NiCiClock

IV-11 VFD Clock available at rgbledcube.com

Quick instruction for assembly the IV-11 VFD Clock
Not suggest to print it, it may still going to update online.

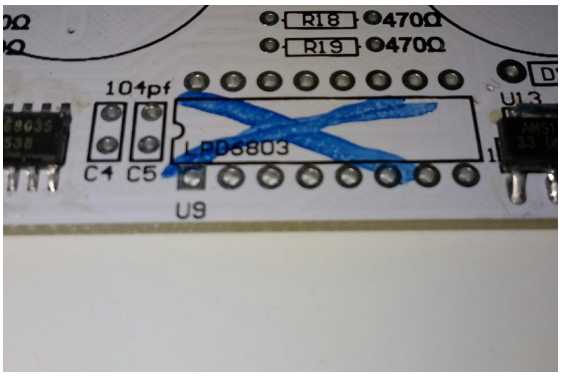
Store
https://rgbledcube.com
ebay.com and ebay.co.uk
Facebook Page
https://www.facebook.com/NiciClock/

Soldering

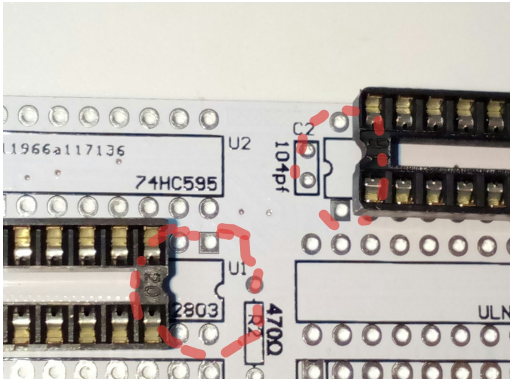
You can see the marking/label on the PCB actually tells which parts goes where, and which direction should be. if you need more reference on the way to put the parts, here is the original photohttp://www.instructables.com/files/orig/F81/TSNE/I...

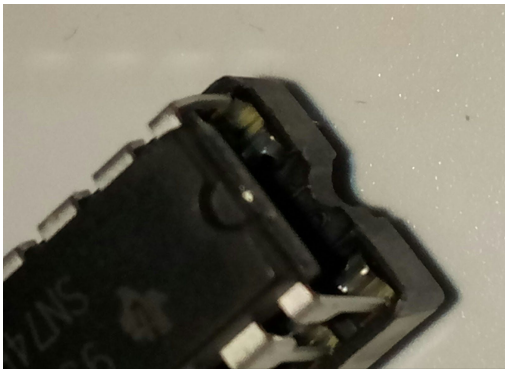
There are 3 smd parts, which soldered before shipping, else you have to solder it with iron and some solder flux for the leds, because the led pins is too close to each other, you better have some flux

