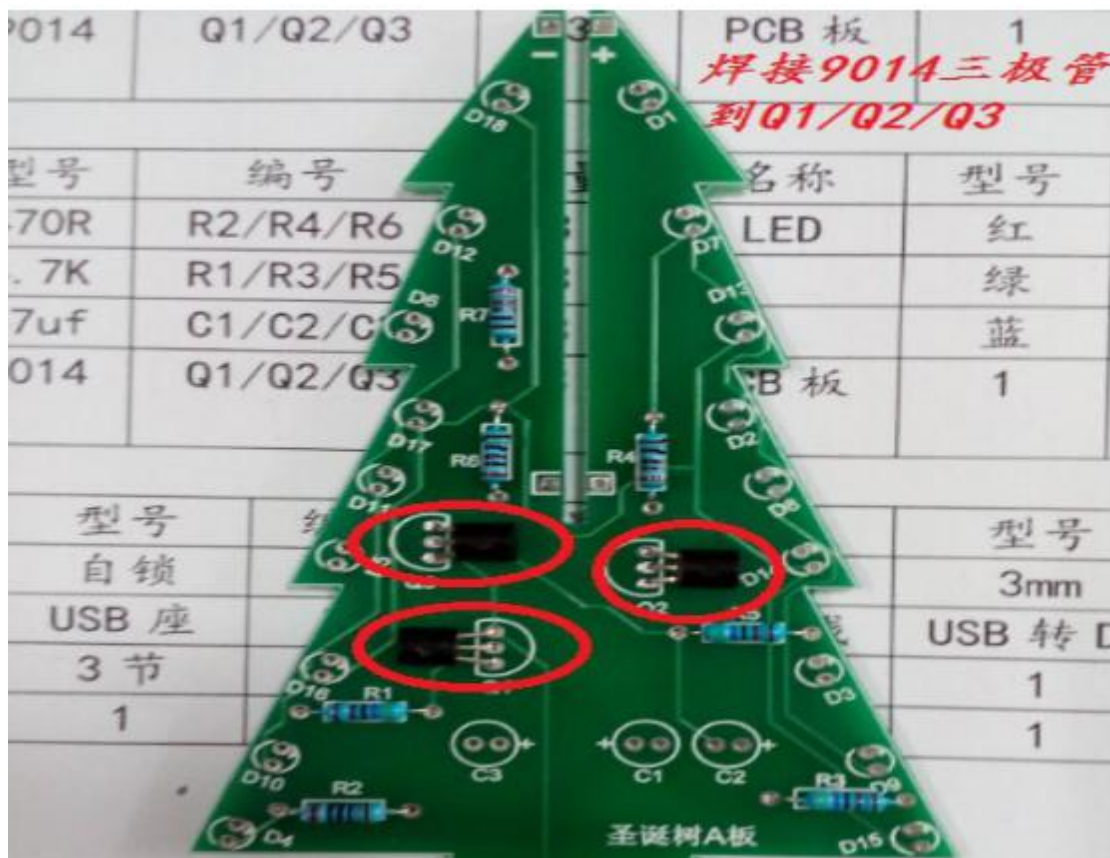
1) Soldering resistance 100R (no direction, as marked on the board)



2) Soldering 4.7K resistor (no direction, as marked on the board)

