

## 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

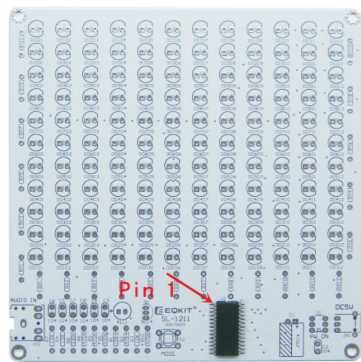
## SL-1211 Audio spectrum LEDkit instructions

Rev. 1.0

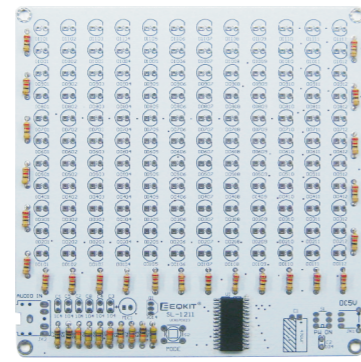
July 17, 2017

Produced by YiQi

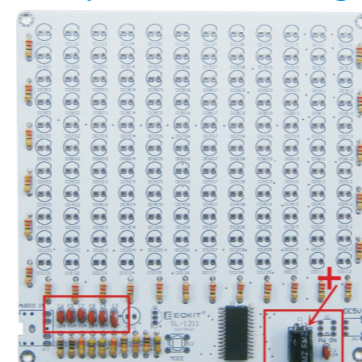
**1. Install I.C :**  
Solder the integrated circuit to the U1. Pay attention to the direction of the integrated circuit



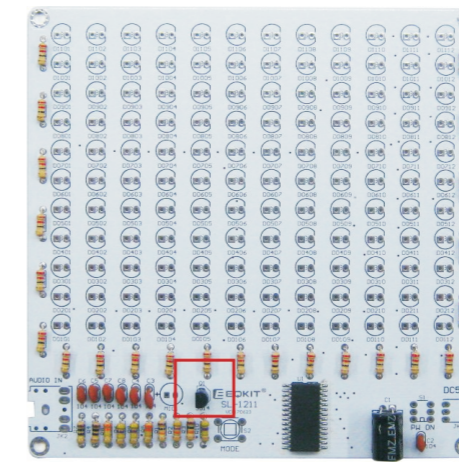
**2. Install RES :**  
22R resistor installed to RX1--RX12. RY1--RY11. Please install the other resistors according to the resistance on the circuit board



**3. Install Cap:**  
Install the 104PF capacitor to the C2--C8. Bend the 470UF electrolytic capacitor Install to C1. Distinguish between positive and negative poles

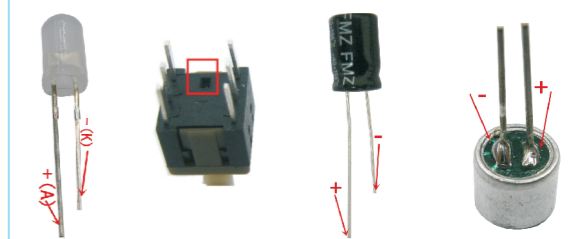


**4. Install triode:**  
Install S9014 to Q1

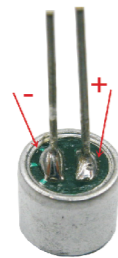
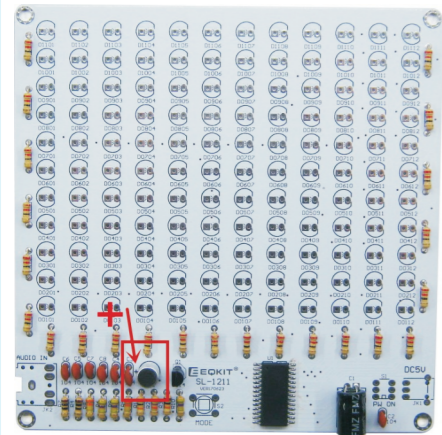


### Warning:

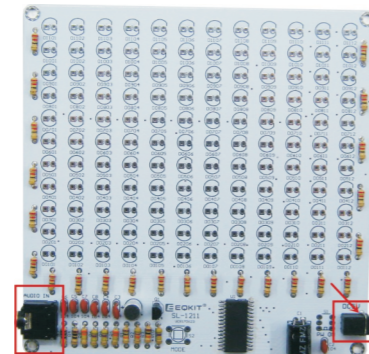
Polar element: LED Electrolytic capacitor Electret microphone etc. The positive electrode shall be soldered to the square pad



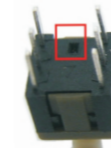
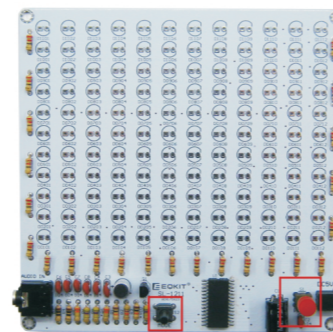
**5. Install Electret microphone :**  
Look out! The negative electrode of the MIC is connected to the metal case. The positive pole is not connected



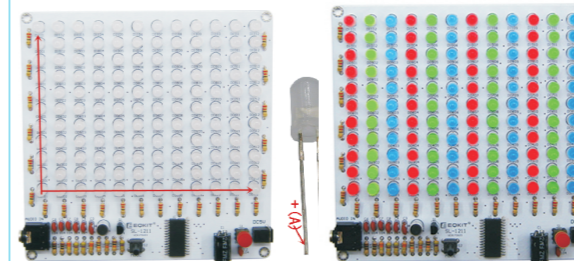
**6. Install the DC input and audio input socket**  
DC input socket Install JK2.  
audio input socket Install Jk1.