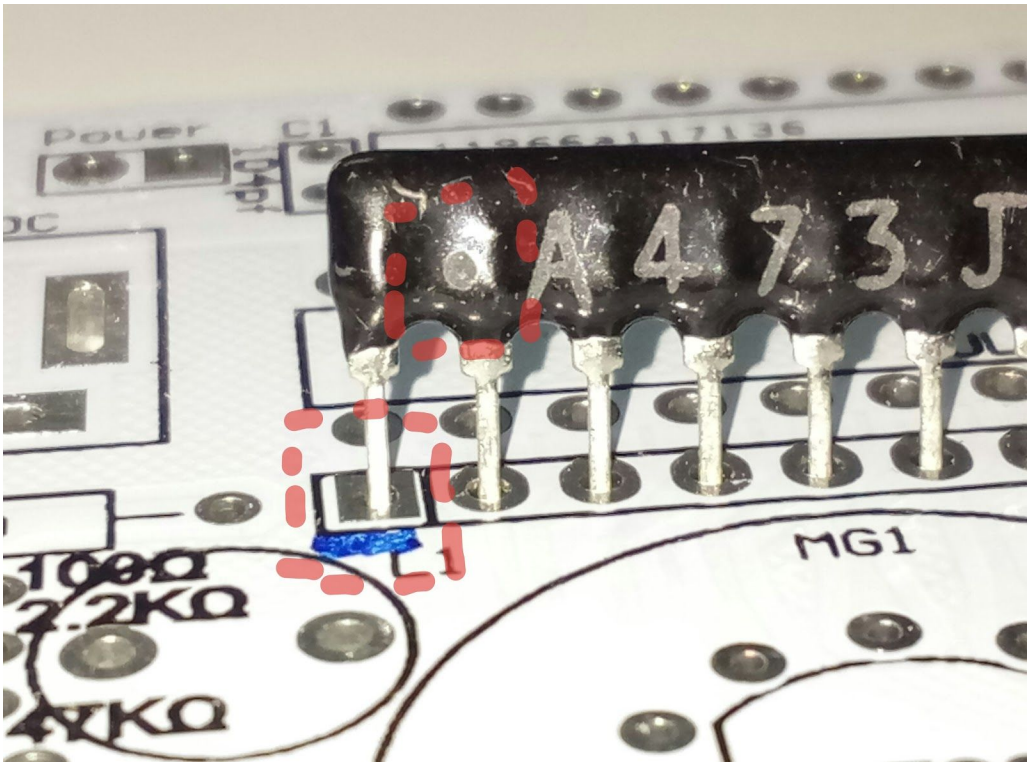
1. Solder the leds before the VFD tube, the longest led pin get into the rectangle through hole.
2. The "power" connector with two through hole need to connect/shorted
3. The MCU (U17) has program in it, it will work when power on.
4. U9 and 5B16 parts are removed and no need to solder as show on the pictures.
5. Cut 1-10mm uneven length of the VFD tube pin will help easy insert to the pin hole.
6. The parts 1N5819 and 1N4007 look the same but solder in different place.
7. The longest pin of the led goes into the rectangle hole.
8. The 4 pin header are not included and no need to solder, they are not in use.



