

Tools you need.

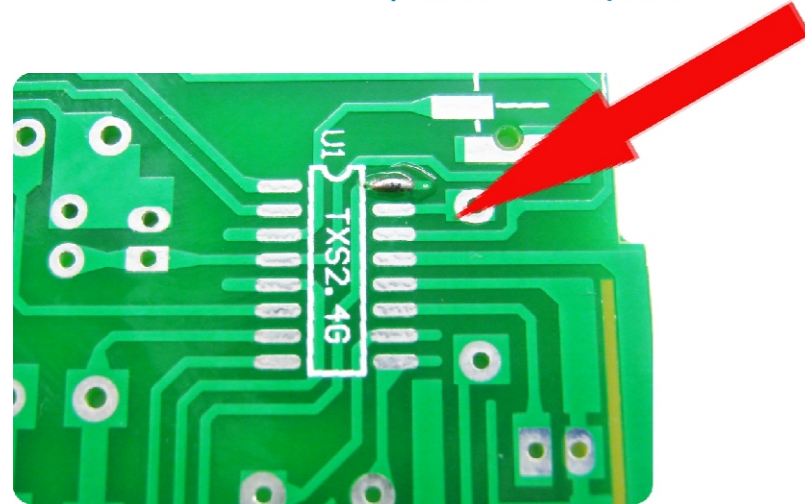
- ①Iron (30W)
- ②Solder wire
- ③Multimeter
- ④Tweezers
- ⑤Wire cutters

Precautions:

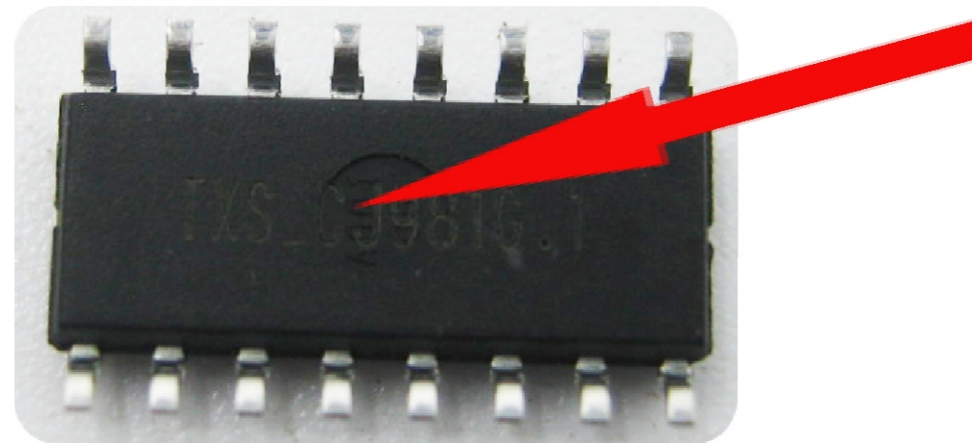
- ①Check part values & quantities against part list
- ②Always meter resistor values before soldering
- ③Understand all part polarities and orientations

Installation of transmitter circuit TX-2.4G 1. Install the U1 transmitter TX-2.4G.

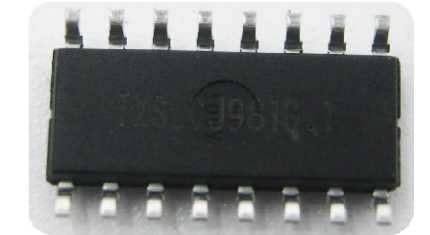
①TX-2.4G Solder a pin to a U1 pad



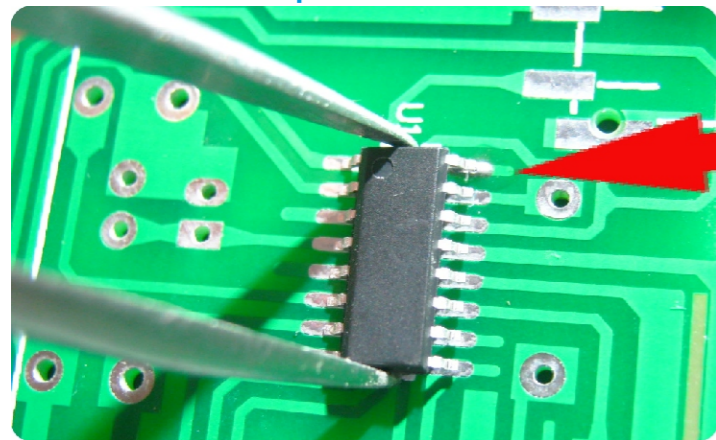
②Confirm the character on the back of the chip "TXS-**** *"



Confirm whether the back model of the transmitter chip U1 is TXS-*****:

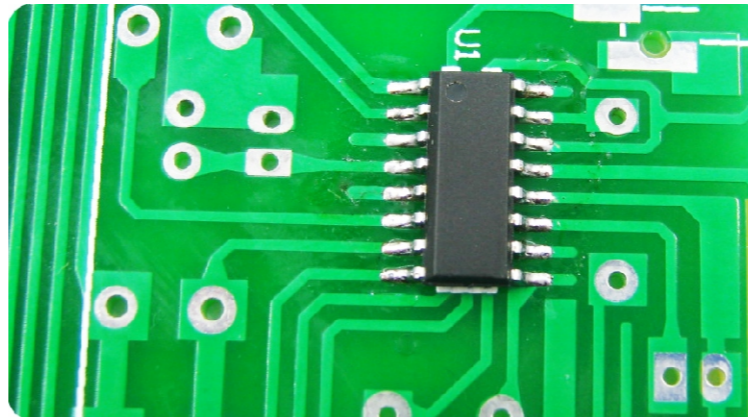


③Put the chip on the circuit board with tweezers

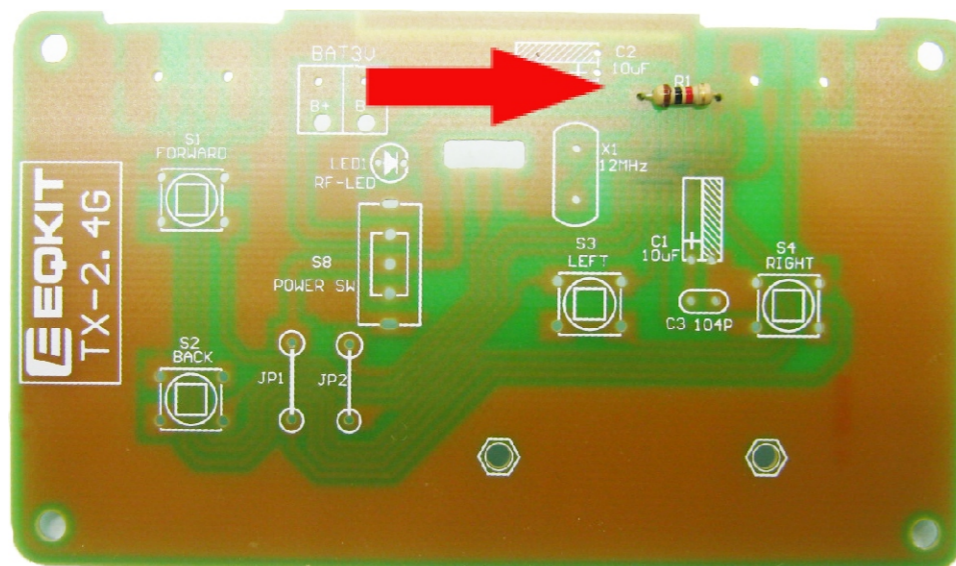


Pay attention to the direction of the chip installation

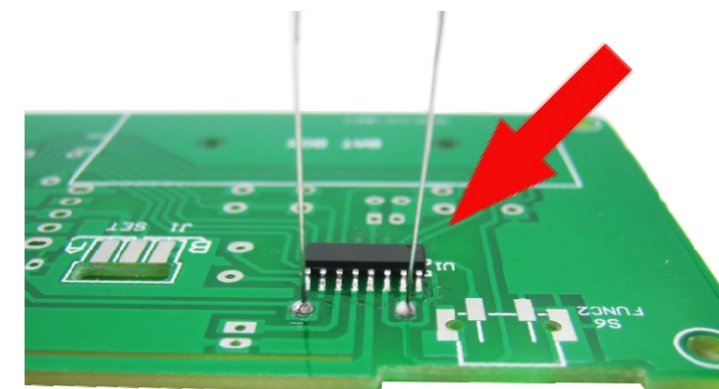
④And then weld all the pins of the chip.