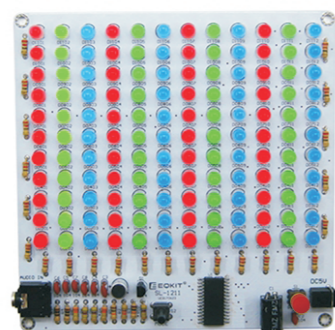
**7. Install S1 and S2:**  
Tact Switch to S2  
power Switch to S1  
Then install the switch cap for the S1



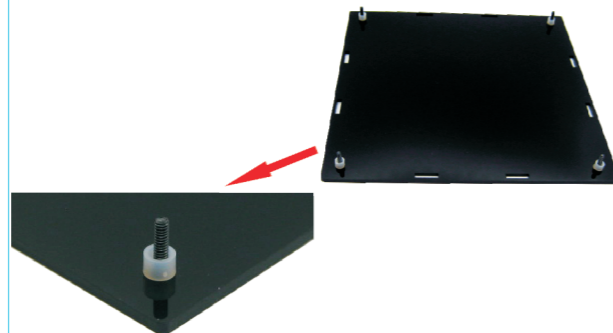
**8. Install LED:**  
The long pin is the positive  
When installing, please keep each transverse or each vertical one in the same color :



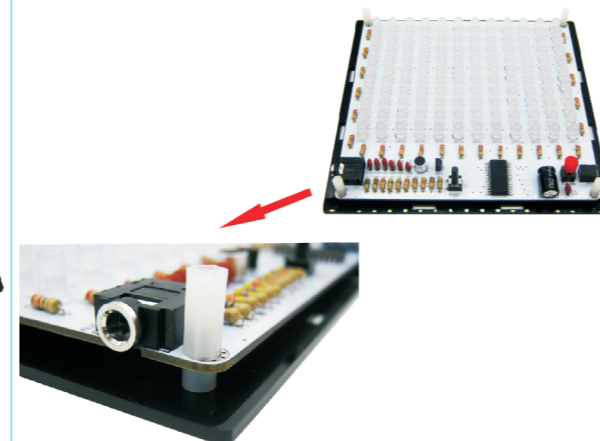
**9. Check the polarity of LED**  
Electrolytic capacitor  
Integrated circuit Triode and  
Electret microphone element  
Finally, switch on the power



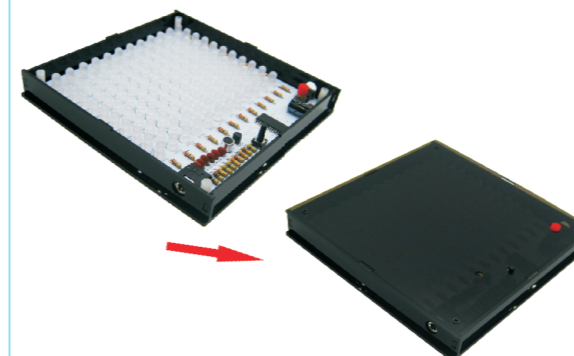
**10. Install housing:**  
Tear off the panel protection paper  
Load four long screws on the base plate  
Then insert the 3mm spacer into the screw



**11. Load the PCB and secure the PCB**  
with four double nylon columns



**12. Load the surrounding panel.**  
Then load the top transparent panel and lock with a shorter screw



### SL-1211 Audio spectrum component list

NO.	Name	Mode	QTY
R4, R7	RES	10R	2
RX1-RX12, RY1-RY11	RES	22R	23
R1, R3	RES	10K	2
R2	RES	47K	1
R5, R8	RES	330K	2
R6, R9, R10	RES	470K	3
C2-C8	Cap	104P	7
C1	E. Cap	470UF16V	1
U1	I. C	WD1211	1
S1	Power SW	Self-locking switch	1
S1	Switch cap	6*5mm	1
Q1	Triode	S9014	1
S2	Contact switch	6*6*13	1
MIC1	Electret microphone	6050	1
JK1	Power input socket	3.5MM	1
JK2	Audio input socket	Stereo 5Pin	1
—	USB to DC Line	0.8M	1
—	PCB	SL-1211	1
DO101-D1112	LED	5mm Red	44+6
DO101-D1112	LED	5mm Green	44+6
DO101-D1112	LED	5mm Blue	44+6
Free give	Audio input line	1.2M	1
Free give	One in two audio line	22CM	1
Choose	Shell	A set black	1

## 1 Circuit features :

- 1) Built in electret microphone , If you do not connect to the audio line , LED will show the sound of the surrounding environment
- 2) Built in memory function , Permanently save user - defined parameters
- 3) Test mode, Meet the test needs in the production process.
- 4) Mono(12\*11)、 Dual channel(Left6\*11 , Right6\*11) Large dot matrix LED display.

## 2 Work mode settings

After the power is on, it enters the normal working state ,  
 Press and hold the "MODE" key and enter after 2 seconds to Mode selection  
 Press and hold the "MODE" key. Turn on the power into Test mode

Working model	On screen display	option	Function description	Default declaration
Channel select	A	1	Mono	2
		2	Dual channel	
Left and right channel setting	B	1	Left channel input	1
		2	Right channel input	
Refresh rate	C	1	The fastest	3
		2	Commonly	
		3	Slow	
		4	The slowest	
Sensitivity setting	D	1	Fixed gain	3
		2	Automatic gain, Low sensitivity	
		3	Automatic gain, High sensitivity	
Brightness setting	E	1	Dark	2
		2	Bright	
Display array setting	F	1	Sequential arrangement of optimization	2
		2	Sort from low to high	

PS: Hold the "MODE" Key first, then turn on the power display "EN" release "MODE" key to English menu mode

The schematic:

