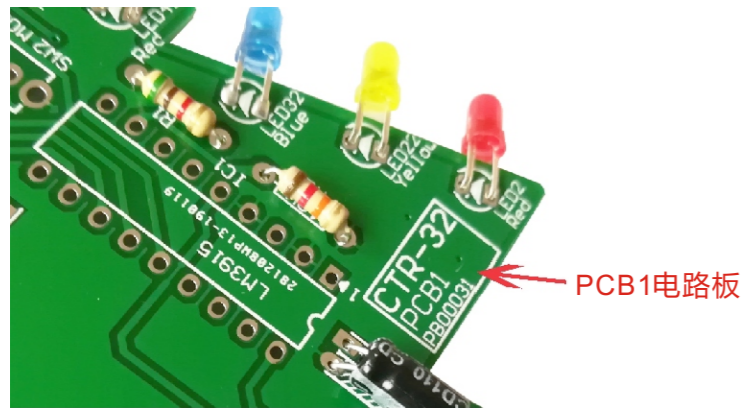


CTR-32 Audio-controlled Christmas Tree Kit Installation Instructions

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1. Install resistance to PCB1:
Find a circuit board named PCB1 ,
Then install R1 and R2



2. Install of LED

Bend the LED 90 degrees 90°, Then weld and install strictly according to the colour marked on the circuit board.

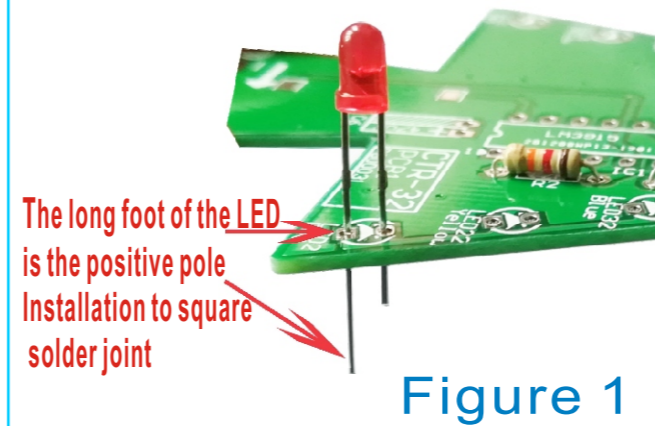


Figure 1

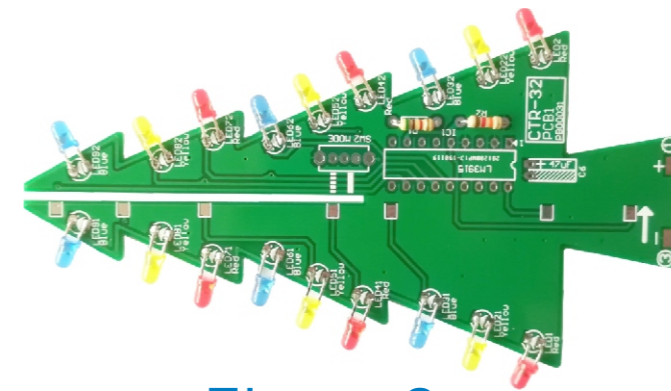


Figure 2

Tools to be prepared:

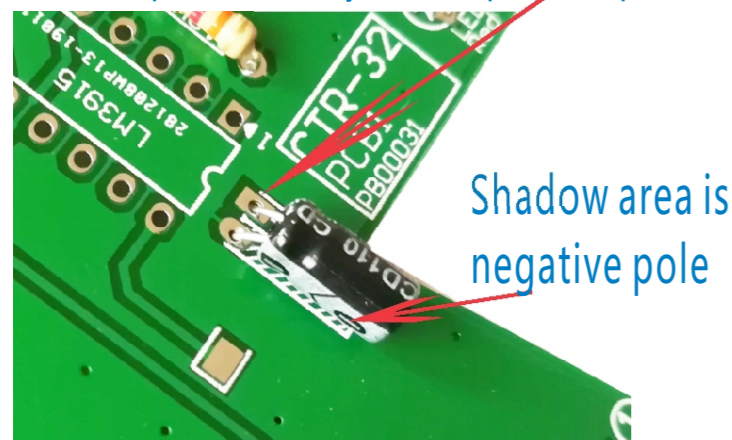
- [1] Soldering iron [4] Bevel pliers
- [2] Solder wire [5] Sharp nose pliers
- [3] A multimeter [6] Tweezers

Installation Notes

- [1] Number and specification of identification elements
- [2] Identify polarity and installation direction of components
- [3] Installation in strict accordance with instructions

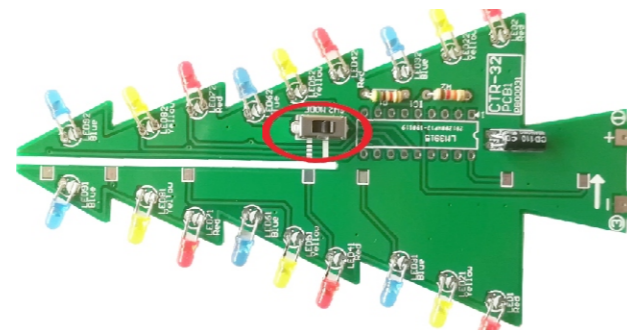
3. Install Electrolytic capacitor :

A square solder joint is a positive pole



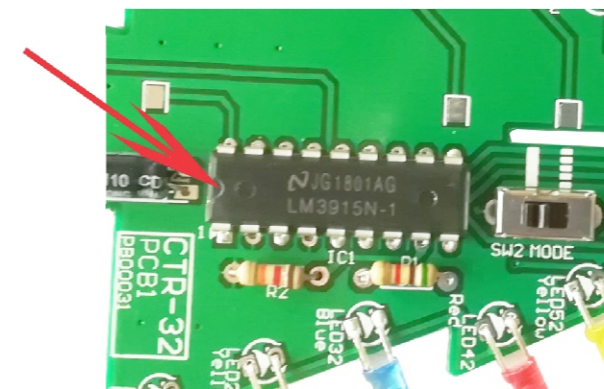
4. Installation mode switch

Mode switch can make LED work in strip or point state , Suggested working in strip shape