2. Install RES.
R1=1KΩ.



Pruning RES pin
Save the excess pins,
As a jumper for JP1 and Jp2



TX-2.4G The transmitter component list

NO.	Name	Parameter	QTY
R1	RES	1K	1
C3	RES	104pF	1
C1, C2	CAP	10uF	2
LED1	LED	3mmRed	1
S1~S4	Key	6*6*9	4
S5, S6	Key	6*6*8	2
S8	Switch	12*06*08	1
X1	oscillator	12MHz	1
J1	Pin header	L type 3P	1
U1	I.C	TXS2.4G	1
J1	Jumper Cap	2P2.54mm	1
LED1	LED spacer	3mm	1
-	PCB	TX-2.4G	1
BAT BOX	Battery box	3VAAA	1
-	Plastic shell	Black	1
S1~S6	Keycap	White circle	6
-	Screw	PA2.6*5	4
BAT BOX	Screw	M2*5	2
BAT BOX	screw cap	M2	2

RX-2.4G The receiver component list

NO.	Name	Parameter	QTY
C2, C3	CAP	102pF	2
C4	CAP	1uF	1
C1	CAP	100uF	1
U2, U3, U4	IC	L9110	3
U5	IC	7133	1
U1	IC	RXS2.4G	1
X1	oscillator	12MHz	1
S1	Switch	SS12D07	1
CN1~CN4	Socket	2P2.54mm	4
CN1~CN4	Connects Cables	15cm	4
-	PCB	RX-2.4G	1

Tools you need.

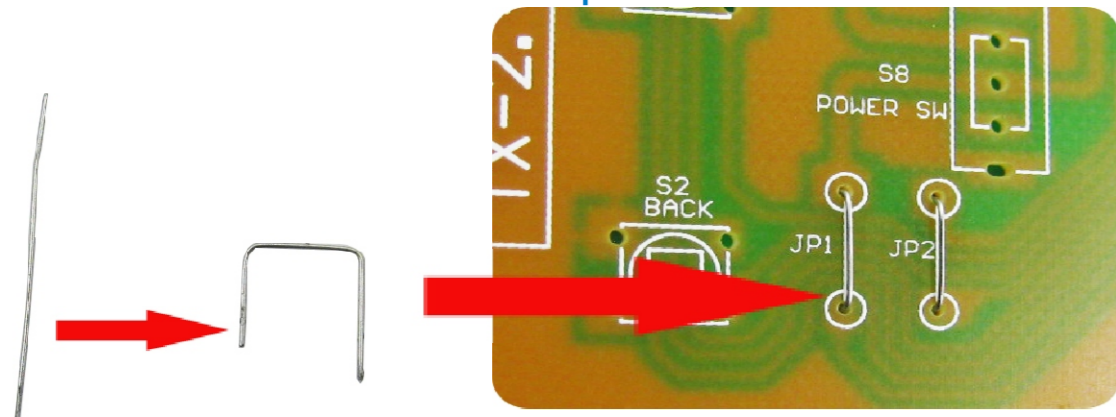
- ①Iron (30W)
- ②Solder wire
- ③Multimeter
- ④Tweezers
- ⑤Wire cutters

Precautions:

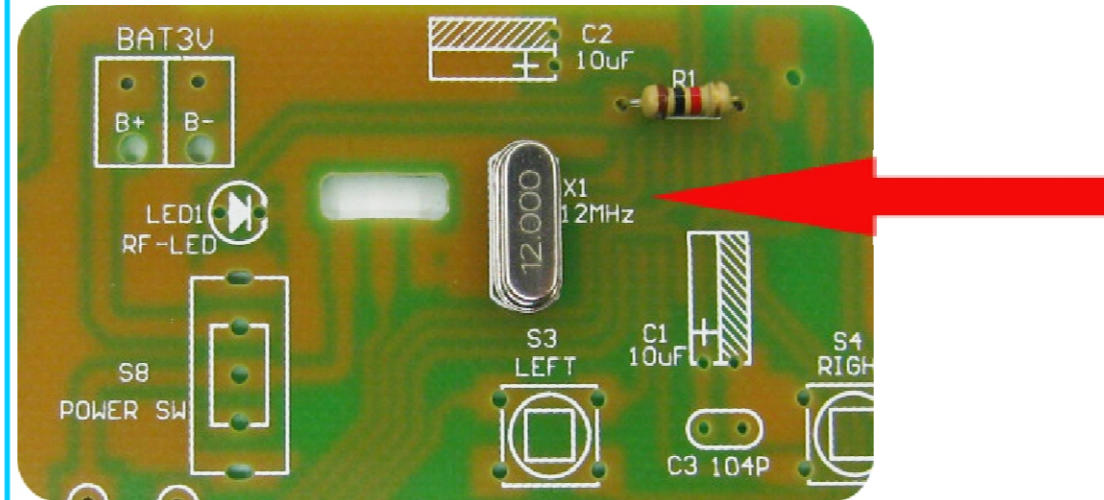
- ①Check part values & quantities against part list
- ②Always meter resistor values before soldering
- ③Understand all part polarities and orientations

3. Install Jumper

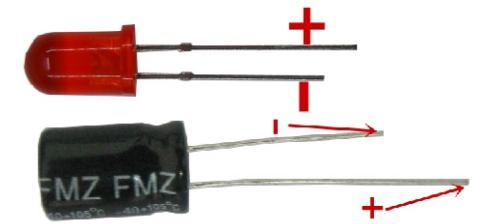
Bending with excess pins into "n"
Then install into JP1 and Jp2



4. Install Quartz oscillator to X1.

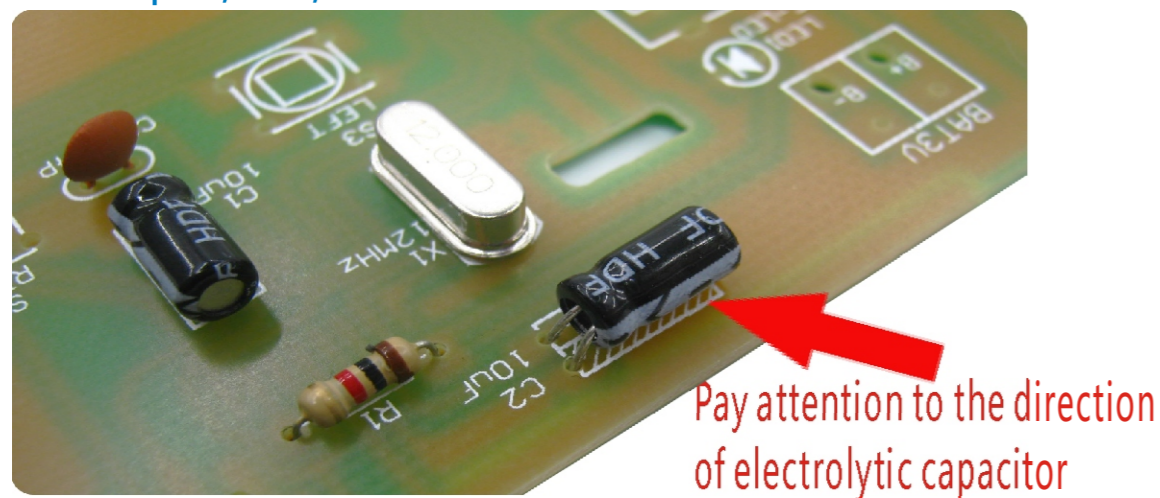


LED, the long foot of the electrolytic capacitor is the positive pole,



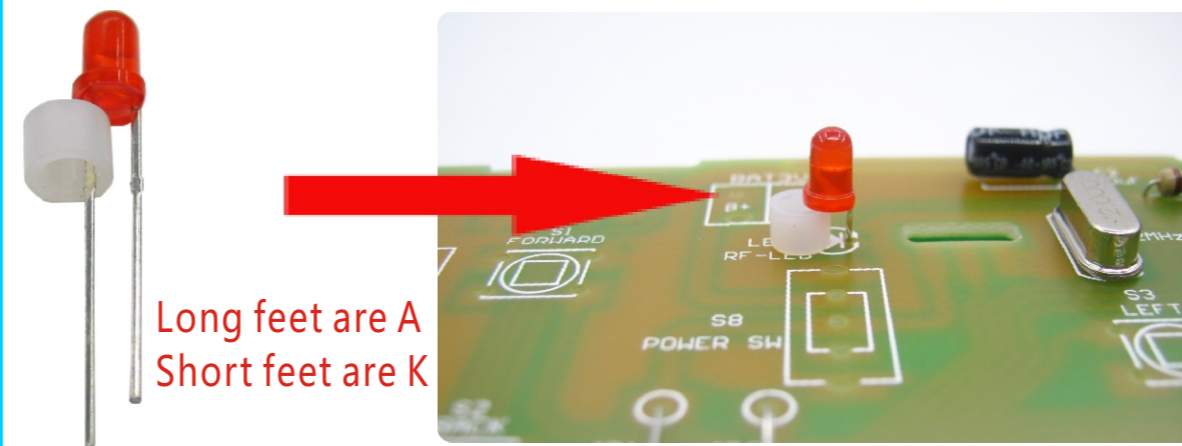
5. Install CAP.

C3= 104pF , C1,C2=10uF!



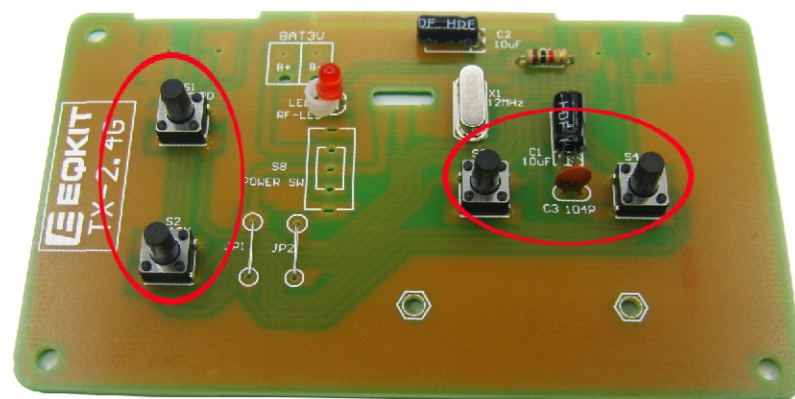
6. Install TX-LED:

Load the 3mm's spacer into LED. And then weld to the LED1

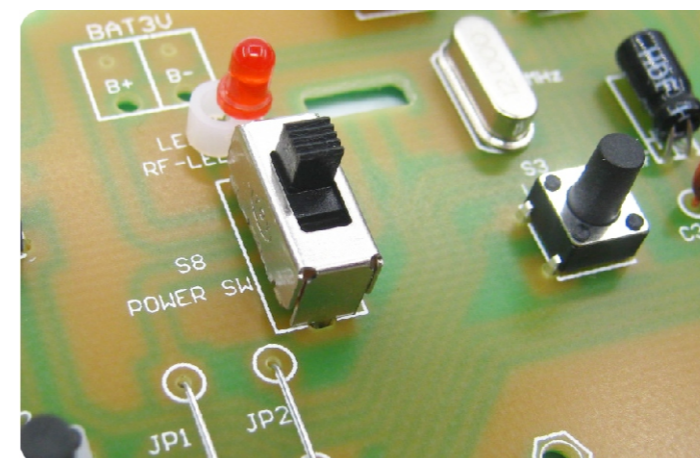


7. Install Key.

Install the key into the S1.S2.S3.S4.



8. Install Power SW to S8



TX-2.4G The transmitter component list

NO.	Name	Parameter	QTY
R1	RES	1K	1
C3	RES	104pF	1
C1.C2	CAP	10uF	2
LED1	LED	3mmRed	1
S1~S4	Key	6*6*9	4
S5.S6	Key	6*6*8	2
S8	Switch	12*06*08	1
X1	oscillator	12MHz	1
J1	Pin header	L type 3P	1
U1	I. C	TXS2. 4G	1
J1	Jumper Cap	2P2. 54mm	1
LED1	LED spacer	3mm	1
-	PCB	TX-2.4G	1
BAT BOX	Battery box	3VAAA	1
-	Plastic shell	Black	1
S1~S6	Keycap	White circle	6
-	Screw	PA2. 6*5	4
BAT BOX	Screw	M2*5	2
BAT BOX	screw cap	M2	2

RX-2.4G The receiver component list

NO.	Name	Parameter	QTY
C2.C3	CAP	102pF	2
C4	CAP	1uF	1
C1	CAP	100uF	1
U2.U3.U4	IC	L9110	3
U5	IC	7133	1
U1	IC	RXS2. 4G	1
X1	oscillator	12MHz	1
S1	Switch	SS12D07	1
CN1~CN4	Socket	2P2. 54mm	4
CN1~CN4	Connects Cables	15cm	4
-	PCB	RX-2.4G	1

Tools you need.

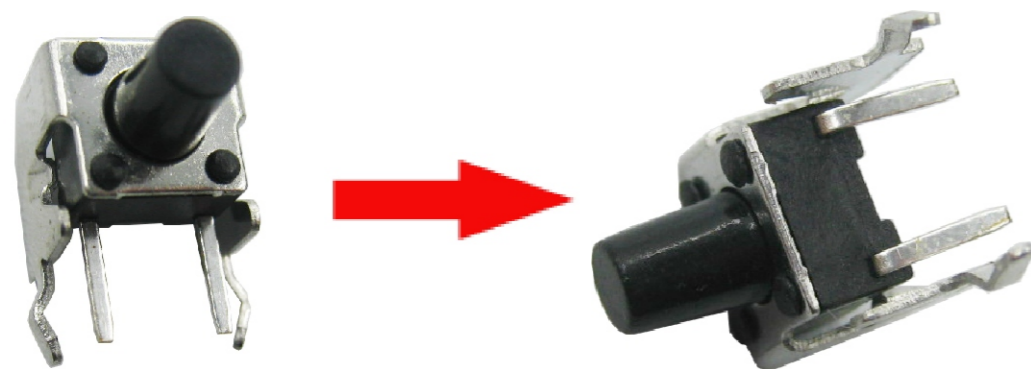
- ①Iron (30W)
- ②Solder wire
- ③Multimeter
- ④Tweezers
- ⑤Wire cutters

Precautions:

- ①Check part values & quantities against part list
- ②Always meter resistor values before soldering
- ③Understand all part polarities and orientations

9. Install the button on the side:

- ① Like the following figure, bend the two pins of the button 90 degrees.