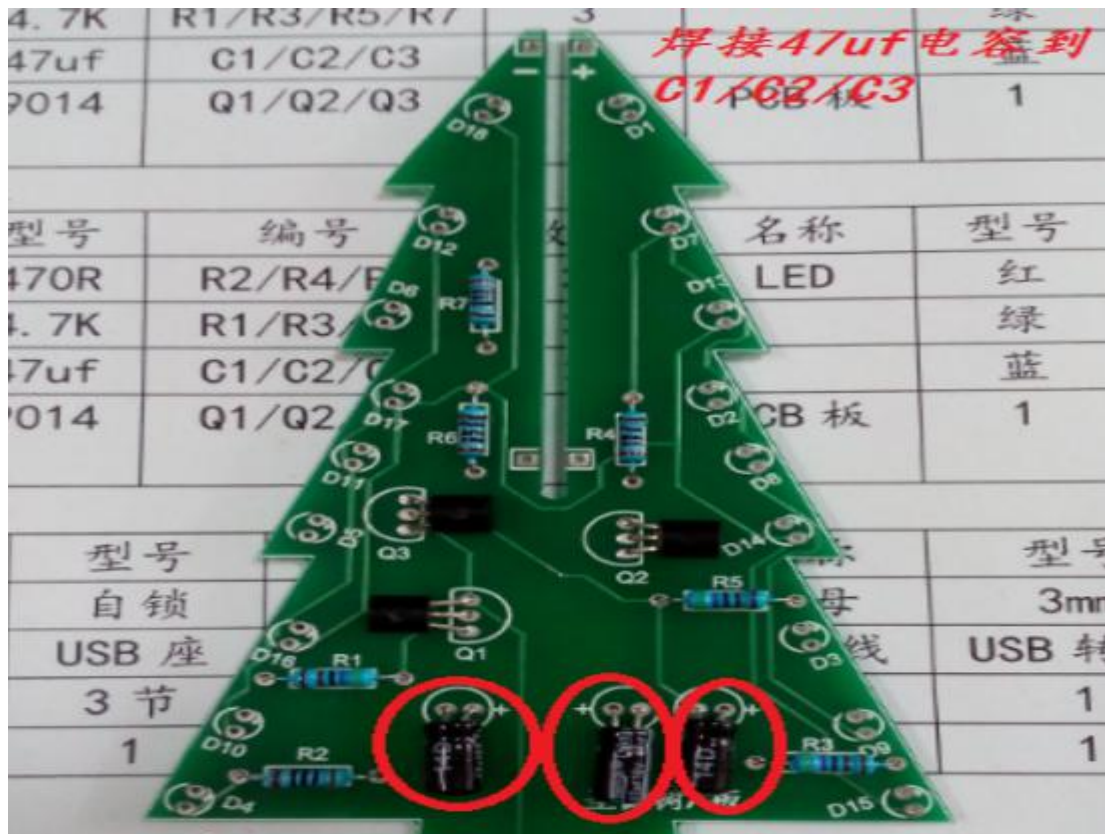


3) Soldering 9014 (there is a direction, as the picture show, please note)