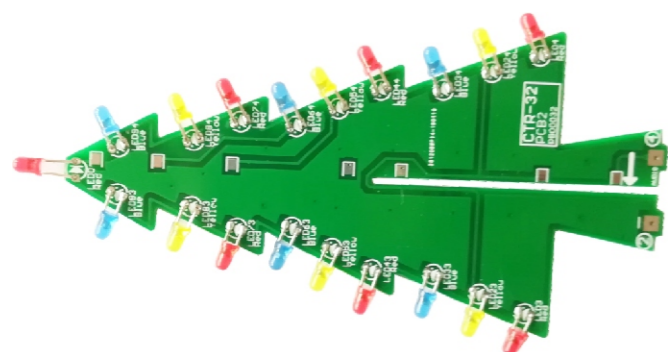
5. Install IC LM3915

Pay attention to identifying the direction of integrated circuits

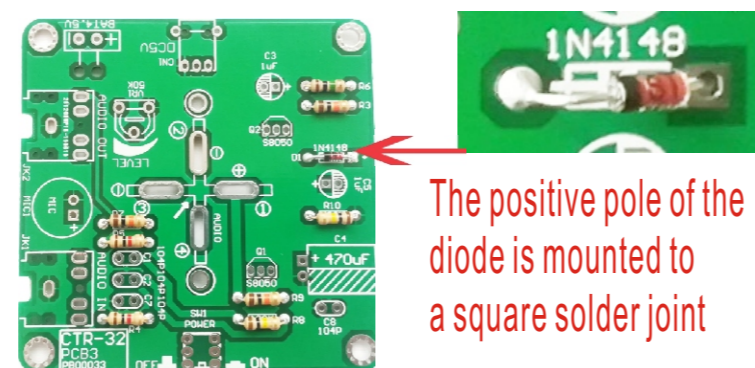


6. Installation of PCB2 LED:

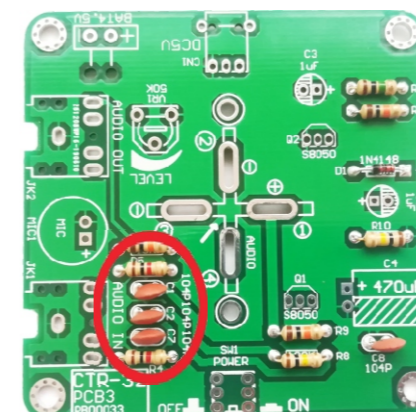
Please install the LED of PCB2 according to PCB1 method.



7. Installation of PCB3 Resistors and Diodes
Installation of Resistors and Diodes with Reference to Shipment List or Marking on Circuit Board



8. Installation of Ceramic Plate Capacitance
Ceramic capacitor has no direction



CTR-32 Sound control Christmas tree component list

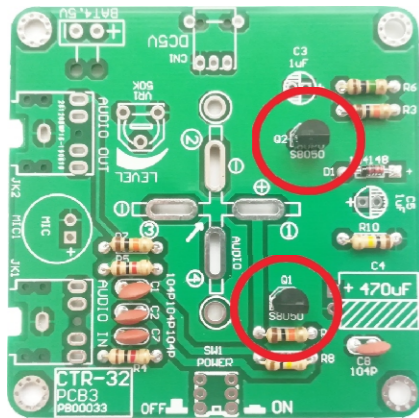
NO.	Name	Parameter	QTY
R4. R5	RES	1K	2
R1	RES	5.1K	1
R3. R7. R9	RES	10K	3
R2	RES	12K	1
R8. R10	RES	100K	2
R6	RES	1M	1
C1. C2. C7. C8	CAP	104PF	4
C3. C5	E-CAP	1UF	2
C6	E-CAP	47UF	1
C4	E-CAP	470UF	1
D1	Diode	1N4148	1
Q1. Q2	Triode	S8050	2
VR1	ADJ-RES	50K	1
LED0-LED4 LED41-LED44 LED71-LED74	LED	3mm Red	13+2
LED21-LED24 LED51-LED54 LED81-LED84	LED	3mm Yellow	12+3
LED31-LED34 LED61-LED64 LED91-LED94	LED	3mm Blue	12+3
SW1	POWER-SW	5.8*5.8	1
SW2	Pullout SW	SS12D07	1
JK1. JK2	Audio seat	5P	2
MIC1	MIC	9*7	1
IC1	IC	LM3915	1
CN1	Power supply seat	DC3.5	1
JK1	Audio cable	3.5mm	1
—	Battery box (Choose to buy)	4.5V/AA	1
CN1	Power cord	USB to DC3.5	1
—	Screw	M2*5	2
—	Nut	M2	2
PB00031	PCB	CTR-32 PCB1	1
PB00032	PCB	CTR-32 PCB2	1
PB00033	PCB	CTR-32 PCB3	1

CTR-32 Audio-controlled Christmas Tree Kit Installation Instructions

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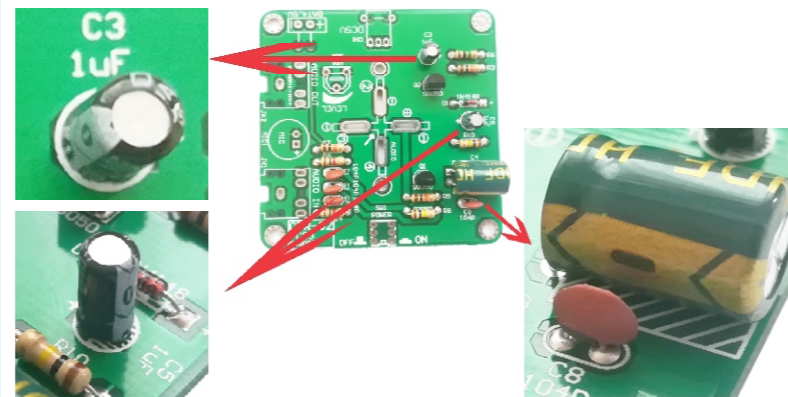
9. Install triode

Please note the installation direction of the transistor !