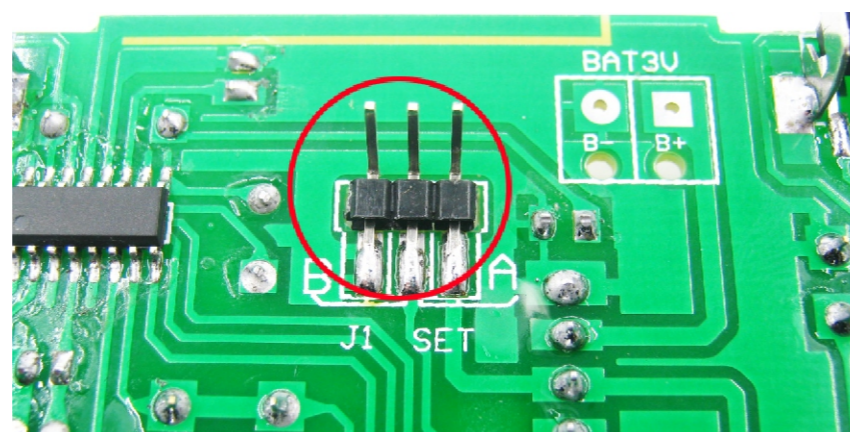


- ② Install the processed button to S5, S6



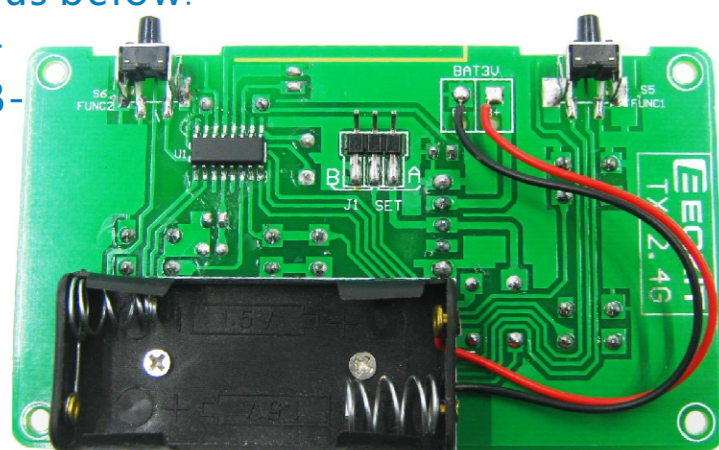
1. Be careful when bending the pins of the keys, do not break the pins.
2. The positive and negative electrode of the battery can not be misplaced

10. Installation frequency selection pin to J1

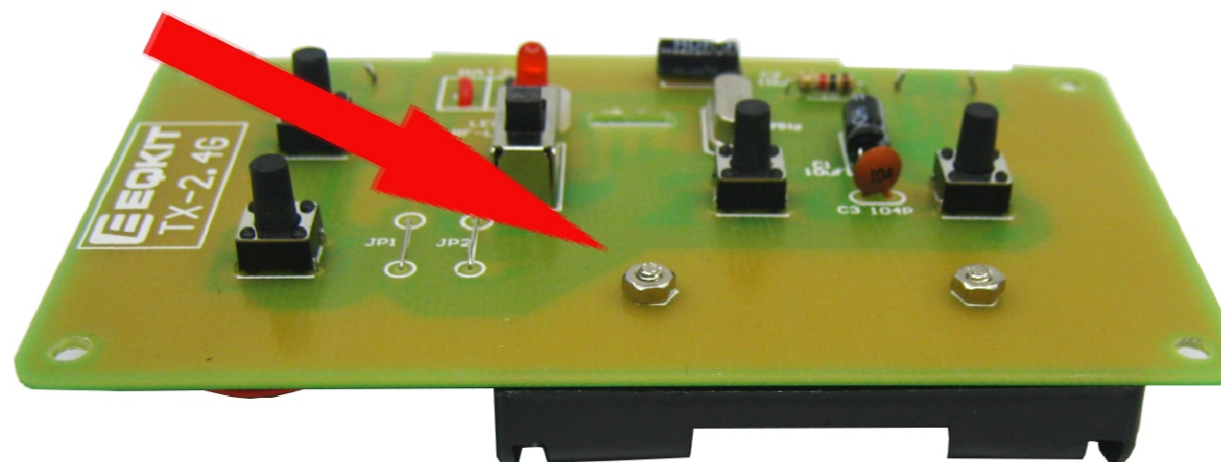


11. Install the battery box on the circuit board as below.

Red line to B+
Black line to B-



The back of the battery box is fixed by the nut.



TX-2.4G The transmitter component list

NO.	Name	Parameter	QTY
R1	RES	1K	1
C3	RES	104pF	1
C1, C2	CAP	10uF	2
LED1	LED	3mmRed	1
S1~S4	Key	6*6*9	4
S5, S6	Key	6*6*8	2
S8	Switch	12*06*08	1
X1	oscillator	12MHz	1
J1	Pin header	L type 3P	1
U1	I. C	TXS2. 4G	1
J1	Jumper Cap	2P2. 54mm	1
LED1	LED spacer	3mm	1
-	PCB	TX-2. 4G	1
BAT BOX	Battery box	3VAAA	1
-	Plastic shell	Black	1
S1~S6	Keycap	White circle	6
-	Screw	PA2. 6*5	4
BAT BOX	Screw	M2*5	2
BAT BOX	screw cap	M2	2

RX-2.4G The receiver component list

NO.	Name	Parameter	QTY
C2, C3	CAP	102pF	2
C4	CAP	1uF	1
C1	CAP	100uF	1
U2, U3, U4	IC	L9110	3
U5	IC	7133	1
U1	IC	RXS2. 4G	1
X1	oscillator	12MHz	1
S1	Switch	SS12D07	1
CN1~CN4	Socket	2P2. 54mm	4
CN1~CN4	Connects Cables	15cm	4
-	PCB	RX-2. 4G	1

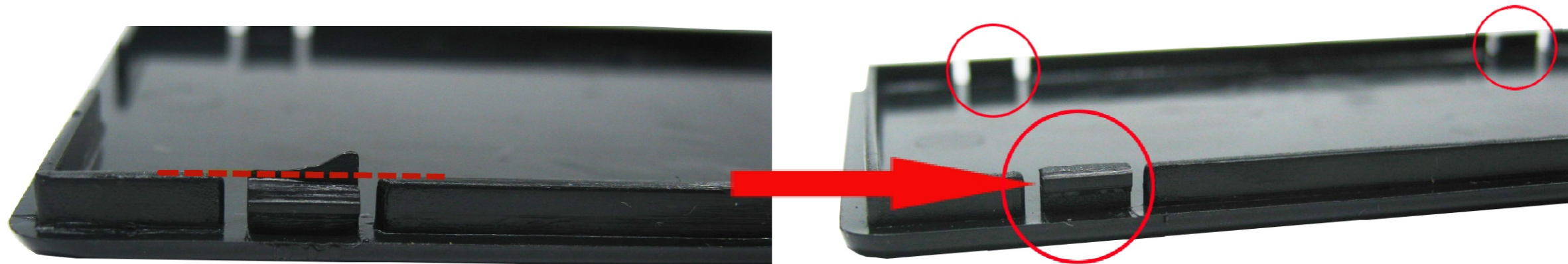
Tools you need.

- ①Iron (30W)
- ②Solder wire
- ③Multimeter
- ④Tweezers
- ⑤Wire cutters

Precautions:

- ①Check part values & quantities against part list
- ②Always meter resistor values before soldering
- ③Understand all part polarities and orientations

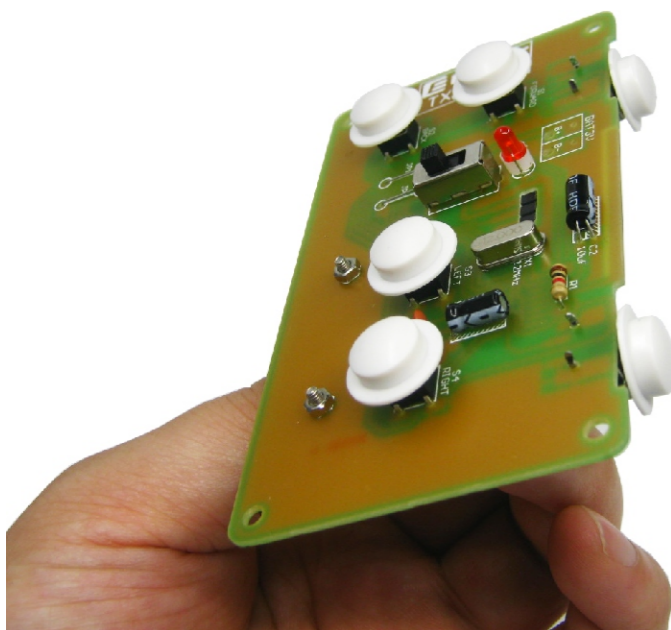
12. Cut off the superfluous angle of the upper cover along the dotted line



Do not press the circuit board with violence when installing the shell

13. Load the circuit board into the shell:

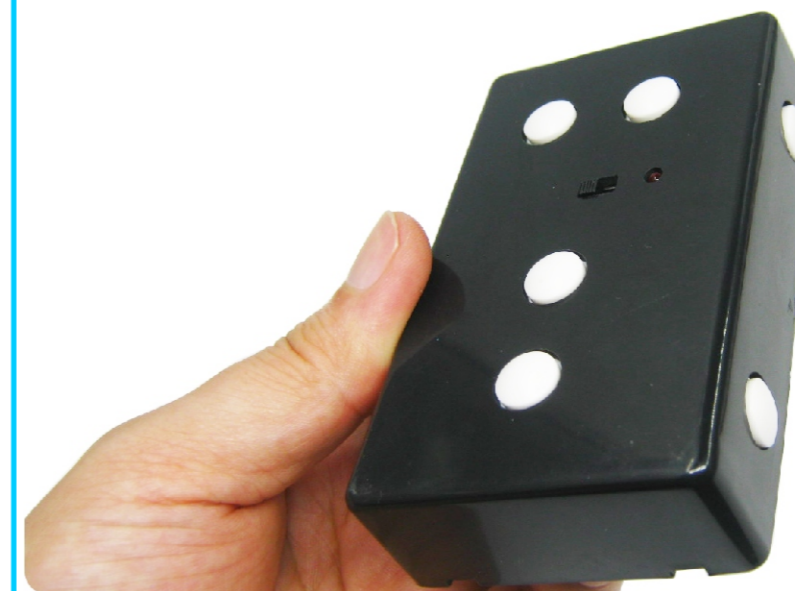
①. Load the white button cap into the circuit board



②. Load the shell into a circuit board. Be careful not to press the circuit board with great strength



③. Check whether the buttons are smooth after the installation is in place



TX-2.4G The transmitter component list

NO.	Name	Parameter	QTY
R1	RES	1K	1
C3	RES	104pF	1
C1, C2	CAP	10uF	2
LED1	LED	3mmRed	1
S1~S4	Key	6*6*9	4
S5, S6	Key	6*6*8	2
S8	Switch	12*06*08	1
X1	oscillator	12MHz	1
J1	Pin header	L type 3P	1
U1	I. C	TXS2. 4G	1
J1	Jumper Cap	2P2. 54mm	1
LED1	LED spacer	3mm	1
-	PCB	TX-2. 4G	1
BAT BOX	Battery box	3VAAA	1
-	Plastic shell	Black	1
S1~S6	Keycap	White circle	6
-	Screw	PA2. 6*5	4
BAT BOX	Screw	M2*5	2
BAT BOX	screw cap	M2	2

RX-2.4G The receiver component list

NO.	Name	Parameter	QTY
C2, C3	CAP	102pF	2
C4	CAP	1uF	1
C1	CAP	100uF	1
U2, U3, U4	IC	L9110	3
U5	IC	7133	1
U1	IC	RXS2. 4G	1
X1	oscillator	12MHz	1
S1	Switch	SS12D07	1
CN1~CN4	Socket	2P2. 54mm	4
CN1~CN4	Connects Cables	15cm	4
-	PCB	RX-2. 4G	1

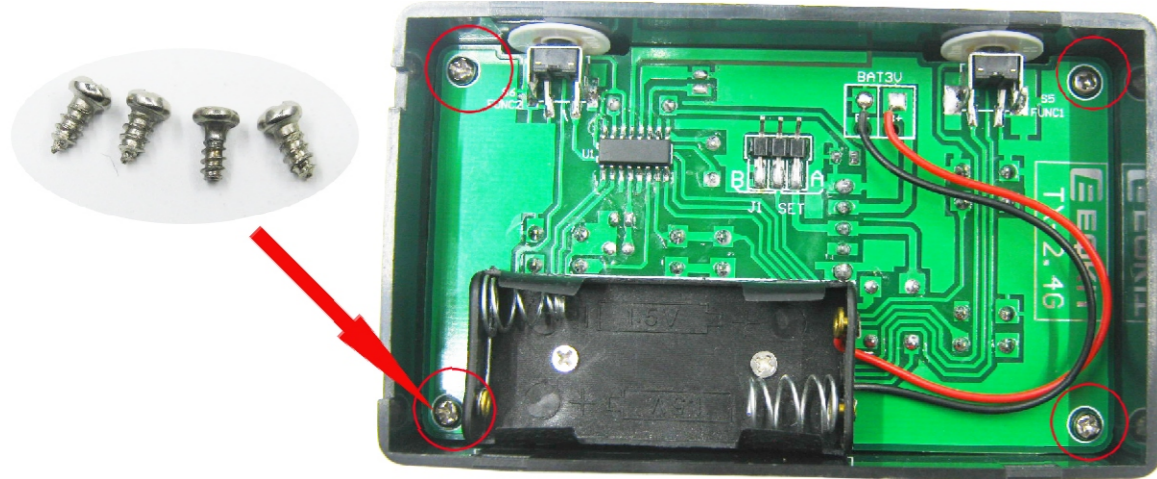
Tools you need.