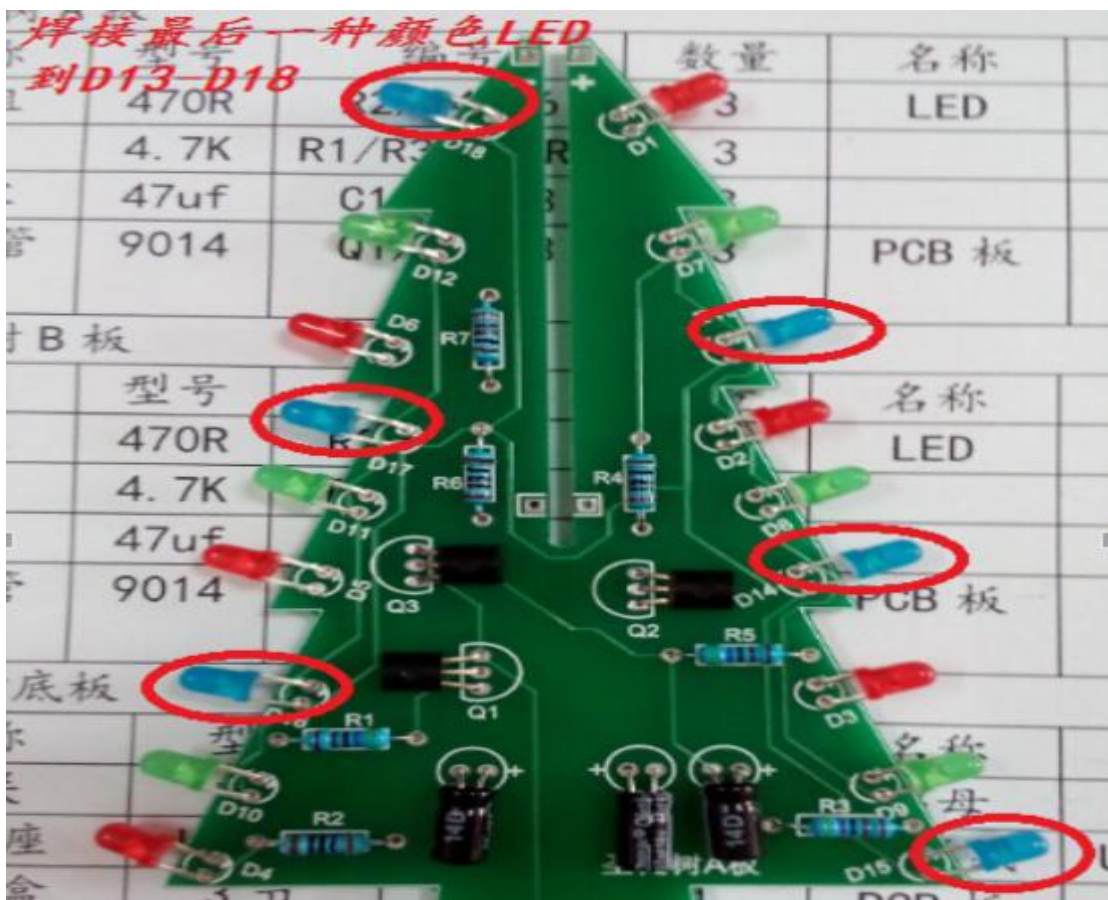
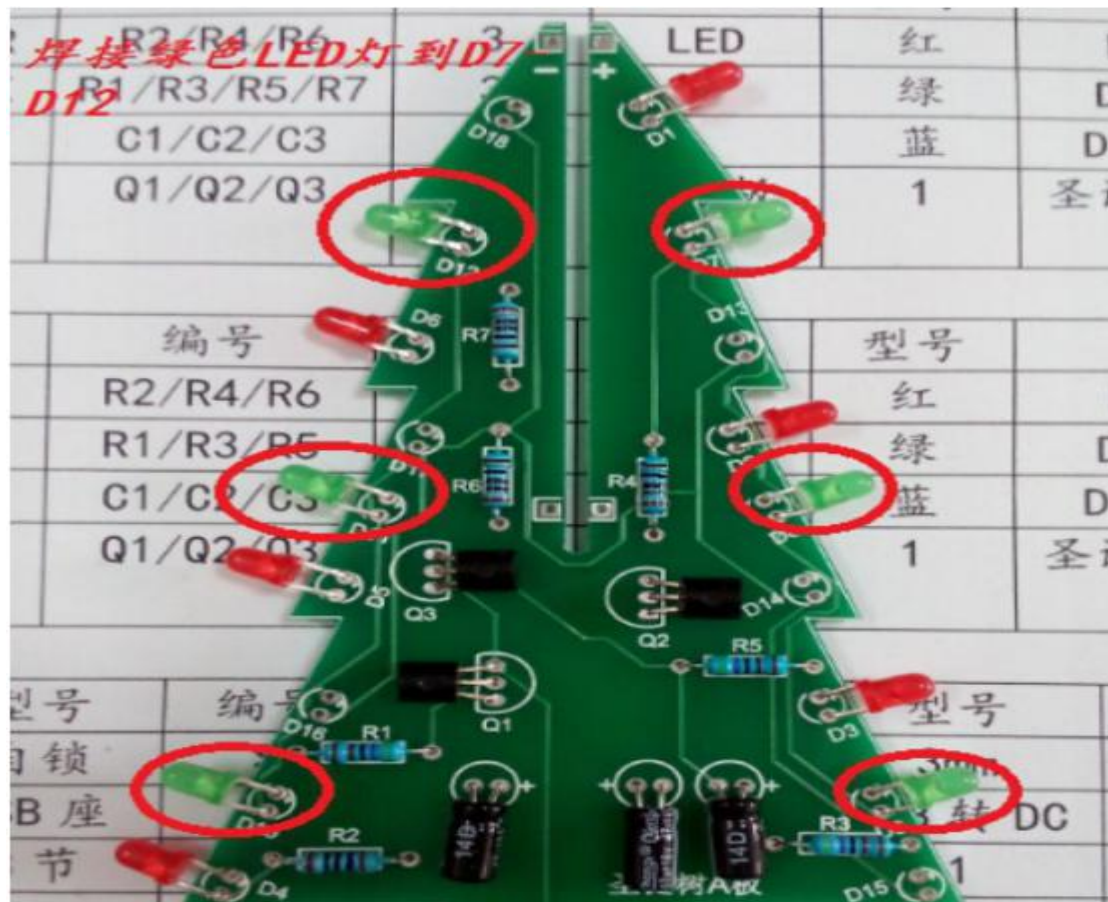
4) Soldering 47uf electrolytic capacitors (directional, long foot is positive)





5) Soldering LEDs (Colorful version LED's position are the same, have direction, long foot is positive, when soldering iron can not soldering two LED pins at the same time)





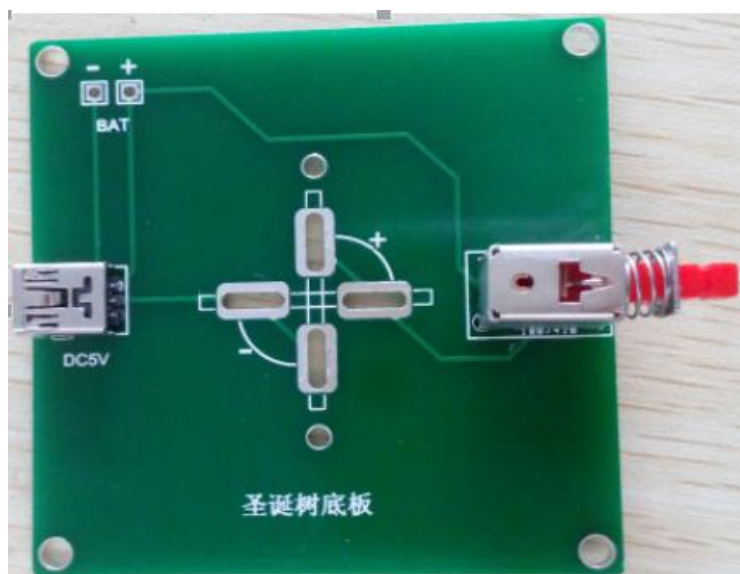


## 6) Soldering top led (Note: Need A and B plate combined and then soldered)



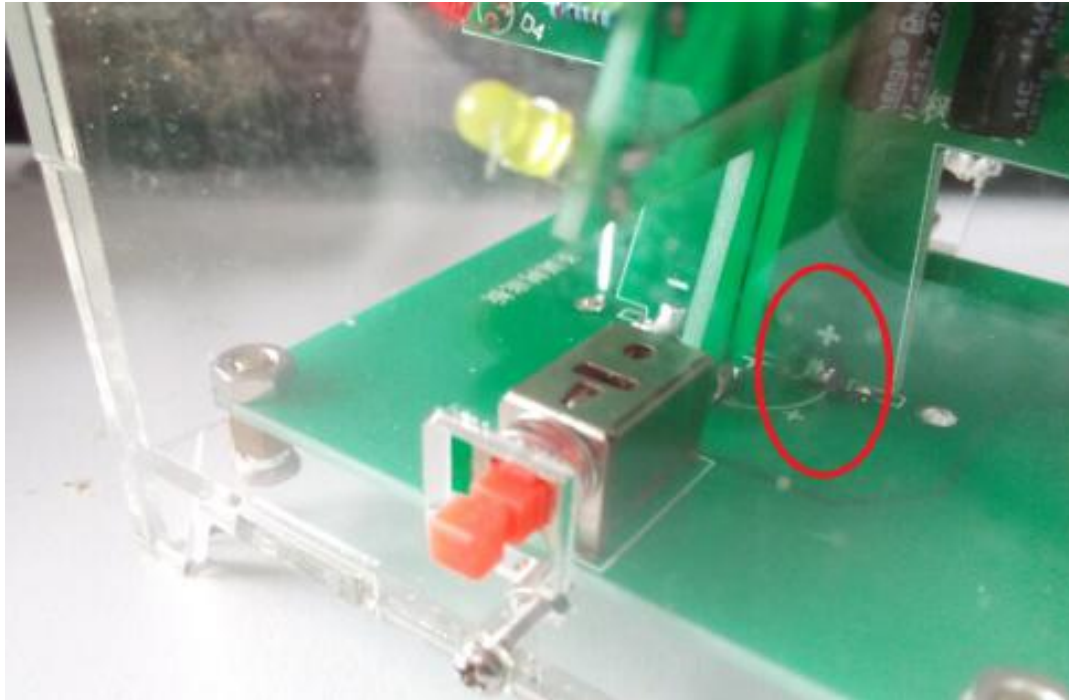
## 2. Christmas base plate soldering

Soldering power plug on P1 , S soldered self-locking switch.

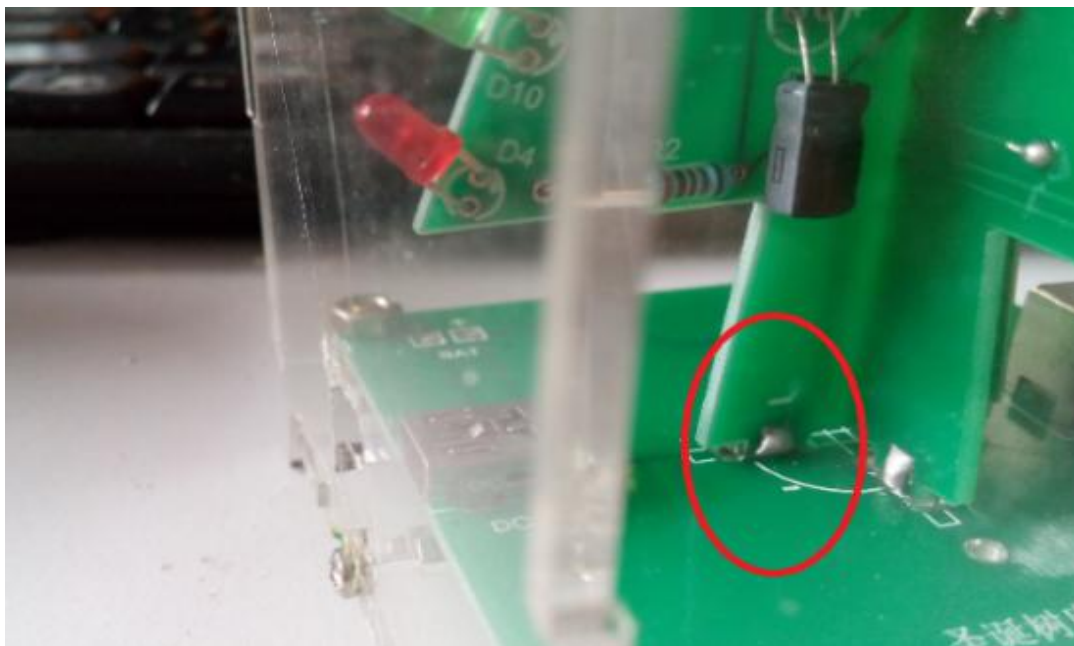


### 3. A, B board and backplane connection diagram:

After the A and B plate combined, the "+" corresponding to the "+" sign  
(watching from self-locking switch):



"-" sign corresponding to the "-" sign (while watching from the power  
connector)



### 4. The assembly of the housing

[http://www.banggood.com/search/christmas-tree/2153-0-0-1-1-44-0-price-0-0\\_p-1.html](http://www.banggood.com/search/christmas-tree/2153-0-0-1-1-44-0-price-0-0_p-1.html)

## 1) a method of assembling the housing

Fixing the housing: Put into the screw nut, and then tighten the screws

