

How to assemble Black Mirror LED Matrix Desktop Alarm Clock Kit

Please carefully read the entire production process and then do it will be better!

First talk about the need to pay attention to the problem before soldering.

1. Soldering temperature below 320 °C, the soldering iron temperature can not be too high.
2. Recommended soldering iron to be grounded and the best is to wear electrostatic bracelet grounding to solder, soldering speed as quickly as possible, or easy to damage the LED dot matrix screen.
3. Make use of high-quality solder with better liquidity.

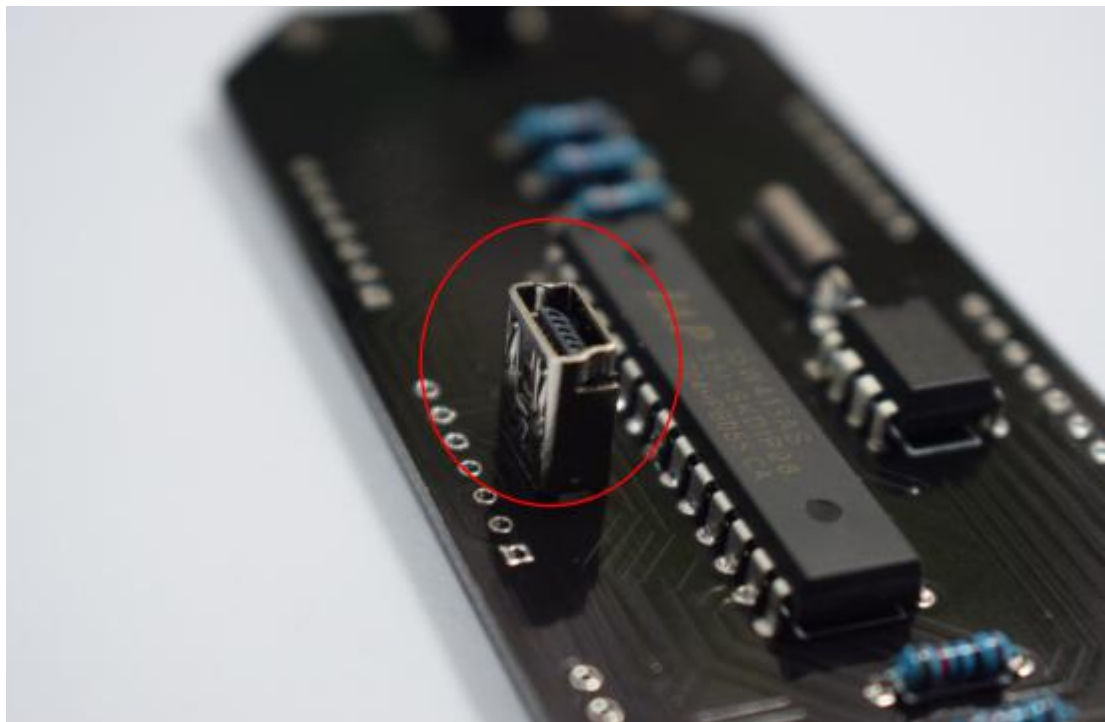
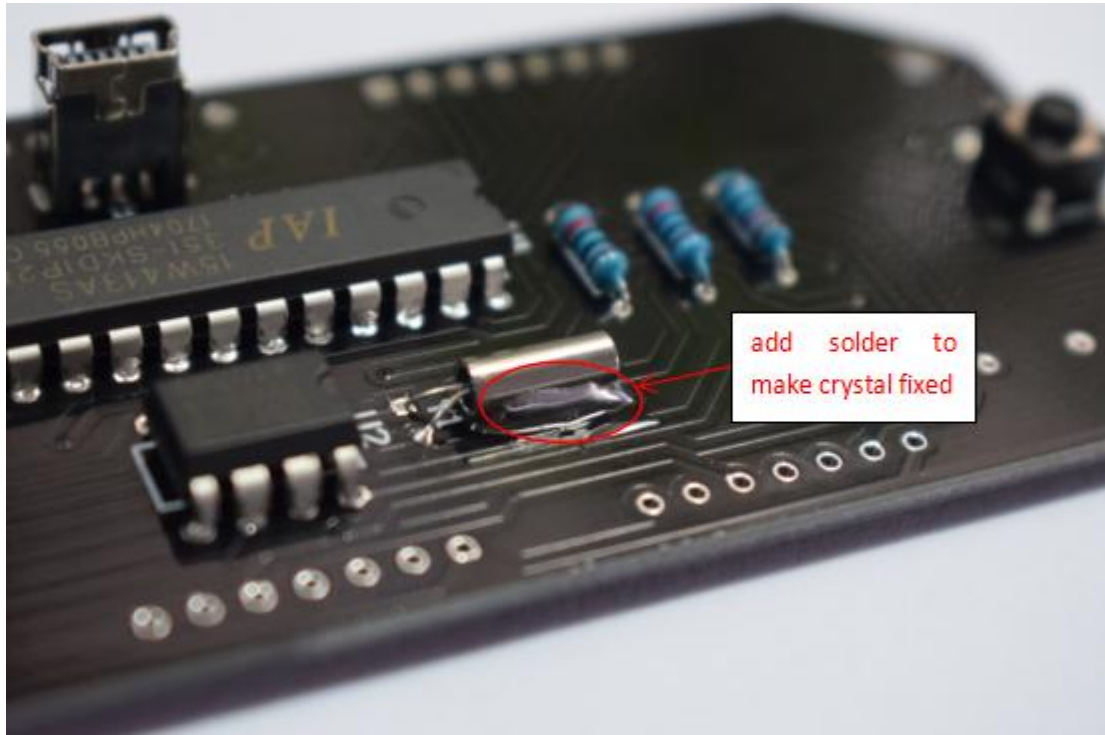
This kit is designed with DIP devices, and soldering is very easy, even for electronic beginners.

We first solder the device on the back of circuit board, just need to see the corresponding position, as shown below:

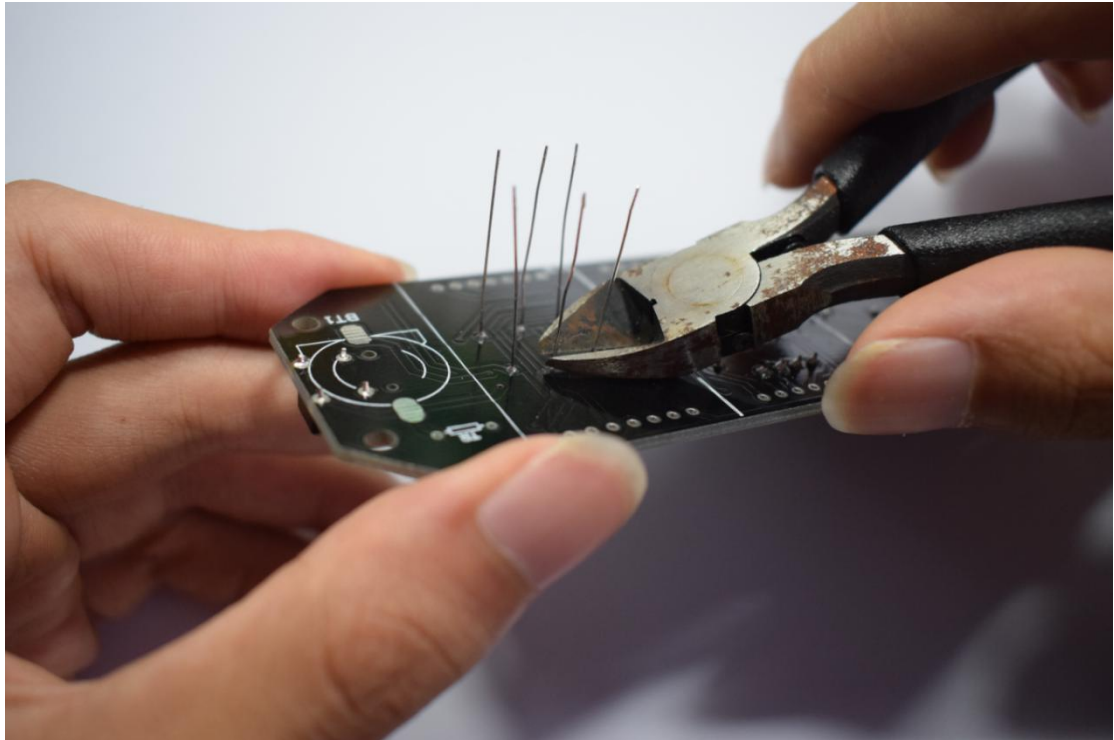
R1-R6: 10K resistance U1: IAP15W413AS U2: DS1307
J1: mini USB socket Y1: 32.768K crystal Key1-Key2: Press the key