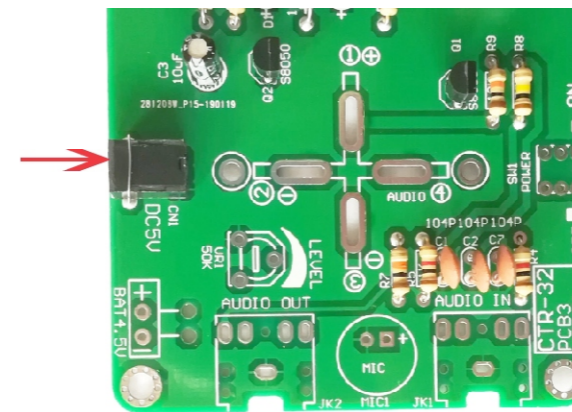
10. Install Electrolytic capacitor:

The long foot of the electrolytic capacitor is a positive pole, which is welded to a square solder joint.



11. Installation of DC Power Seat

Fix DC seat with pins of other parts :



Tools to be prepared:

- [1] Soldering iron
- [2] Solder wire
- [3] A multimeter
- [4] Bevel pliers
- [5] Sharp nose pliers
- [6] Tweezers

Installation Notes

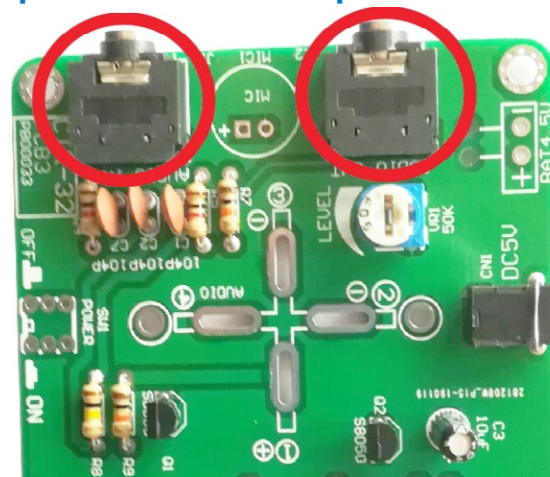
- [1] Number and specification of identification elements
- [2] Identify polarity and installation direction of components
- [3] Installation in strict accordance with instructions

12. Installation of adjustable resistance

Install 50K adjustable resistance to VR1

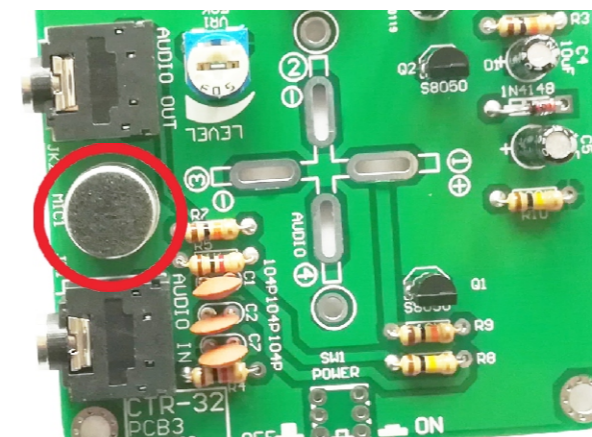


13. Installation of Audio Input and Output Seats



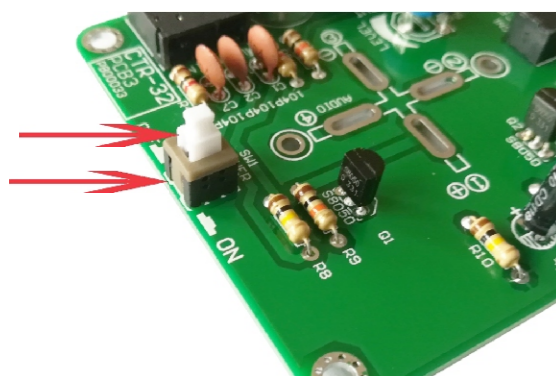
14. Installation of MIC pickup

Distinguishing positive and negative poles of MIC Please install in the direction on the circuit board.