- ①Iron (30W)
- ②Solder wire
- ③Multimeter
- ④Tweezers
- ⑤Wire cutters

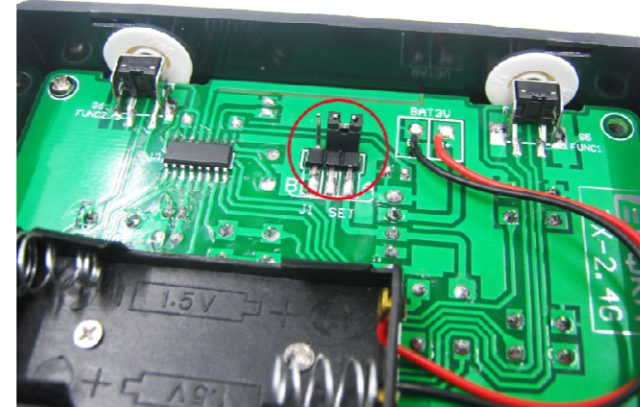
Precautions:

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- ②Always meter resistor values before soldering
- ③Understand all part polarities and orientations

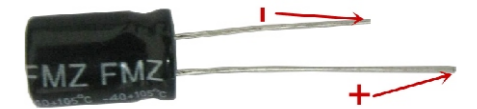
14.Lock the circuit board in the shell with a screw



15.Insert the jumper cap into J1's A or B , Notice that the A or B here corresponds to the A or B of the receiver

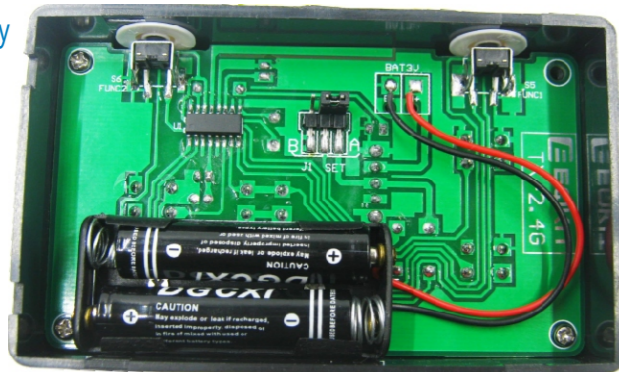


LED, the long foot of the electrolytic capacitor is the positive pole,



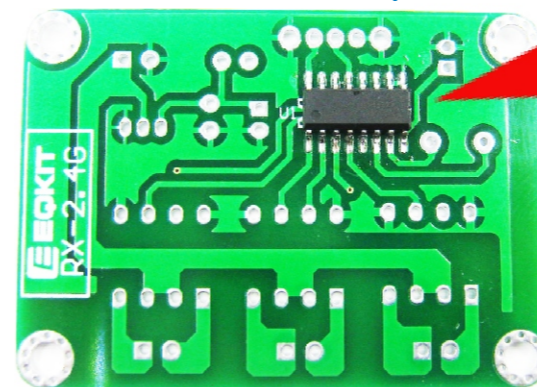
16.Load the battery into the battery box , And then cover the upper cover PS : 1.Pay attention to the positive and negative poles of the battery.

2. There is no battery in the consignment package



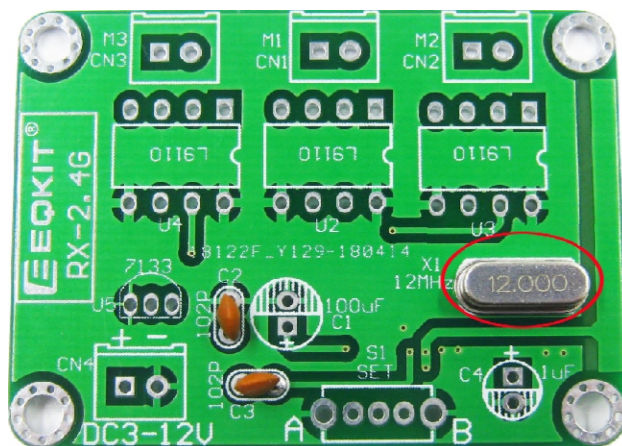
Install the receiver circuit board RX-2.4G

17.Install U1 , Pay attention to the direction of the chip.

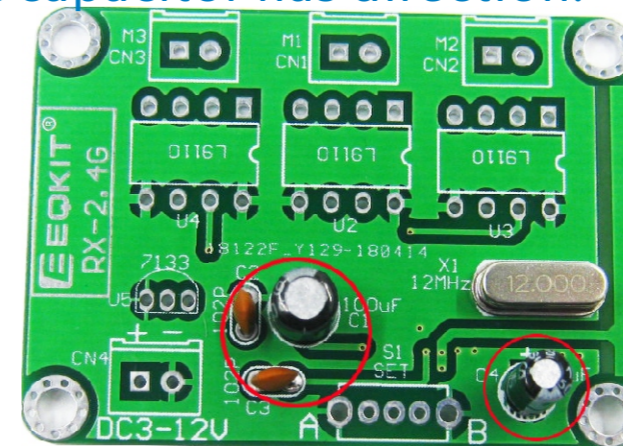


Confirm the character on the back of the chip "RXS-*****".

18. Install Quartz oscillator to X1



19. Instal CAPI : C2.C3=102pF,C1=100uF,C4=1uF. Electrolytic capacitor has direction.



TX-2.4G The transmitter component list

NO.	Name	Parameter	QTY
R1	RES	1K	1
C3	RES	104pF	1
C1.C2	CAP	10uF	2
LED1	LED	3mmRed	1
S1~S4	Key	6*6*9	4
S5.S6	Key	6*6*8	2
S8	Switch	12*06*08	1
X1	oscillator	12MHz	1
J1	Pin header	L type 3P	1
U1	I.C	TXS2. 4G	1
J1	Jumper Cap	2P2. 54mm	1
LED1	LED spacer	3mm	1
-	PCB	TX-2. 4G	1
BAT BOX	Battery box	3VAAA	1
-	Plastic shell	Black	1
S1~S6	Keycap	White circle	6
-	Screw	PA2. 6*5	4
BAT BOX	Screw	M2*5	2
BAT BOX	screw cap	M2	2

RX-2.4G The receiver component list

NO.	Name	Parameter	QTY
C2.C3	CAP	102pF	2
C4	CAP	1uF	1
C1	CAP	100uF	1
U2.U3.U4	IC	L9110	3
U5	IC	7133	1
U1	IC	RXS2. 4G	1
X1	oscillator	12MHz	1
S1	Switch	SS12D07	1
CN1~CN4	Socket	2P2. 54mm	4
CN1~CN4	Connects Cables	15cm	4
-	PCB	RX-2. 4G	1

Tools you need.

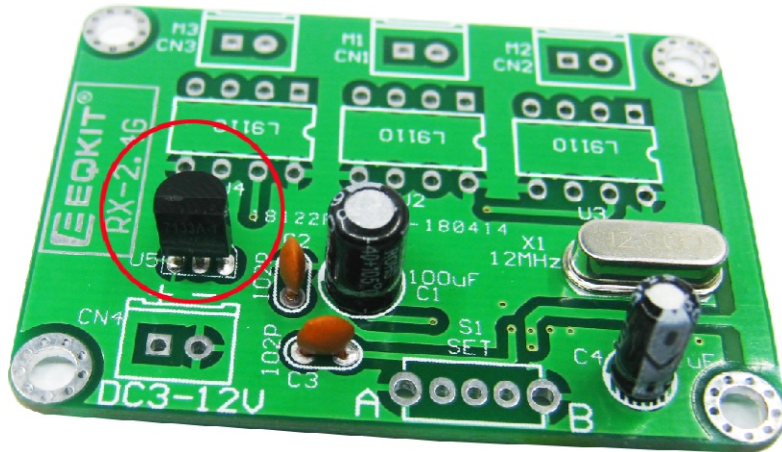
- ①Iron (30W)
- ②Solder wire
- ③Multimeter
- ④Tweezers
- ⑤Wire cutters

Precautions:

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- ②Always meter resistor values before soldering
- ③Understand all part polarities and orientations

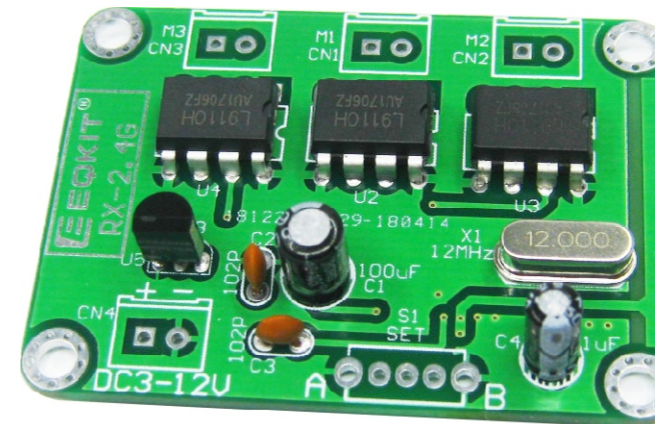
20. Install 7133 to U5.

