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## RGB LED Electric Piano DIY Kit

### 1.Introduction:

The scale of the circuit can produce different sounds, while different keys correspond to different scales. The play of the electronic organ is to use the fingers to press different keys to produce different scales.

This DIY product needs to be soldered and assembled by yourself.

### 2.Parameter:

- 1>.Work Voltage:DC 4.0V-5.5V
- 2>.Work Current:60mA
- 3>.Power Type:MINI USB
- 4>.Control Type:Button Control
- 5>.Music Type:Pure Music
- 6>.Music: 12kinds(Can not be modified)
- 7>.Work Temperature:-40℃~85℃
- 8>.Work Humidity:0%~95%RH
- 9>.Size(Installed):129\*49\*23mm

### 3.Function:

- 1>.RGB LED light color changes automatically
- 2>.Music playback
- 3>.12kinds pure music
- 4>.Switch memory function
- 5>.Music switch control
- 6>.MINI USB provide power supply
- 7>.Perfect simple circuit
- 8>.Analog spectrum

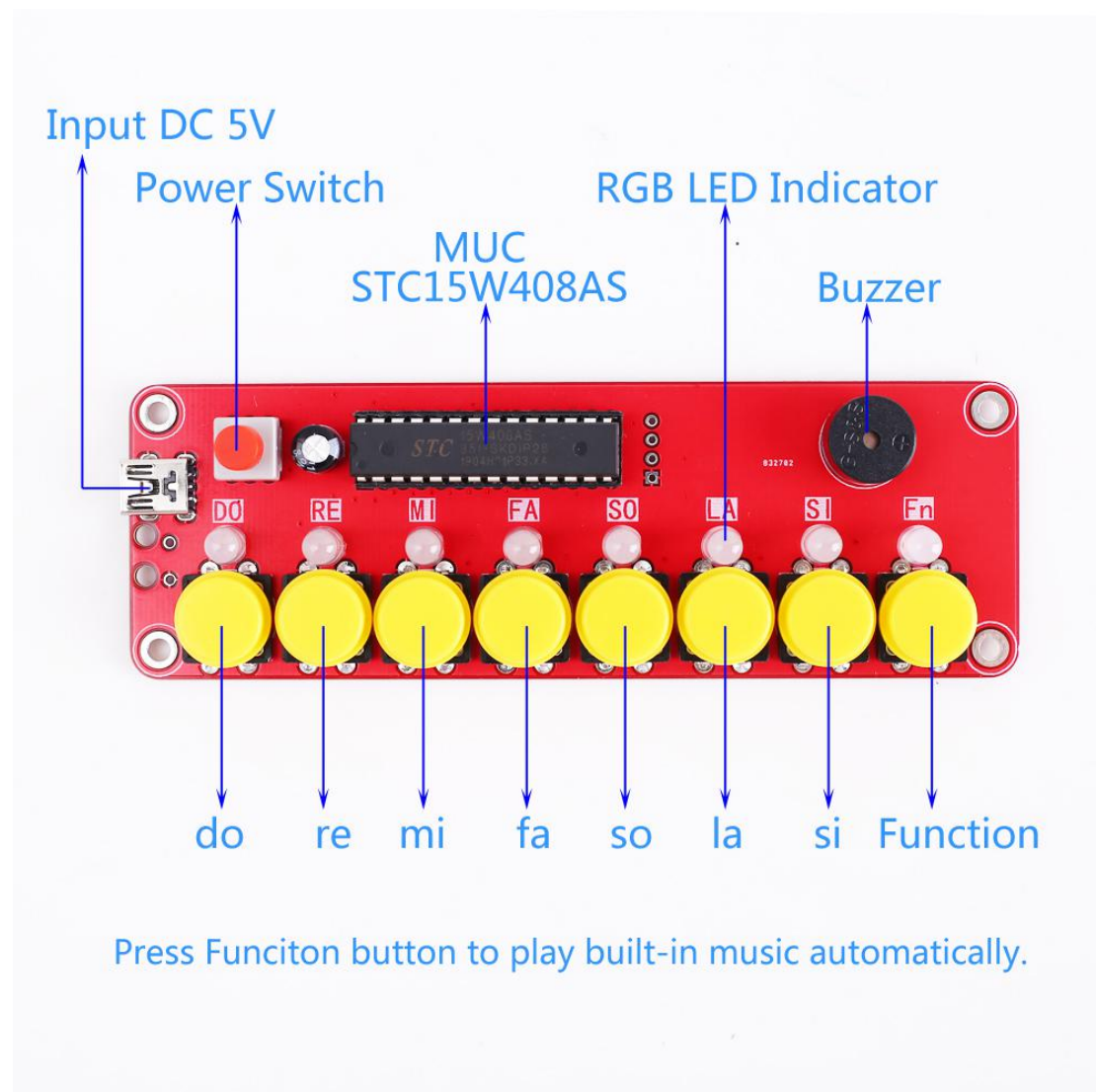
### 4.Component listing:

NO.	Component Name	PCB Marker	Parameter	QTY
1	Electrolytic Capacitor	C1	16V 22uF	1
2	STC15W408AS	U1	DIP-28	1
3	IC Socket	U1	DIP-28	1
4	MINI USB Female Socket	J3		1
5	Tact Switch	S1,S2	Black	2
6	Self-Locking Switch	S3	Red	1
7	Passive Buzzer	B1	5V 12mm	1
8	RGB LED		5mm	40
9	USB Cable			1
10	Acrylic Shell			6
11	Copper Column		M3*12mm	4

12	Copper Column		M3*5+6mm	4
13	Screw		M3*4mm	8
14	PCB		80*75*1.6mm	1

Note: Users can complete the installation according to the PCB silk screen and component list.

## 5.Basic instruction:



## 6.Application:

- 1>.Training welding skills
- 2>.Student school
- 3>.DIY production
- 4>.Project Design
- 5>.Electronic competition
- 6>.Gift giving
- 7>.Crafts collection
- 8>.Home decoration

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9>.Souvenir collection

## 7.Installation Notes

- 1>.User needs to prepare the welding tool at first.
- 2>.This DIY installation is more difficult to be installed, please be patient until the installation is complete.
- 3>.The package is DIY kit.It need finish install by user.
- 4>.The soldering iron can't touch the components for a long time(1.0 second), otherwise it will damage the components.
- 5>.Pay attention to the positive and negative of the components.
- 6>.Users can complete installation by PCB silk screen and component listing.
- 7>.User must install the LED according to the specified rules.Otherwise some LED will not light.
- 8>.Install complex components preferentially.
- 9>.Make sure all components are in right direction and right place.
- 10>.It is strongly recommended to read the installation manual before starting installation.

## 8.Installation Steps(Please be patient install! !)

Step 1: Install 1pcs Mini USB socket at J1. Note: all components are installed on the same side of the PCB, please do not install the error.

Step 2: Install 1pcs DIP-28 IC Socket at U1.Must not be installed reverse, otherwise it will not work properly. User can also not install IC Socket.

Step 3: Install 1pcs DIP-28 STC15W408AS at U1 on IC Socket.Must not be installed reverse, otherwise it will not work properly.Note:Users can also install this chip last.

Step 4: Install 1pcs 16V 22uF Electrolytic Capacitor at C1.Note:Long pin is the positive pole.

Step 5: Install 8pcs 5mm RGB LED at D1-D8.Pay attention to distinguish between positive and negative.Long pin is the positive pole.

Step 6: Install 8pcs button at S2-S9.

Step 7: Install 1pcs Passive Buzzer at B1.Pay attention to distinguish between positive and negative.There is a mark + on buzzer means the corresponding pin is positive pole.

Step 8: Install 1pcs Self-Locking Switch at S1.Please pay attention to the installation direction.

Step 9: Install 1pcs DIP-28 STC15W408AS at U1 on IC Socket.Must not be installed reverse, otherwise it will not work properly.Please ignore this step if the chip is already installed in Step 3.

Step 10: Install 1pcs red button cap on Self-Locking Switch and 8pcs yellow button cap on button.

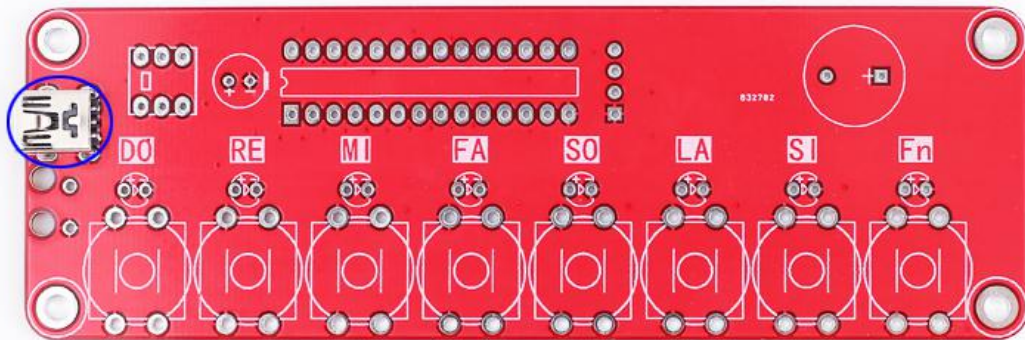
Step 11: Mounting screws and copper posts.

Step 12: Install the acrylic case.User can also not install.Tear off the protective film on the acrylic surface.

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- Step 13: Fixed base acrylic.
  - Step 14: Place the surrounding acrylic.
  - Step 15: Fixed upper acrylic.
  - Step 16: Turn on the power and enjoy the effect.

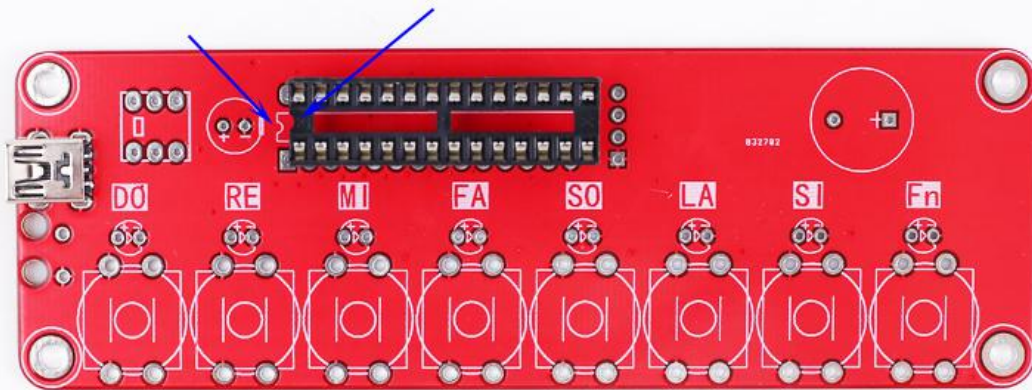
## 9. Install shown steps:

**Step 1:** Install 1pcs Mini USB socket at J1.  
Note: all components are installed on the same side of the PCB, please do not install the error.

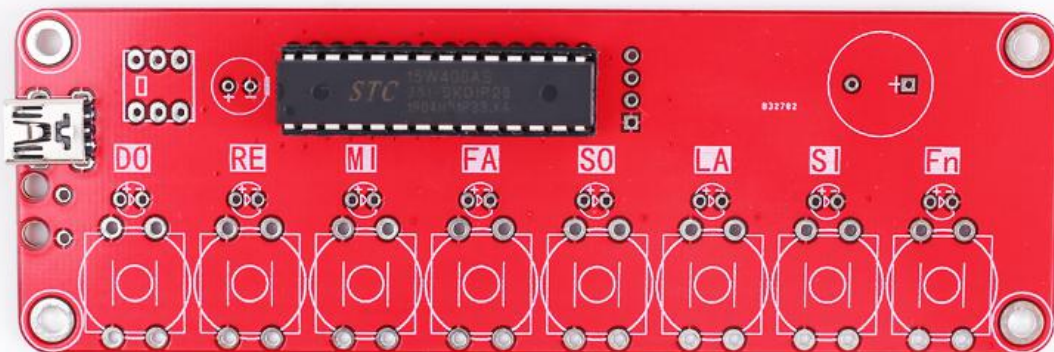




**Step 2:** Install 1pcs DIP-28 IC Socket at U1. Must not be installed reverse, otherwise it will not work properly. User can also not install IC Socket.

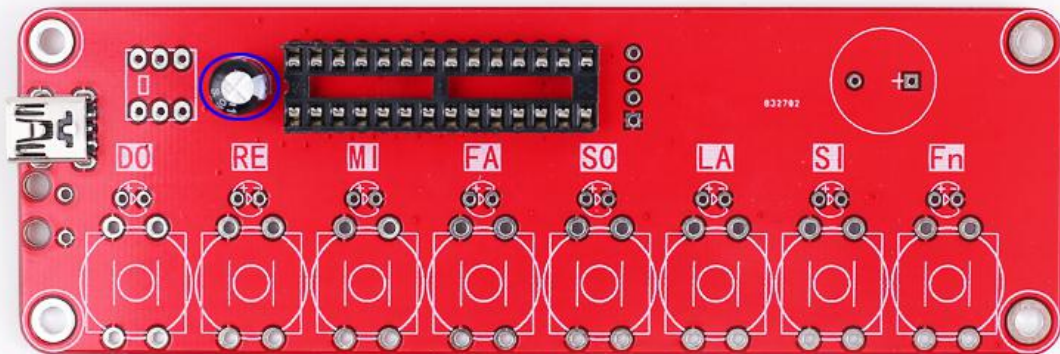


**Step 3:** Install 1pcs DIP-28 STC15W408AS at U1 on IC Socket. Must not be installed reverse, otherwise it will not work properly. Note: Users can also install this chip last.

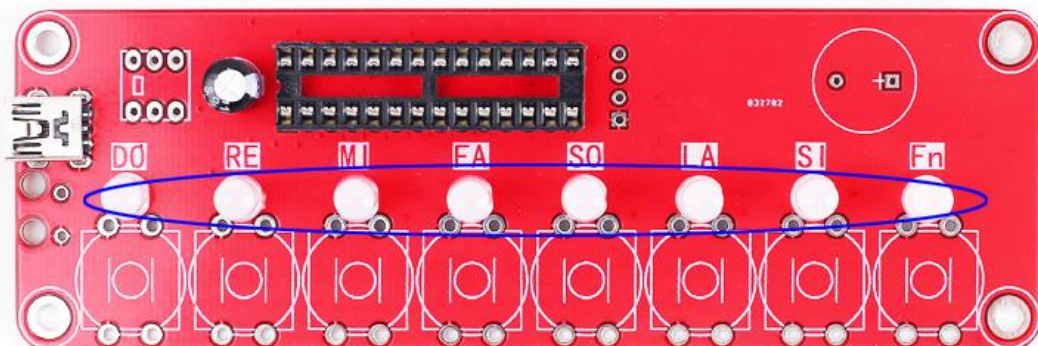


**Step 4:** Install 1pcs 16V 22uF Electrolytic Capacitor at C1.

Note: Long pin is the positive pole.



**Step 5:** Install 8pcs 5mm RGB LED at D1-D8.  
Pay attention to distinguish between positive and negative. Long pin is the positive pole.

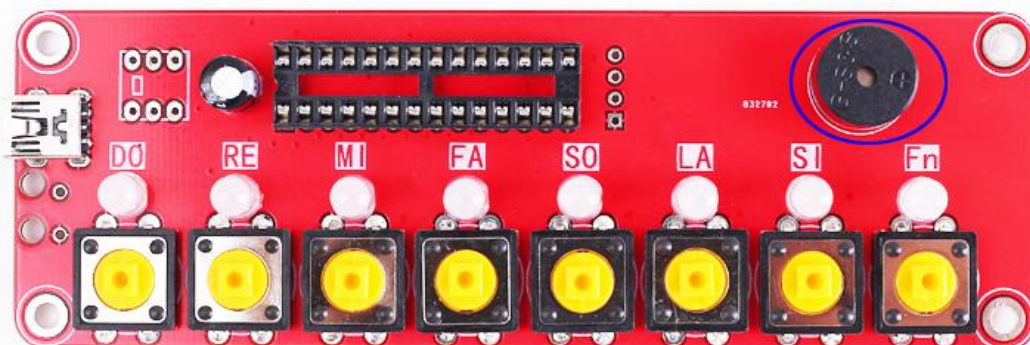




**Step 6:** Install 8pcs button at S2-S9.

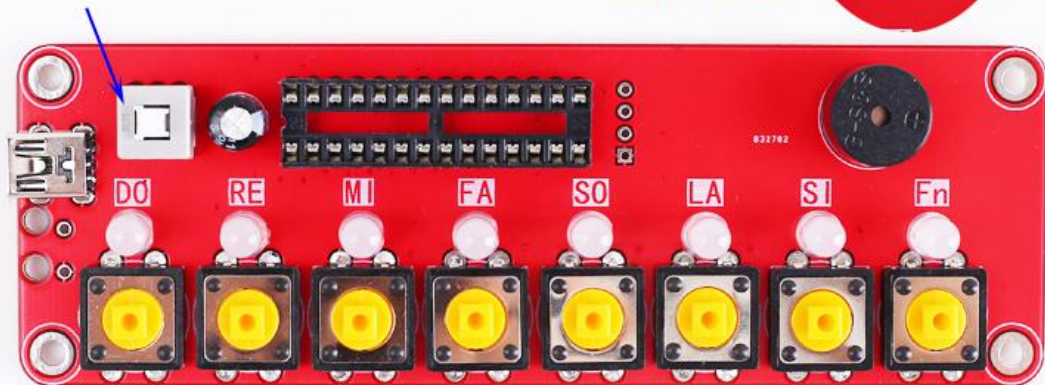


**Step 7:** Install 1pcs Passive Buzzer at B1.  
Pay attention to distinguish between positive and negative. There is a mark + on buzzer means the corresponding pin is positive pole.



**Step 8:** Install 1pcs Self-Locking Switch at S1. Please pay attention to the installation direction.

Marked



**Step 9:** Install 1pcs DIP-28 STC15W408AS at U1 on IC Socket. Must not be installed reverse, otherwise it will not work properly. Please ignore this step if the chip is already installed in Step 3.





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**Step 10:** Install 1pcs red button cap on Self-Locking Switch and 8pcs yellow button cap on button.



**Step 11:** Mounting screws and copper posts.

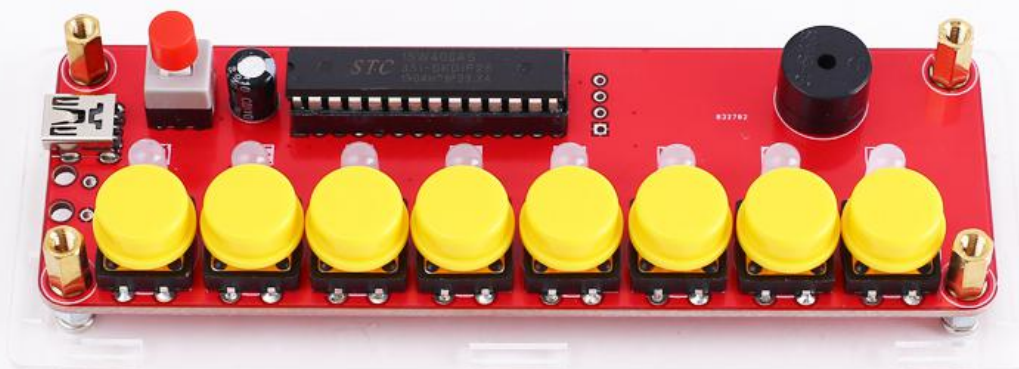


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**Step 12:** Install the acrylic case.  
User can also not install.  
Tear off the protective film on the acrylic surface.



**Step 13:** Fixed base acrylic.

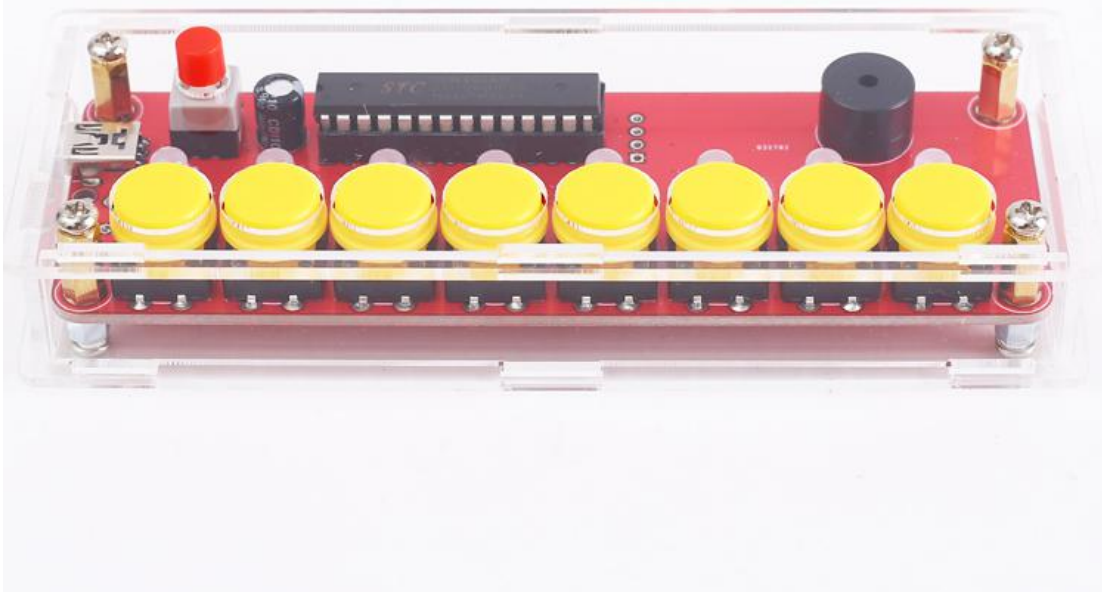


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Step 14: Place the surrounding acrylic.



Step 15: Fixed upper acrylic.





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**Step 16:** Turn on the power and enjoy the effect.