15. Install power switch

The grooved side of the power switch corresponds to the grooved screen printing of the circuit board !

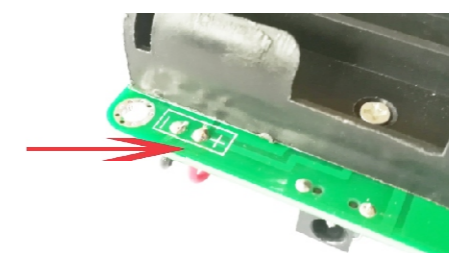
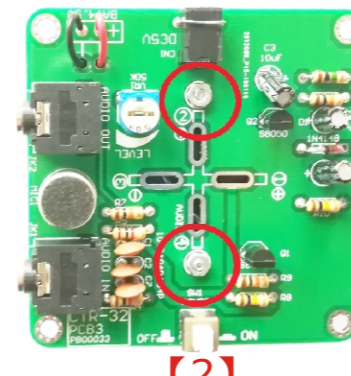
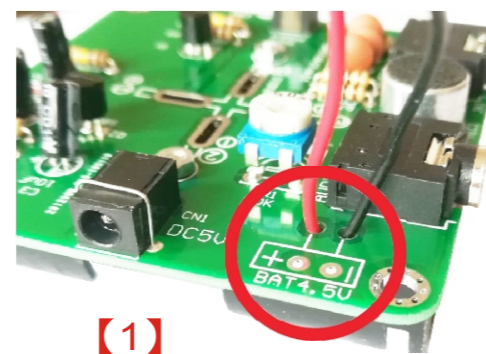


16. Install Battery Box (If you haven't bought a battery case, please skip this step)

[1] Put two lines of the battery box from the back of the circuit board into the circuit board

[2] Put two screws of M2*5 into the circuit board from the battery box and fix them

[3] Weld the lead of the battery box from the bottom of the circuit board, red welding +, black welding-



CTR-32 Sound control Christmas tree component list

NO.	Name	Parameter	QTY
R4. R5	RES	1K	2
R1	RES	5.1K	1
R3. R7. R9	RES	10K	3
R2	RES	12K	1
R8. R10	RES	100K	2
R6	RES	1M	1
C1. C2. C7. C8	CAP	104PF	4
C3. C5	E-CAP	1UF	2
C6	E-CAP	47UF	1
C4	E-CAP	470UF	1
D1	Diode	1N4148	1
Q1. Q2	Triode	S8050	2
VR1	ADJ-RES	50K	1
LED0-LED4 LED41-LED44 LED71-LED74	LED	3mm Red	13+2
LED21-LED24 LED51-LED54 LED81-LED84	LED	3mm Yellow	12+3
LED31-LED34 LED61-LED64 LED91-LED94	LED	3mm Blue	12+3
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SW2	Pullout SW	SS12D07	1
JK1. JK2	Audio seat	5P	2
MIC1	MIC	9*7	1
IC1	IC	LM3915	1
CN1	Power supply seat	DC3.5	1
JK1	Audio cable	3.5mm	1
—	Battery box (Choose to buy)	4.5V/AA	1
CN1	Power cord	USB to DC3.5	1
—	Screw	M2*5	2
—	Nut	M2	2
PB00031	PCB	CTR-32 PCB1	1
PB00032	PCB	CTR-32 PCB2	1
PB00033	PCB	CTR-32 PCB3	1

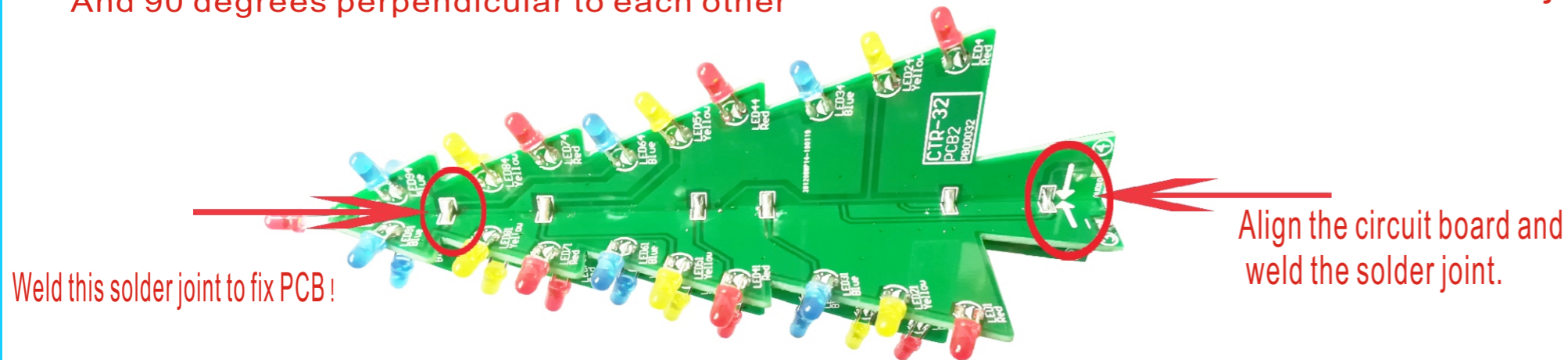
CTR-32 Audio-controlled Christmas Tree Kit Installation Instructions

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17. Merging PCB1 and PCB2

[1] PCB1 and PCB2 should be aligned. And 90 degrees perpendicular to each other

[2] Keep the two circuit boards vertical and weld two of the solder joints.



Tools to be prepared:

- [1] Soldering iron
- [2] Solder wire
- [3] A multimeter
- [4] Bevel pliers
- [5] Sharp nose pliers
- [6] Tweezers

Installation Notes

- [1] Number and specification of identification elements
- [2] Identify polarity and installation direction of components
- [3] Installation in strict accordance with instructions

18. Install bottom PCB3

[1] Vertical of the merge insertion lamp board into the hole of the base plate. Please note that the 1234 serial number of the lamp board should correspond to the 1234 serial number of the bottom board.

Three arrows in the same direction



19. Weld all solder joints to complete installation

Welding, all solder joints in the red ring and four solder joints at the bottom, a total of 16 solder joints.



CTR-32 Sound control Christmas tree component list

NO.	Name	Parameter	QTY
R4. R5	RES	1K	2
R1	RES	5.1K	1
R3. R7. R9	RES	10K	3
R2	RES	12K	1
R8. R10	RES	100K	2
R6	RES	1M	1
C1. C2. C7. C8	CAP	104PF	4
C3. C5	E-CAP	1UF	2
C6	E-CAP	47UF	1
C4	E-CAP	470UF	1
D1	Diode	1N4148	1
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LED31-LED34 LED61-LED64 LED91-LED94	LED	3mm Blue	12+3
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SW2	Pullout SW	SS12D07	1
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MIC1	MIC	9*7	1
IC1	IC	LM3915	1
CN1	Power supply seat	DC3.5	1
JK1	Audio cable	3.5mm	1
—	Battery box (Choose to buy)	4.5V/AA	1
CN1	Power cord	USB to DC3.5	1
—	Screw	M2*5	2
—	Nut	M2	2
PB00031	PCB	CTR-32 PCB1	1
PB00032	PCB	CTR-32 PCB2	1
PB00033	PCB	CTR-32 PCB3	1

[1]

[2]

[3]

CTR-32 Audio-controlled Christmas Tree Kit Installation Instructions

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Instructions and circuit diagrams

- 【1】 Install 3 1.5V batteries, Turn on the power switch, Without inserting audio lines, MIC detects the sound level of the environment, It is shown by circuit conversion. When the audio line is inserted and the audio is input, MIC automatically closes and switches to audio level display
- 【2】 Audio output interface is a transfer interface used to connect other power amplifier devices. No audio amplification function!