Pay attention to the direction of the chip

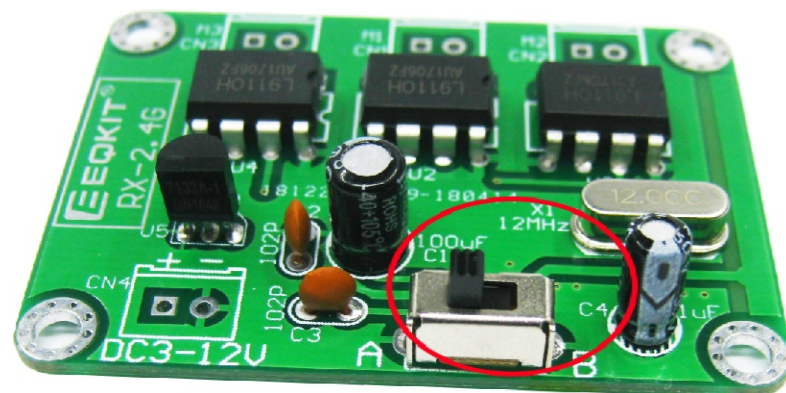


21. Install L9110H to U2,U3,U4 :

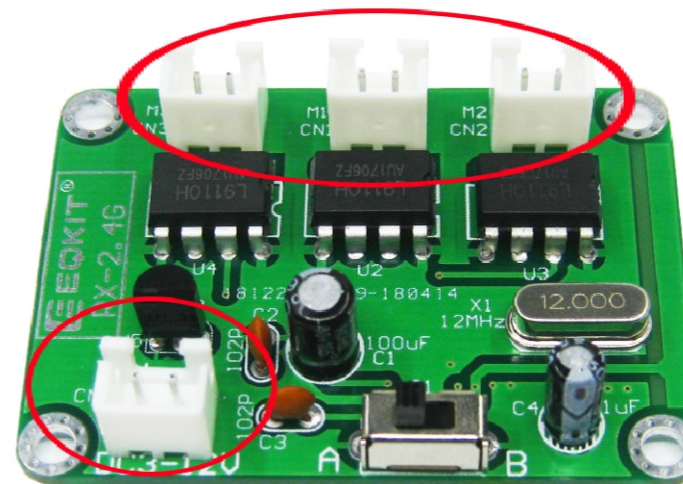
Pay attention to the direction of the chip



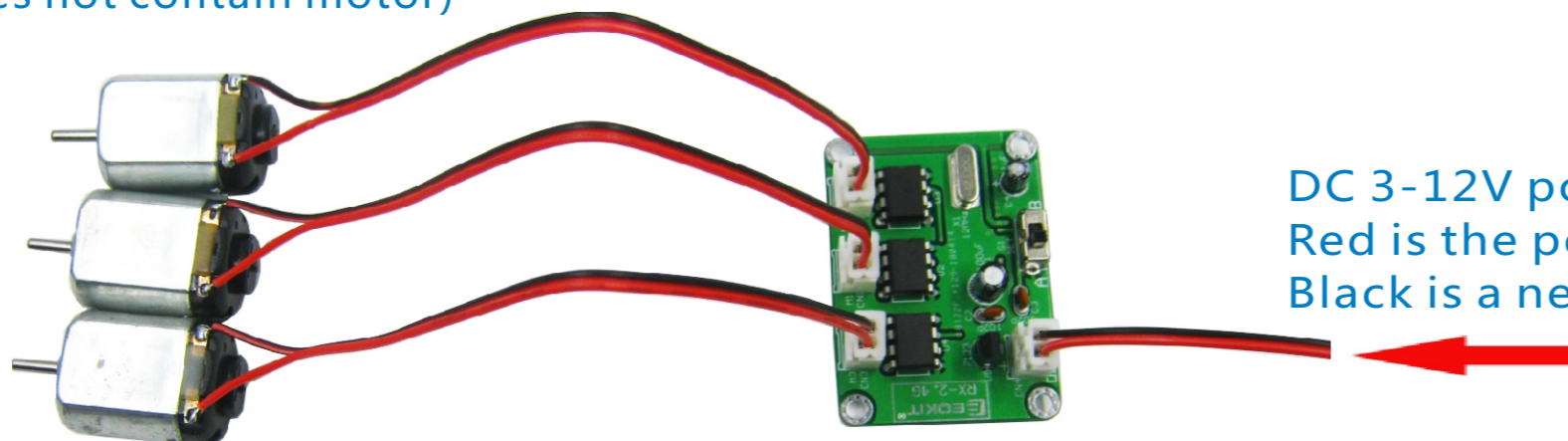
22. Installation frequency selector switch.
Notice the A or B correspondence here to the A or B of the transmitter