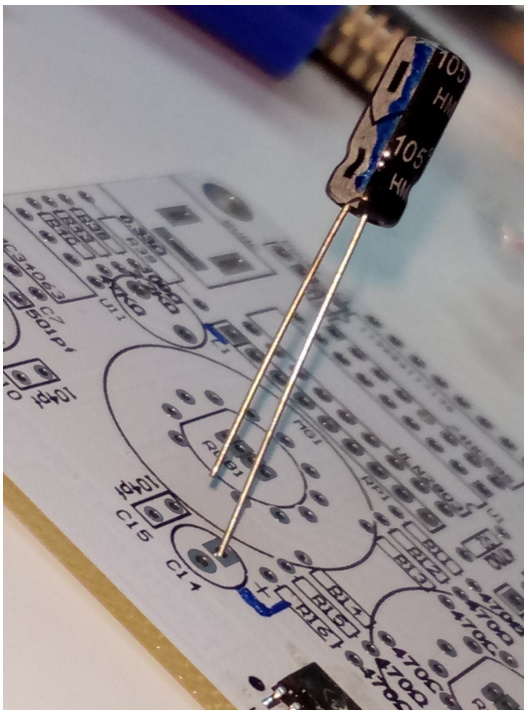
2 Parts no need to solder

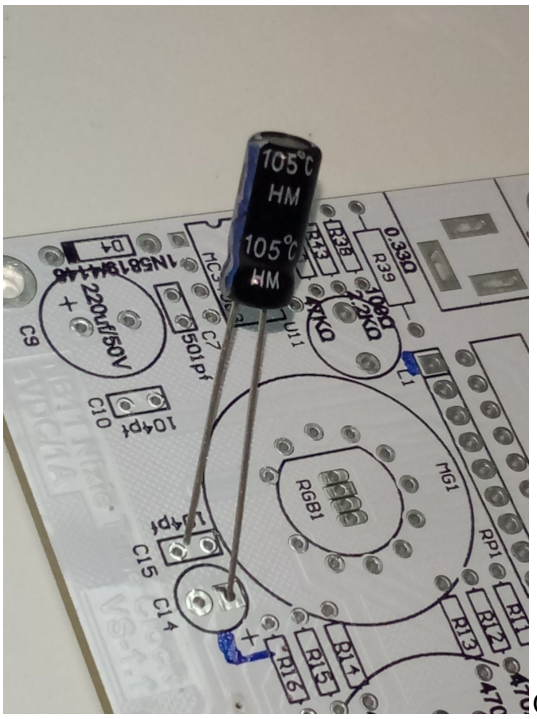




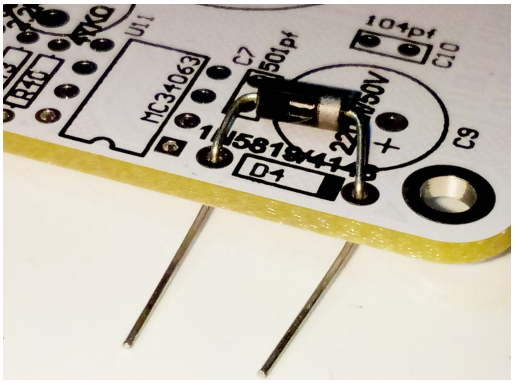


Orientation and Alignment

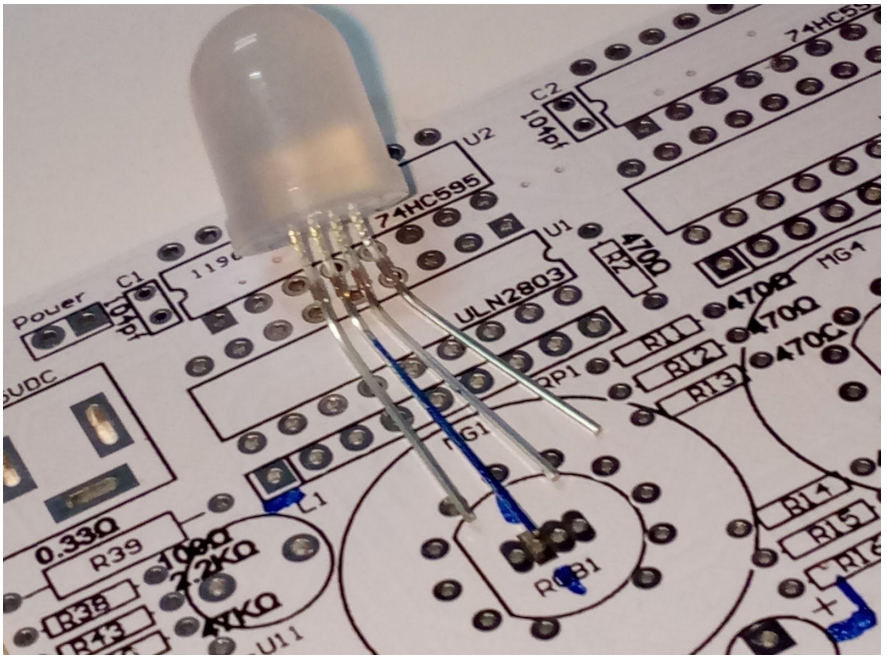


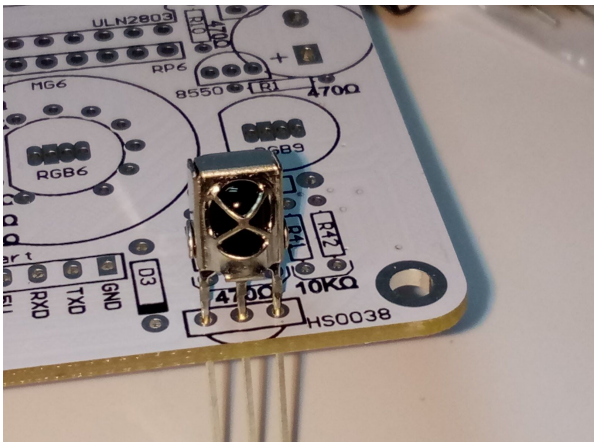


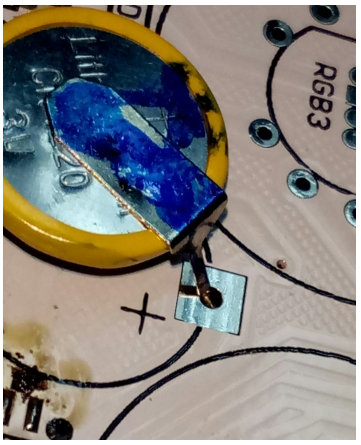
Orientation

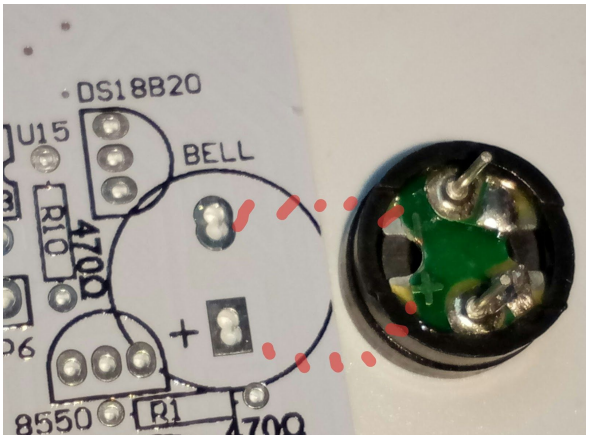


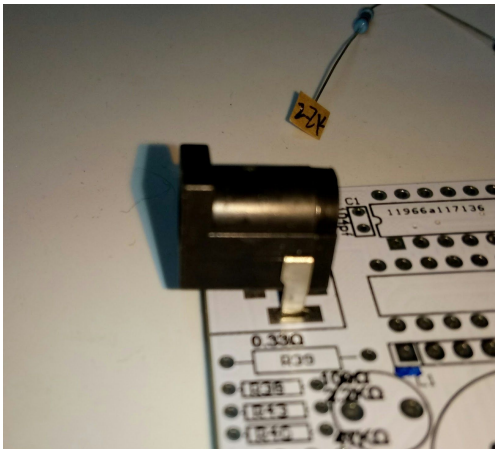
and Alignment

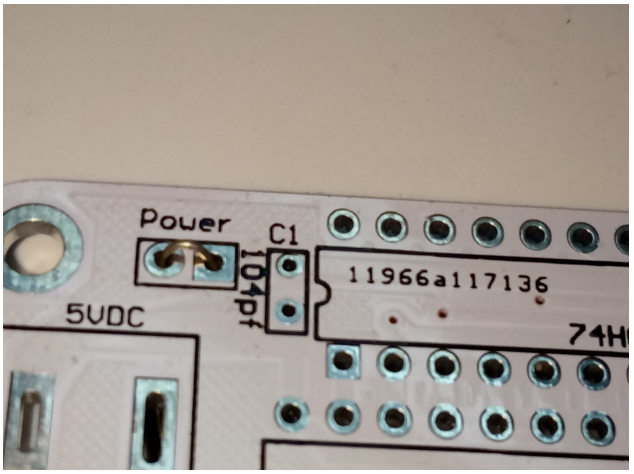


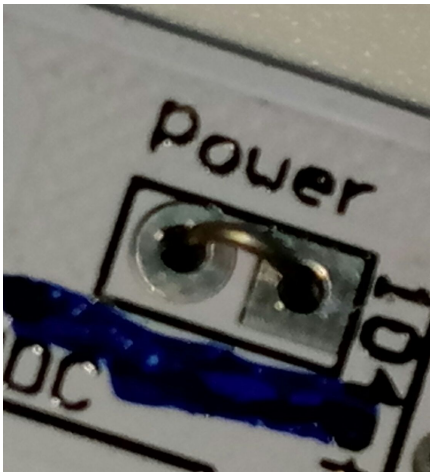




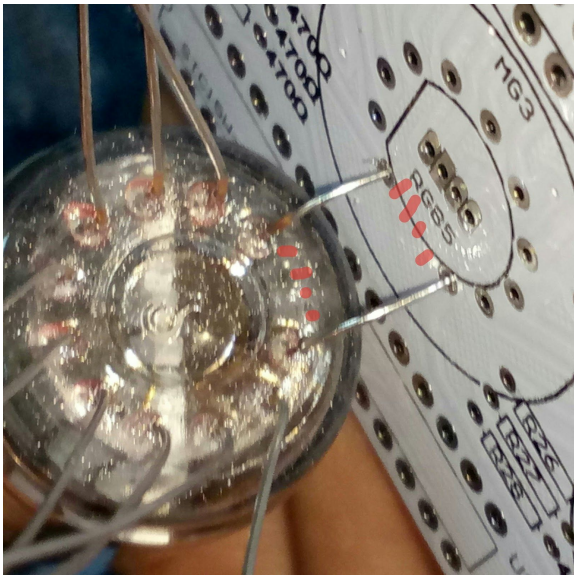
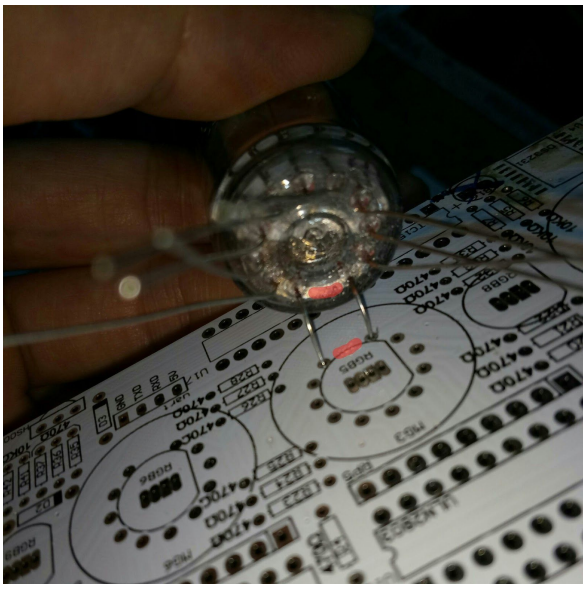








Solder to short this power through hole

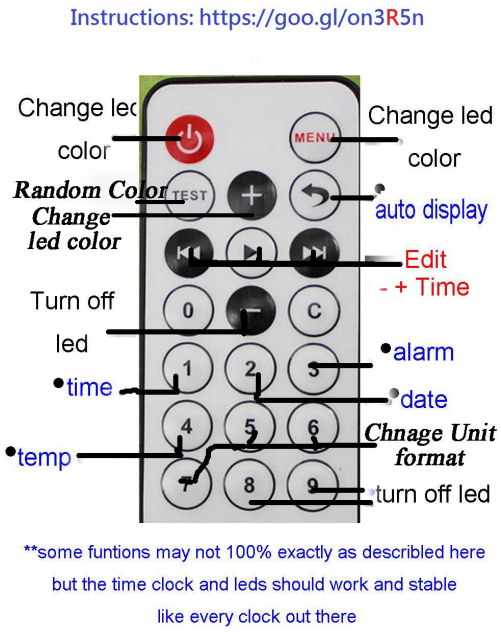



All the tube are same direction, align with that two pin.

Checking

-You need a 5V1A power source, 5V0.5A doesn't work. 5V2A is maxium.
-Check with the photo show above may be help easier.
-The "power" mark on the PCB I made it connected as the last photo show.
-The parts 1N5819 and 1N4007 look the same but solder in different place.
-RP1 to RP6 has a white dot, need align to the square solder hole

Remote



Battery may not included because of air shipping

update:

5 change YYMMDD MMDDYY DDMMYY

6 change Celsius/Fahrenheit

7 change 12/24 Hour

Tips

-Cut 1-10mm uneven length of the VFD tube pin will help easy insert to the pin hole.
-The parts 1N5819 and 1N4007 look the same but solder in different place.
-5V1A power source, 5V0.5A doesn't work. 5V2A is max

-The ds39b20 or ds18b20 is a temperature sensor, you may solder it with a cable connect out of the clock to avoid PCB and led light heat.

- The leds can’t solder with iron temp over 350`C or 662`F