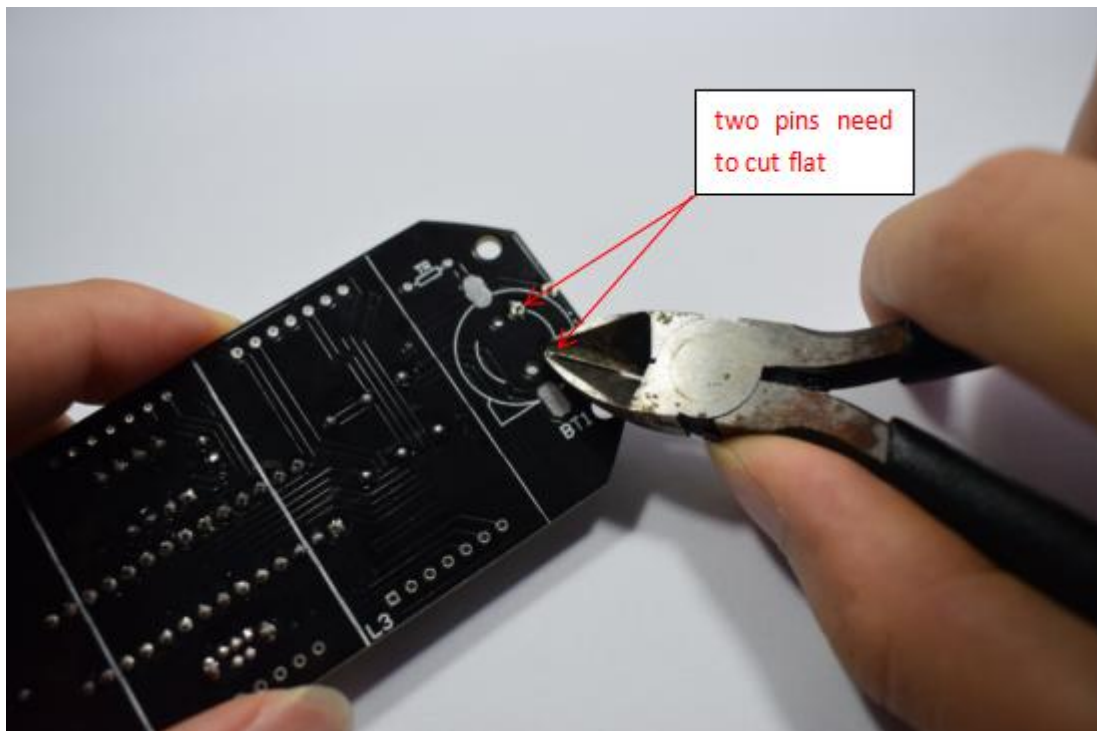
After soldered on the back of all the devices, there are two places to note: firstly, 32.768KHZ crystal metal body need to solder and fix to the pad, secondly, miniUSB socket is needed to be soldered straight:



Then we turn to the front of the circuit board, Cut off the excess pin.

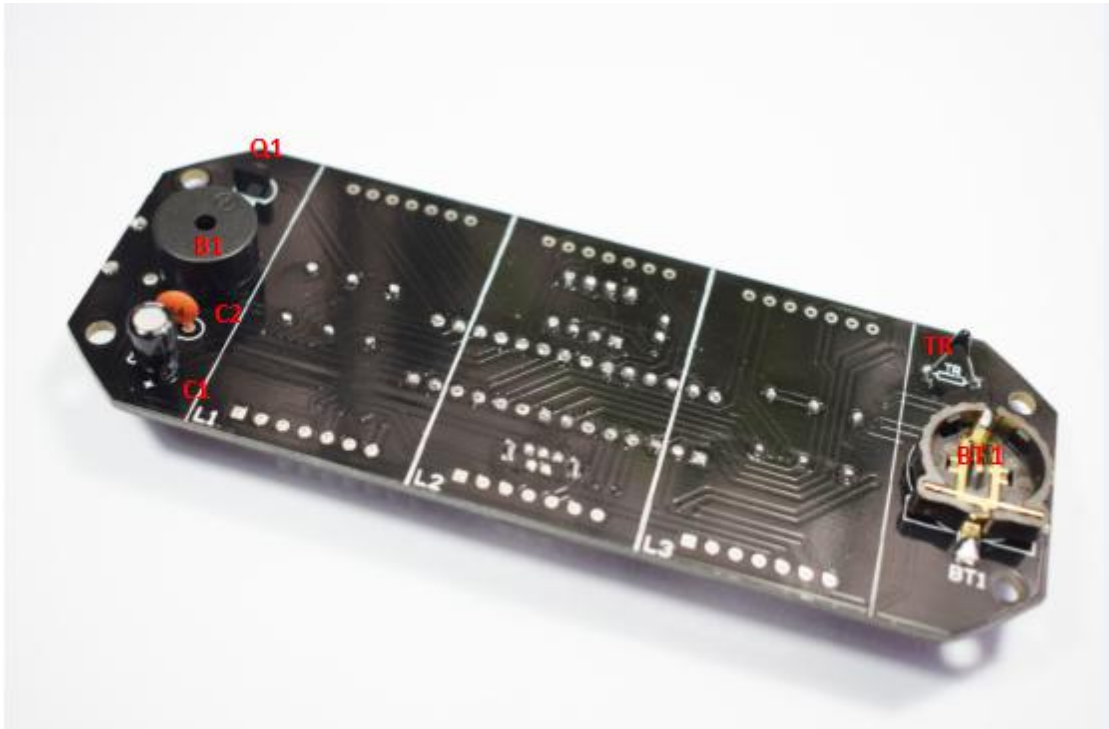


The following figured with red circle position need to cut a little bit, try to cut, to make the next battery holder easy to solder.

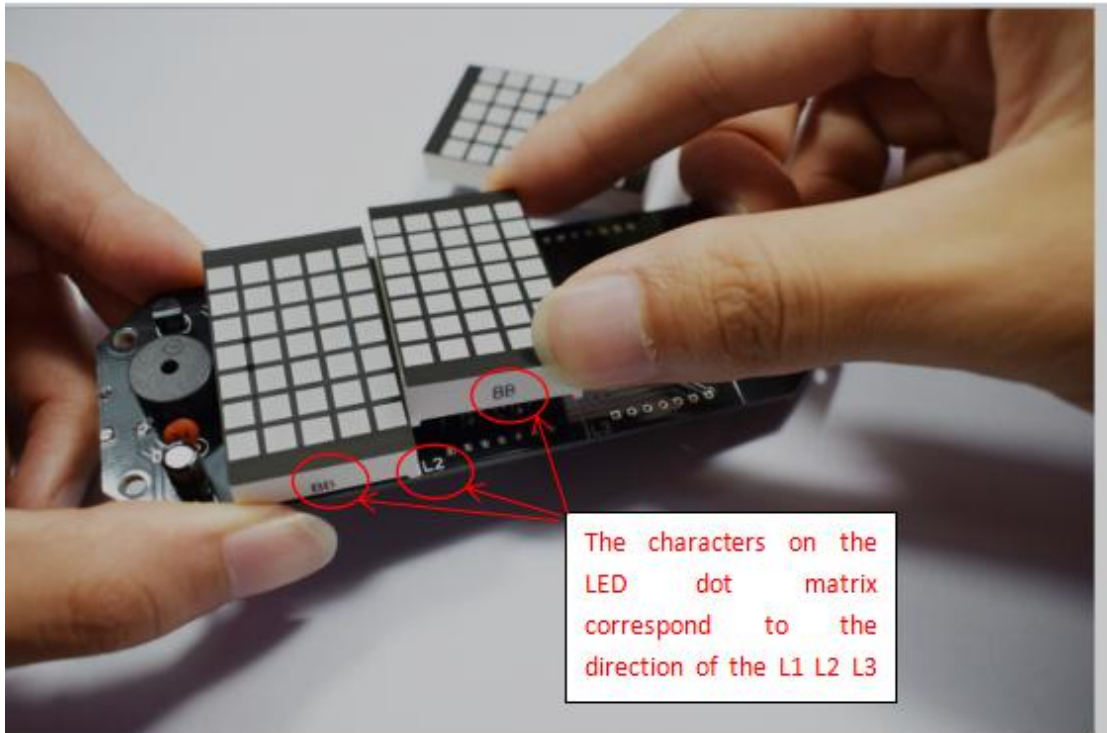


Other components soldering look to the next picture:

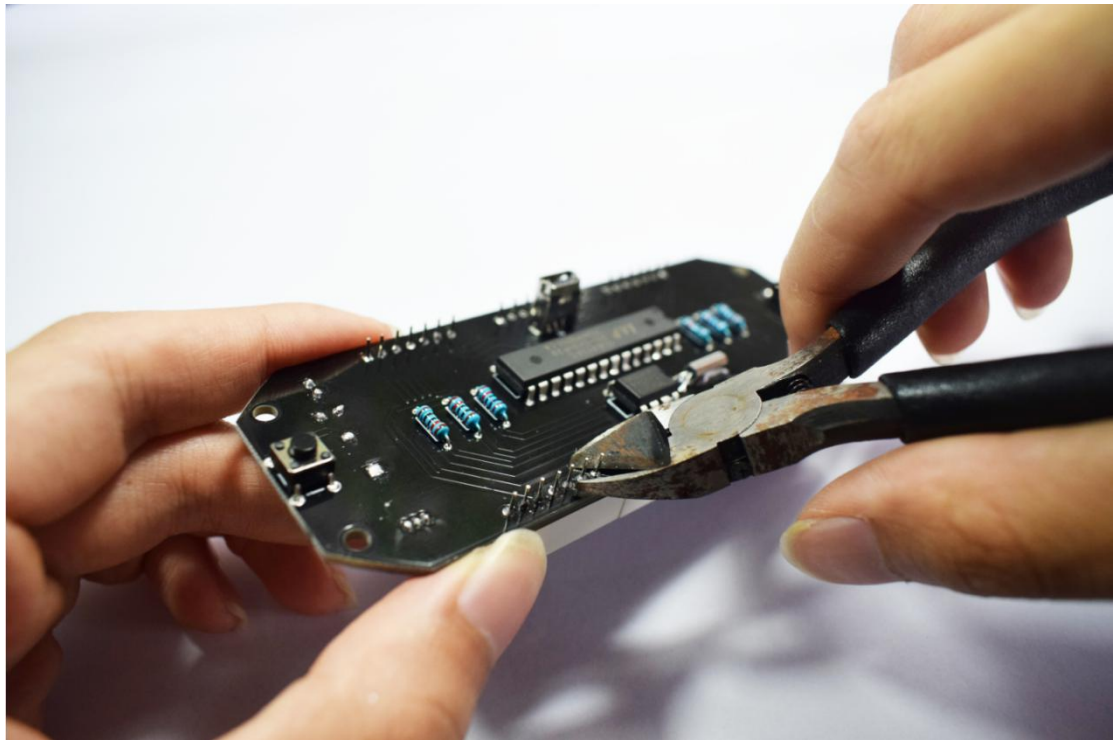
Q1: 9012 Transistor (Note not to reverse it) B1: Buzzer (buzzer long pin corresponds to square pad) C2: 104 Ceramic capacitor C1: 100UF electrolytic capacitor (long leg corresponds to positive) TR: Thermistor BT1: CR1220 battery holder



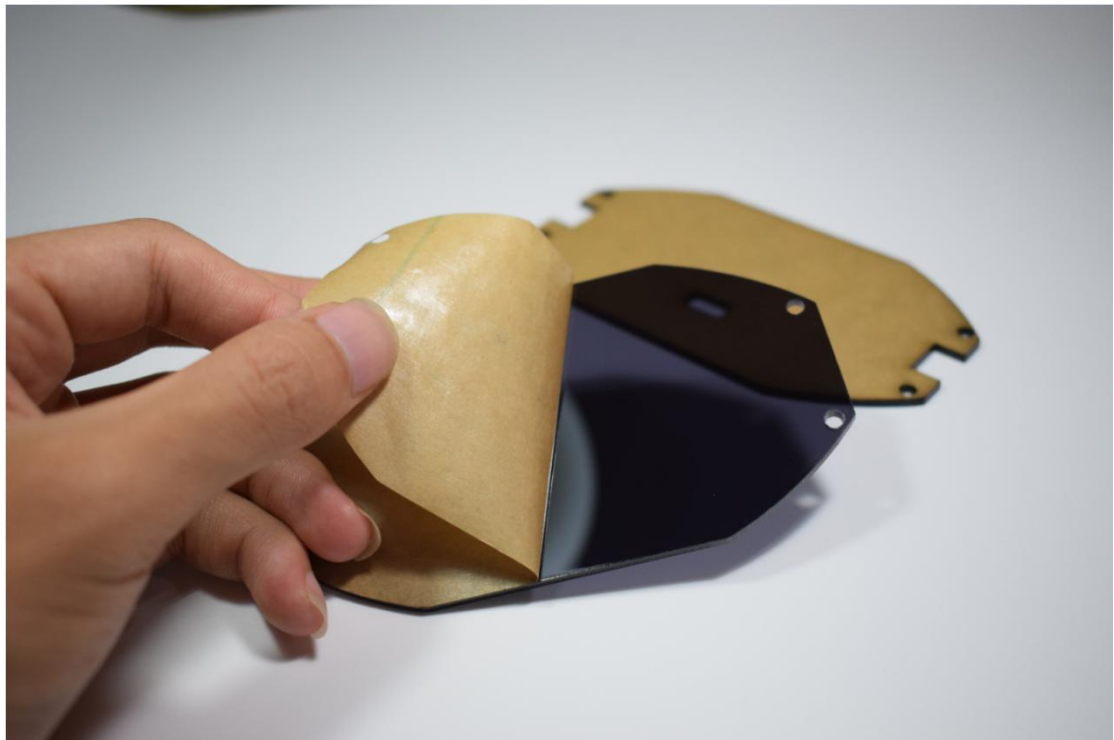
The following soldering the remaining three LED dot matrix, LED dot matrix above the corresponding characters printed on the circuit board L1 L2 L3 direction, the three matrix are such soldering treatment, while soldering attention that LED matrix should try to keep a little bit of each other, Try not to leave the gap as shown below:

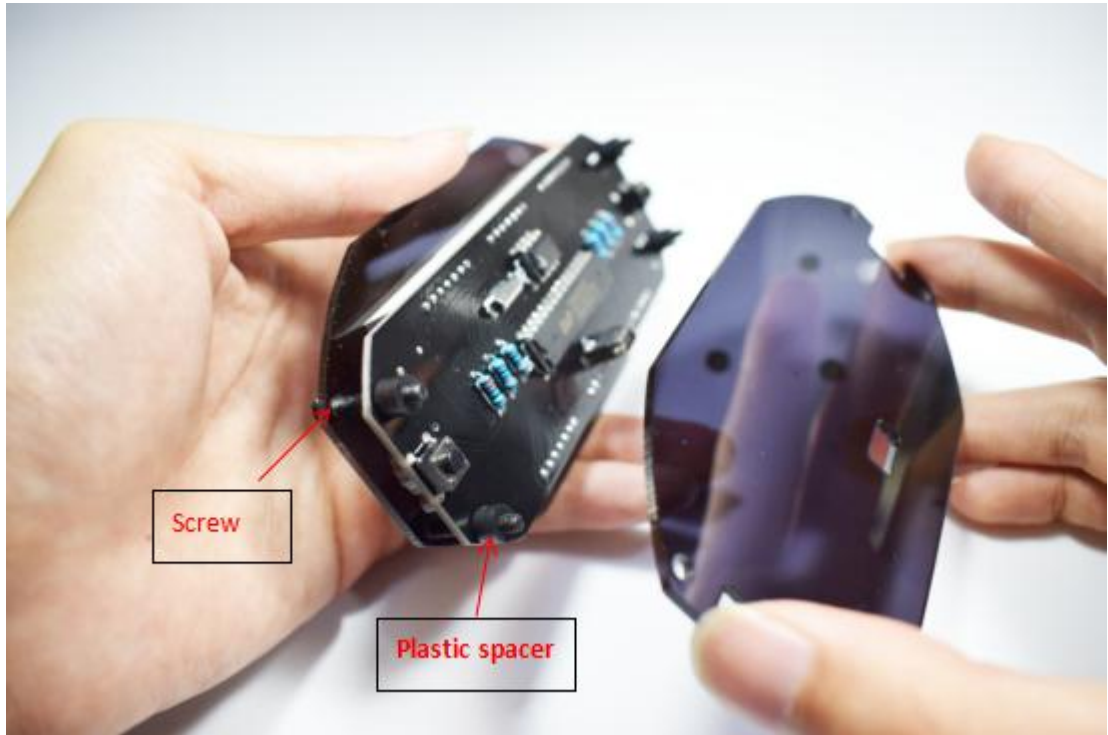


After soldered LED dot matrix cutting off the excess pin, as shown below:



Then we installed the acrylic panel, first tear off the acrylic protective film:







Function:

Long press the Confirm button(Left key) to enter or exit the menu functions list.

Short press the Next key(Right key) to select the different functions,the functions menu has TIME(Time setup),DATE(Date setup),ALARM(Alarm setup),FONT(Font type),DISP(Set transition animation),Midp(Middle point turn effect),FMT(Set 24/12H format),BRH(Set the date of birth remind),Brig(Brightness).and then press the Confirm button(Left key) to enter in parameters mode.

Short press the Next button(Right key)When shows the Temperature it can switch the Fahrenheit and Celsius format.

Parameters:

- 1、 Alarm setup:ON-turn on the time alarm and enter the parameters mode;OFF-turn off the time alarm;
- 2、 Font Type:Type:1-5;
- 3、 Set display animation effect: 1-Scroll left mode; 2-Sweep mode; 3-Single Fall Down mode;

4-Flip mode; 5- Time only;

4、 Middle point turn effect: 1-Converge Middle mode;2-Up and Down Miss mode;3-Up and Down Move mode;4-Lit Per Second mode;

5、 Time format: 24H-24h time format; 12H-12h time format;

6、 Set the date of birth remind : ON-turn on the birth remind and enter the parameters mode;OFF-turn off the birth remind;

7、 Brightness of tubes: level:1-5;