23. Install the line seat :



24. Reference diagram for motor welding
(Default shipment does not contain motor)



DC 3-12V power input :
Red is the positive pole,
Black is a negative pole

LED, the long foot of the electrolytic capacitor is the positive pole,



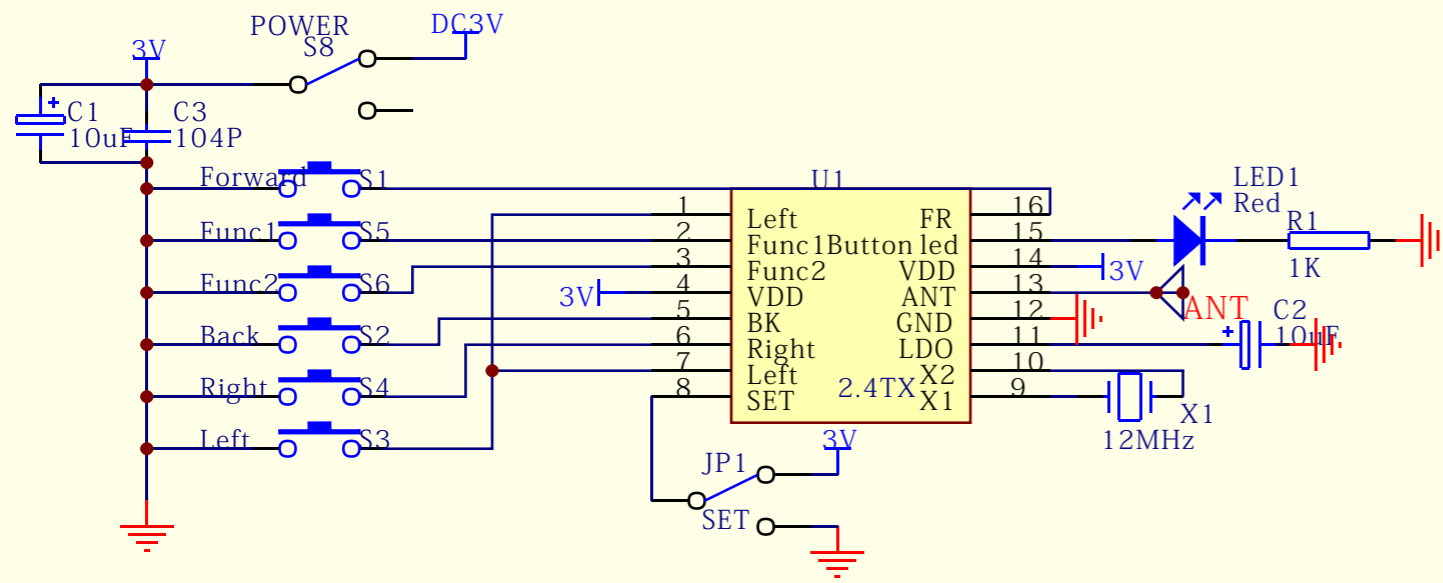
TX-2.4G The transmitter component list

NO.	Name	Parameter	QTY
R1	RES	1K	1
C3	RES	104pF	1
C1, C2	CAP	10uF	2
LED1	LED	3mmRed	1
S1~S4	Key	6*6*9	4
S5, S6	Key	6*6*8	2
S8	Switch	12*06*08	1
X1	oscillator	12MHz	1
J1	Pin header	L type 3P	1
U1	I. C	TXS2.4G	1
J1	Jumper Cap	2P2.54mm	1
LED1	LED spacer	3mm	1
-	PCB	TX-2.4G	1
BAT BOX	Battery box	3VAAA	1
-	Plastic shell	Black	1
S1~S6	Keycap	White circle	6
-	Screw	PA2.6*5	4
BAT BOX	Screw	M2*5	2
BAT BOX	screw cap	M2	2

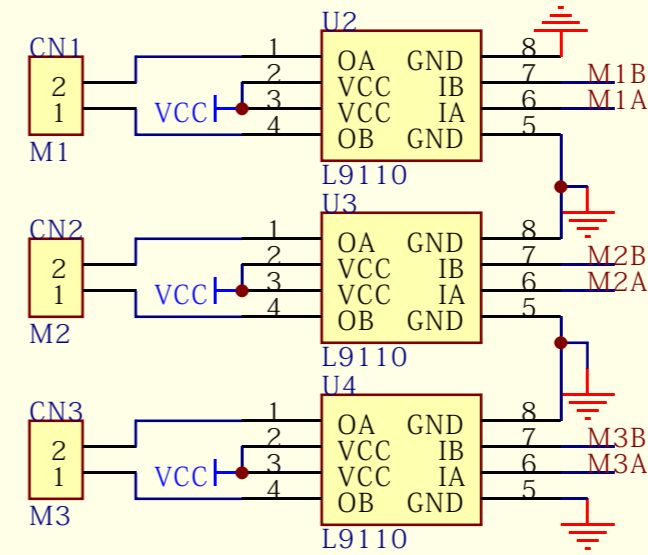
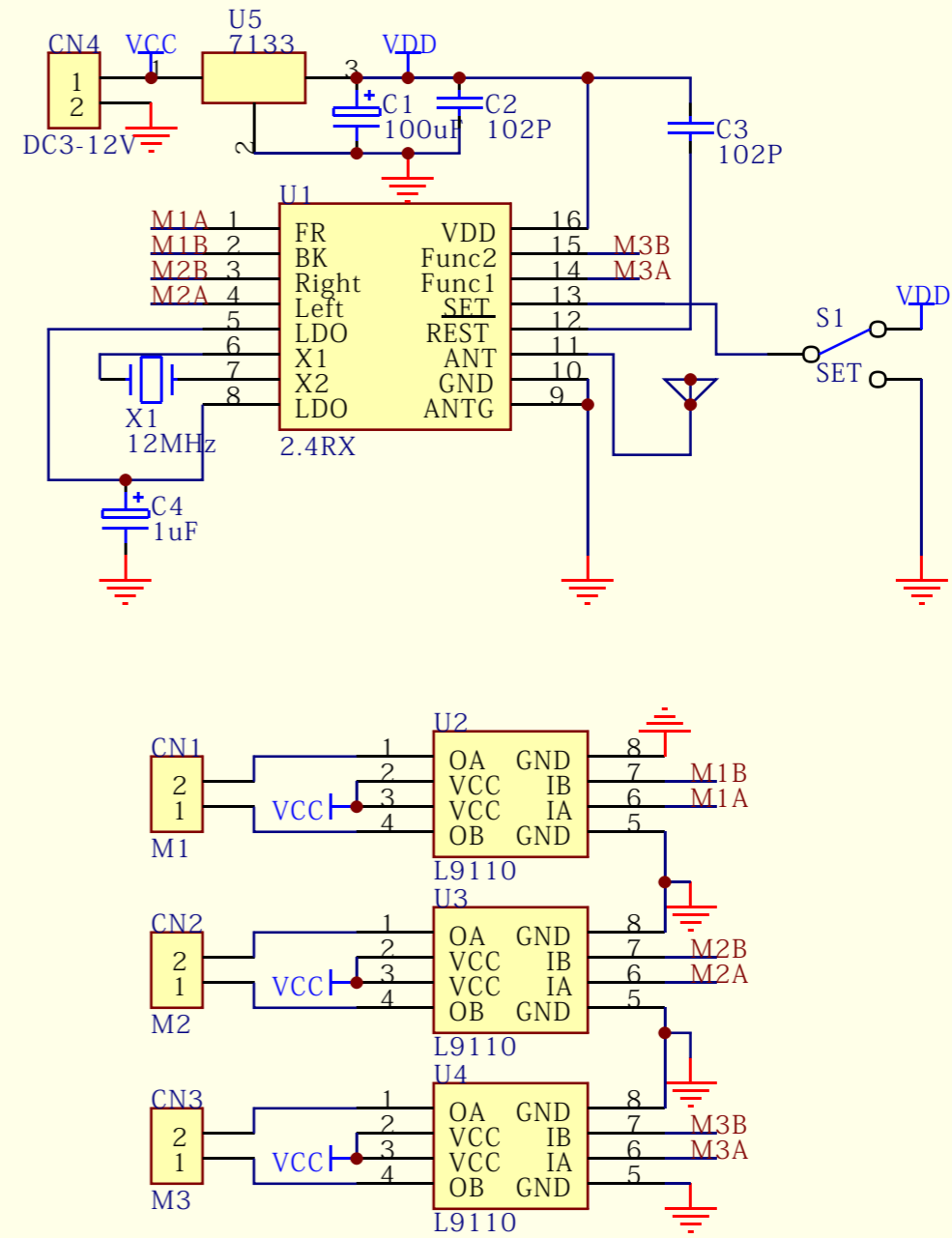
RX-2.4G The receiver component list

NO.	Name	Parameter	QTY
C2, C3	CAP	102pF	2
C4	CAP	1uF	1
C1	CAP	100uF	1
U2, U3, U4	IC	L9110	3
U5	IC	7133	1
U1	IC	RXS2.4G	1
X1	oscillator	12MHz	1
S1	Switch	SS12D07	1
CN1~CN4	Socket	2P2.54mm	4
CN1~CN4	Connects Cables	15cm	4
-	PCB	RX-2.4G	1

TX-2.4G



RX-2.4G



Title		
Size	Number	Revision
A4		
Date:	8-May-2018	Sheet of
File:	E:\longyong.ddb	Drawn By: