

RTL.SDR DIY KITs

Installation instructions



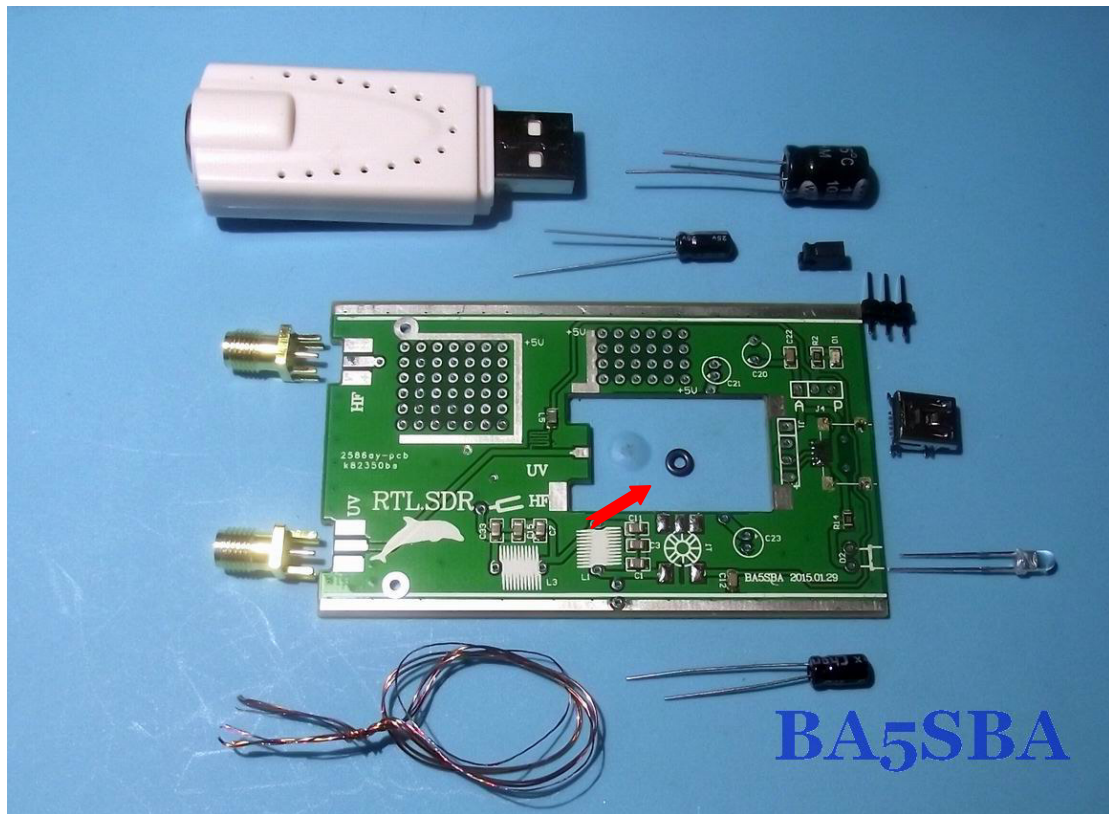
V2.01

Note the installation instructions apply only provided by the shop KITs.

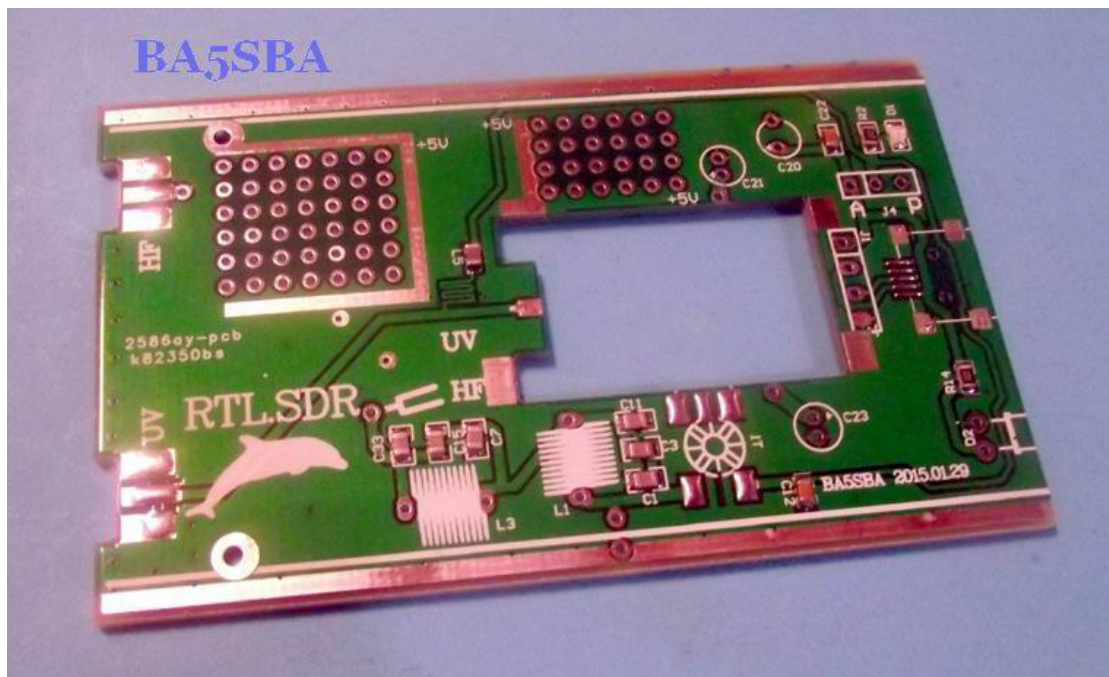
The note is not applicable to pirated KITs.

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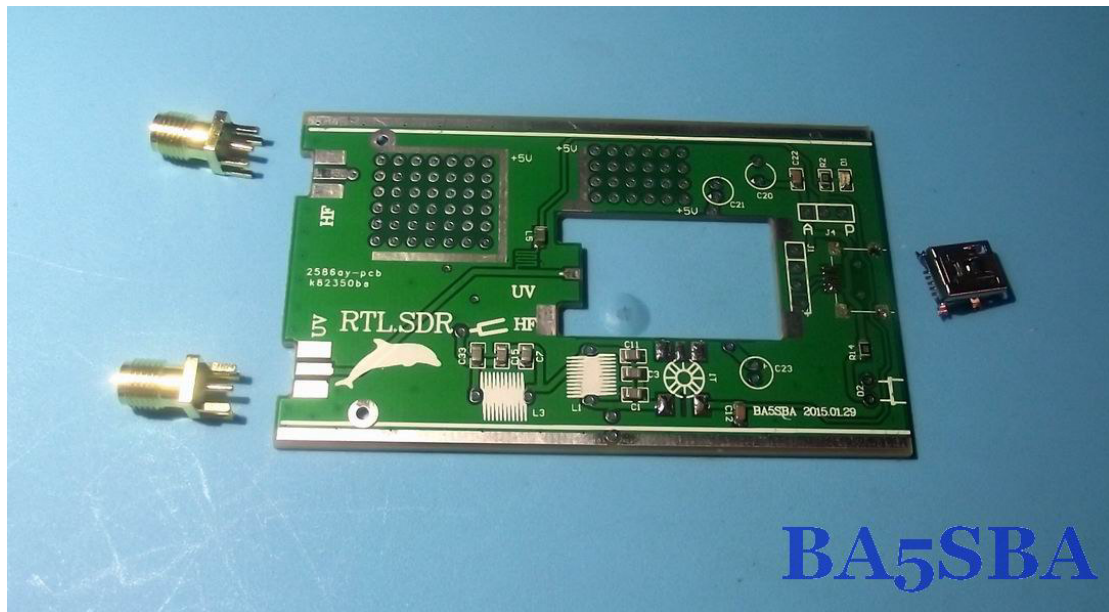
ba5sba@163.com



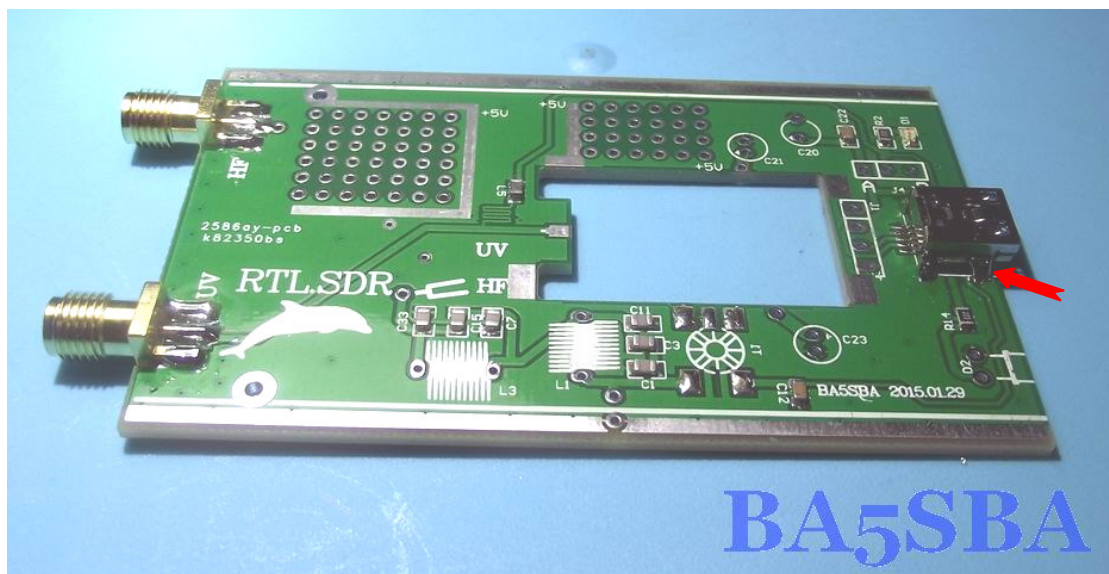
1; check the kits plastic bag all parts contrast images, attention to keep good in a small ferrite bead, don't lose it.



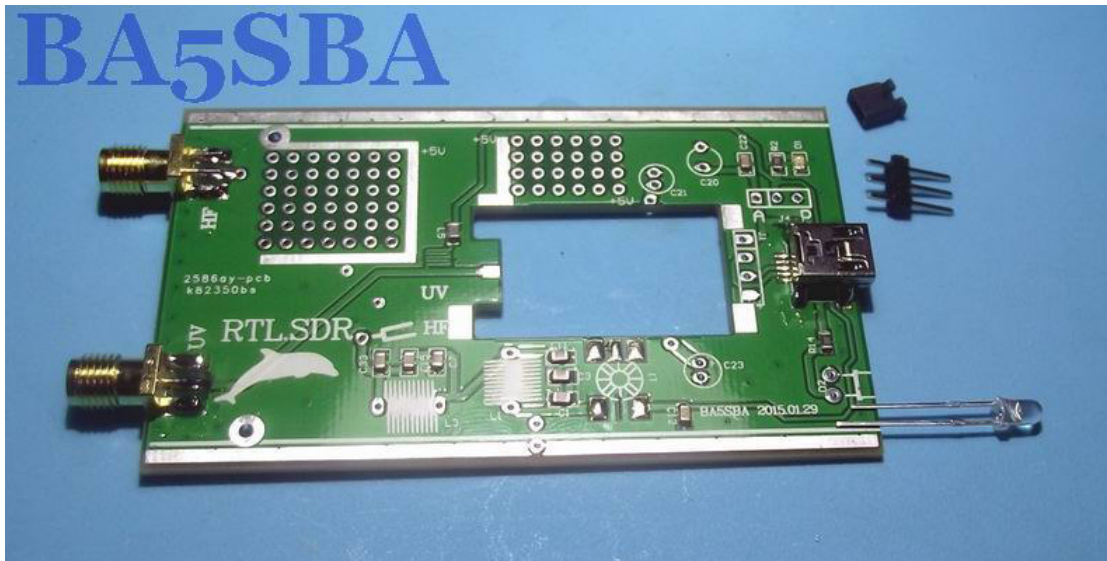
2; SMD components all 0805 package have welding is PCB, please check whether there is leakage solder and cold solder joint.



3; welding of SMA interface and miniUSB interface.

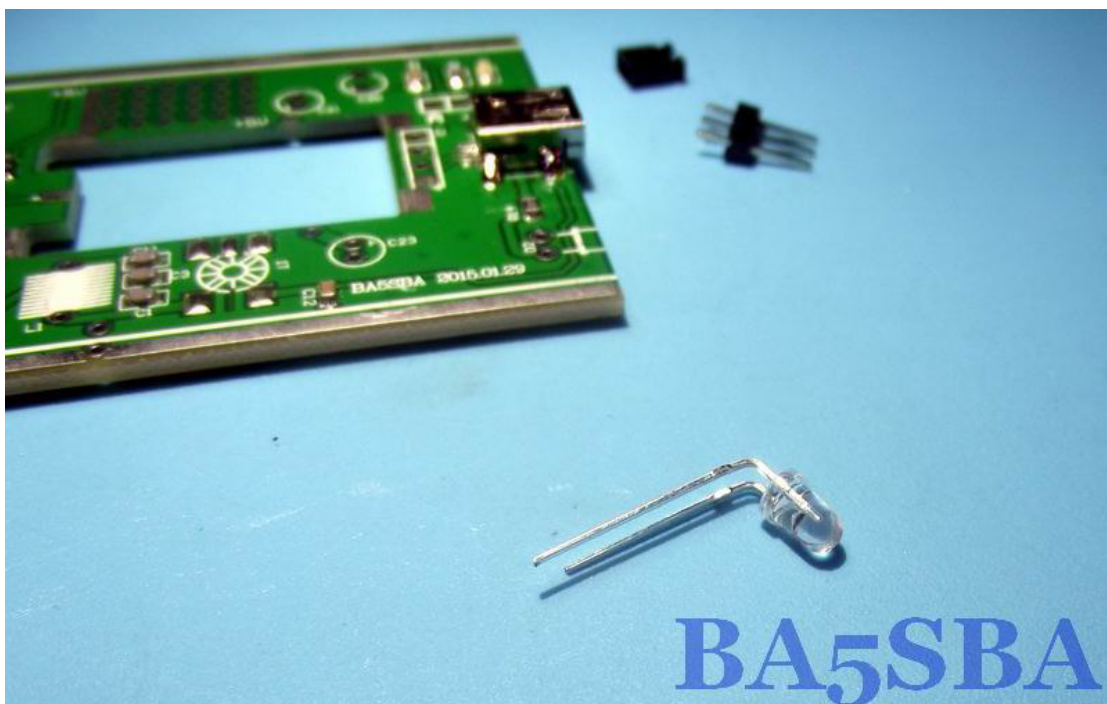


Note that, on the back of the SMA interface also to welding, fixed pin USB interface to welding firm

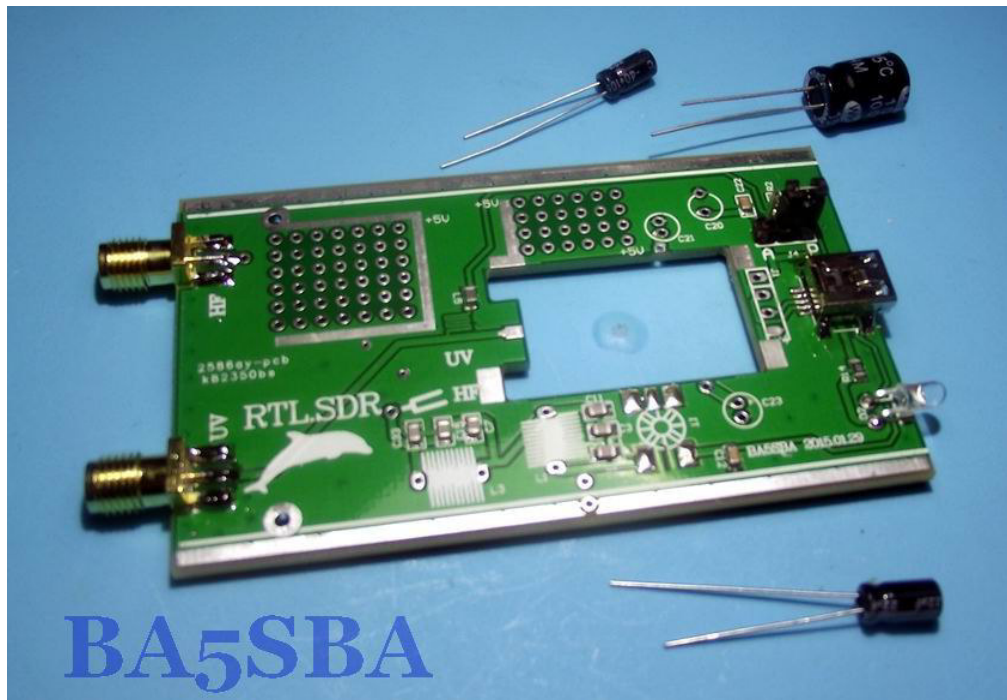


4; welding jumper and LED. Note, the long foot is LED positive.

【A】【P】 jumper circuit board inside is arranged to the active antenna for the power supply, connected to the 【A】 position, the red LED light, through the power output of the 5V to the antenna interface, power supply in active antenna amplifier. The default connection to 【P】 .



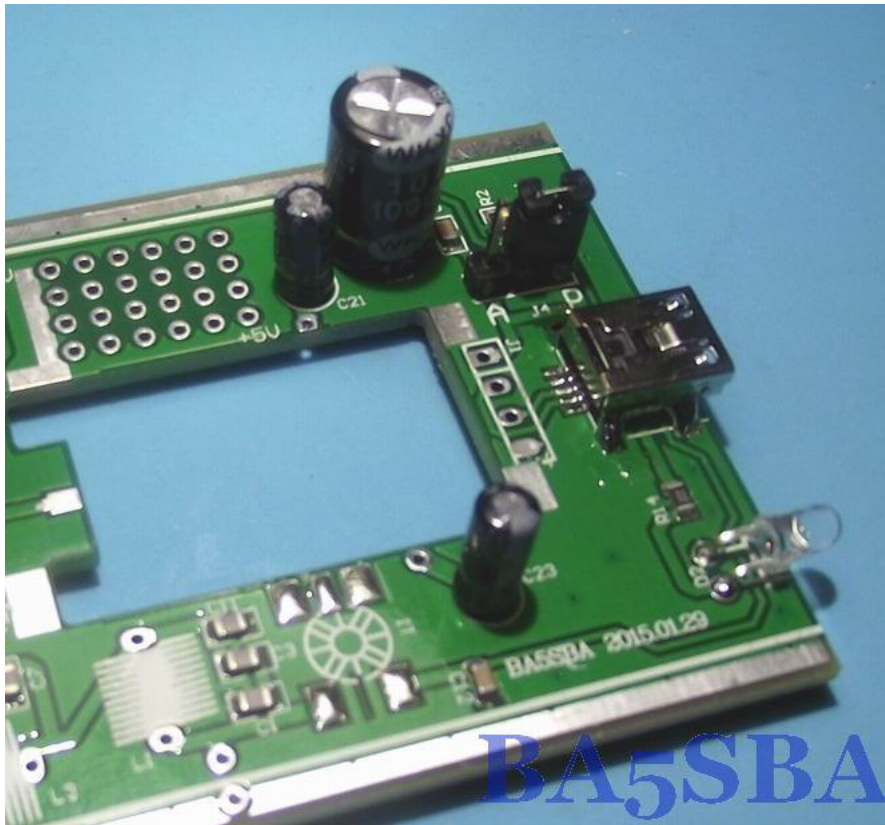
Pin bending direction of LED refer to the above picture, careful not to mistake or LED not bright.



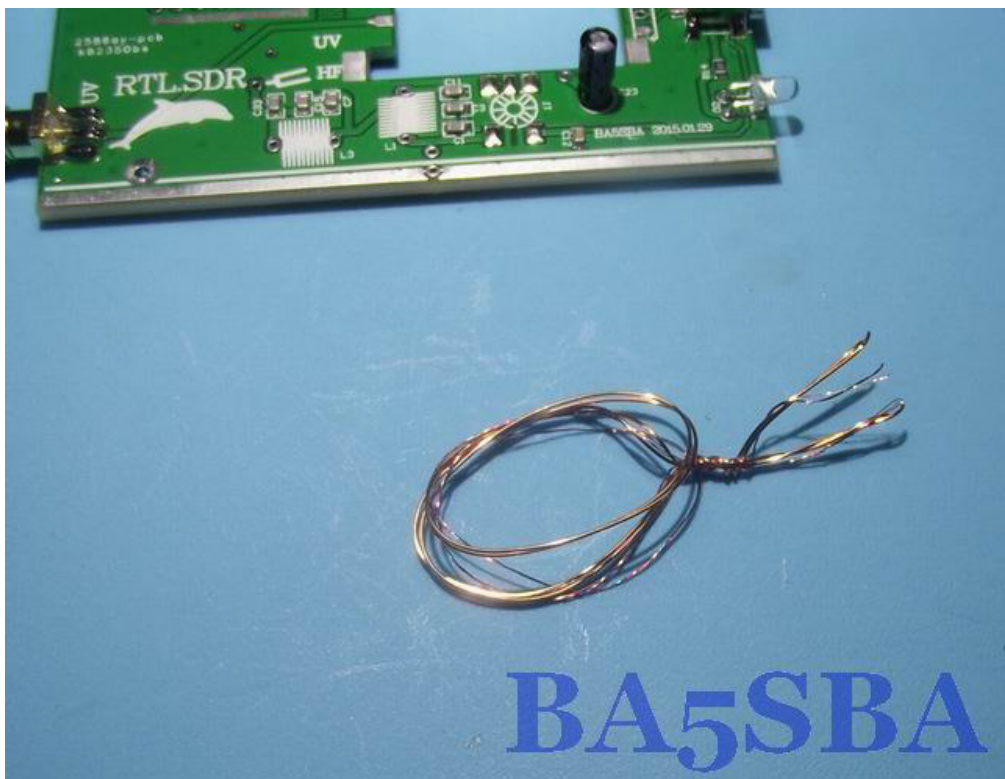
5; welding electrolytic capacitor, note capacitor polarity, long legs is capacitor the positive electrode. Do not reverse the welding.



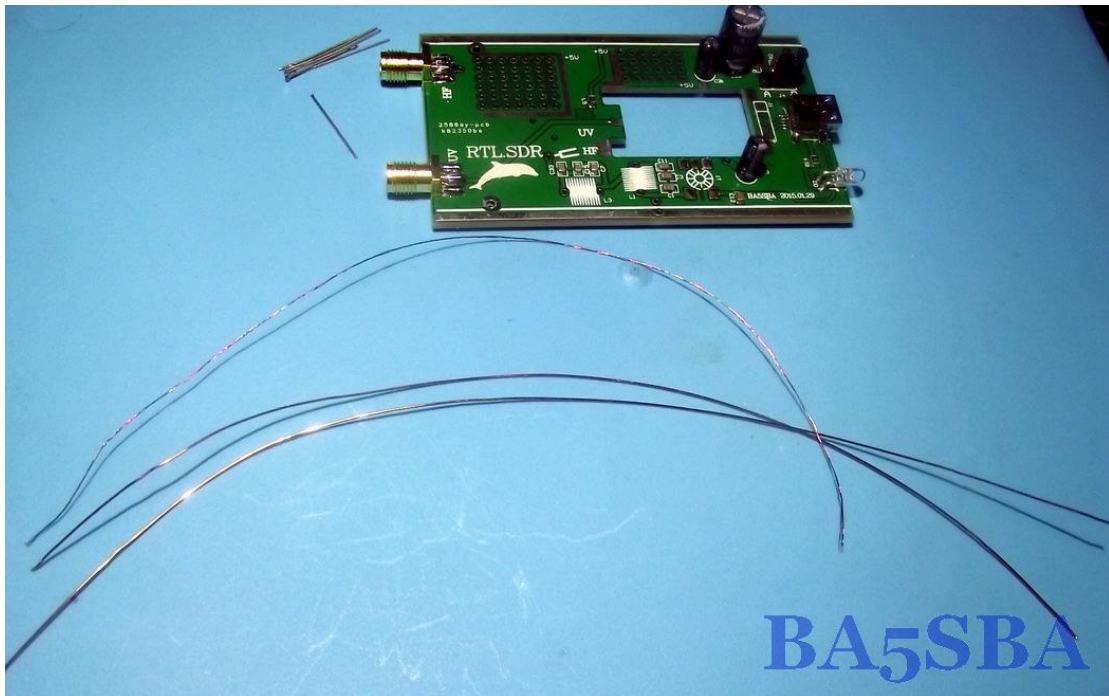
Note that the polarity of the capacitor refer to the above picture check. After welding, cut off the excess part, take good care of cut pins, later need to use.



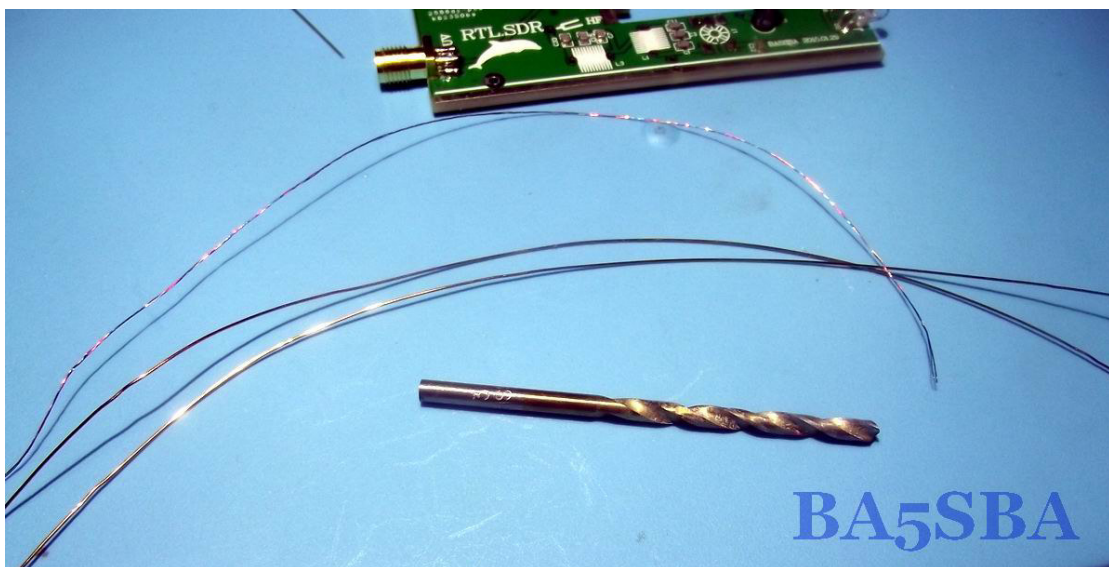
Note that the polarity of the capacitor refer to the above picture check.



6; inductance coil winding and installation. Pictured above is provided
KITS enameled wire, please open it tidy.



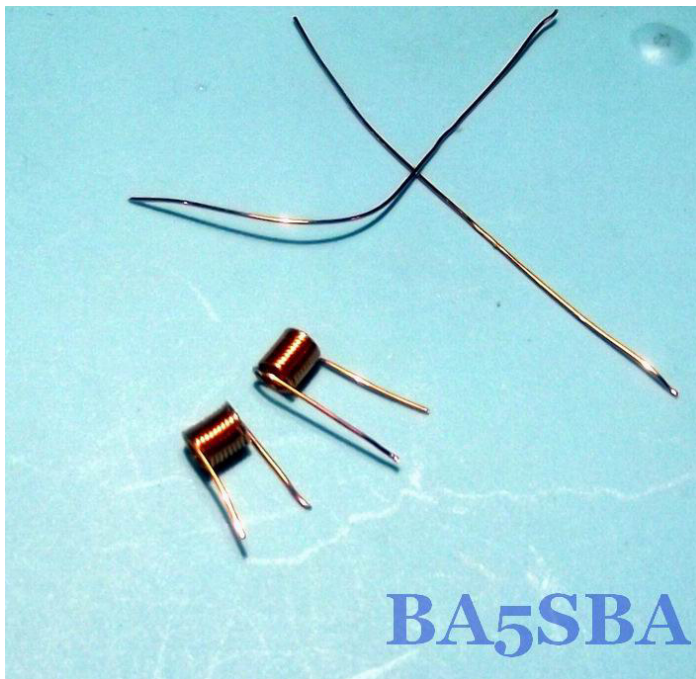
Finishing a good.

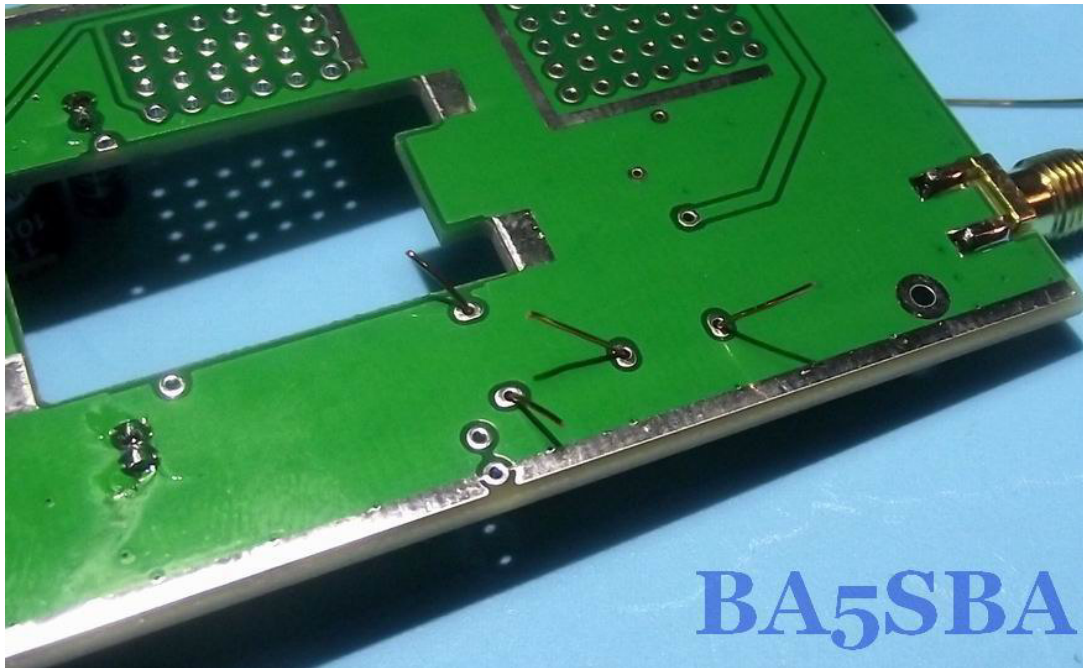


Please find a diameter of 3 mm of objects, such as the drill, screwdriver, here are using a 3mm drill bit.。



Envelope with paint in the 3mm drill bit, around 11 turns. Cut off excess.

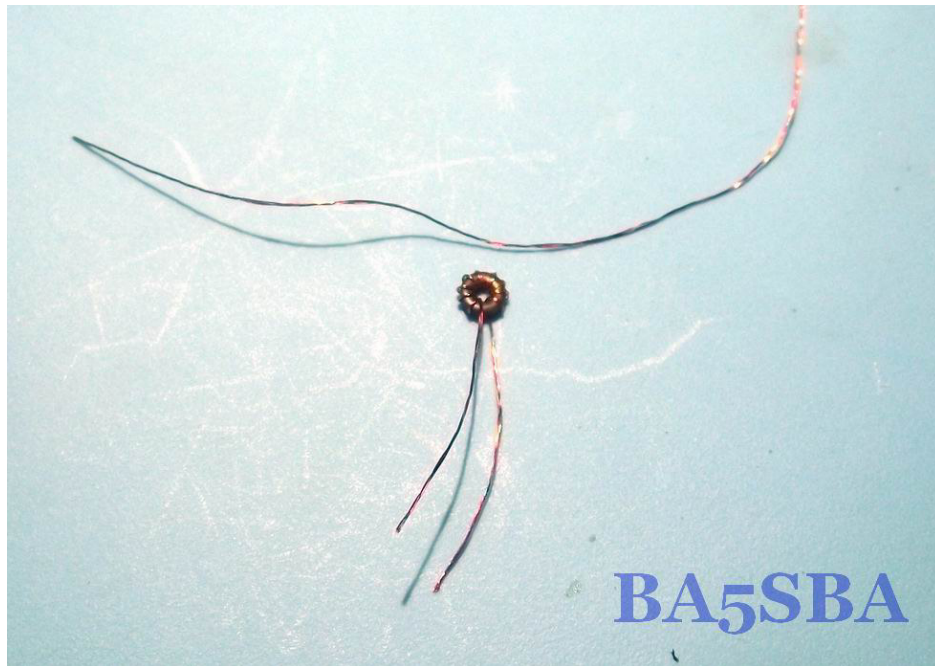




Installation position of the coil, provides the enameled wire can be directly welded enameled wire.

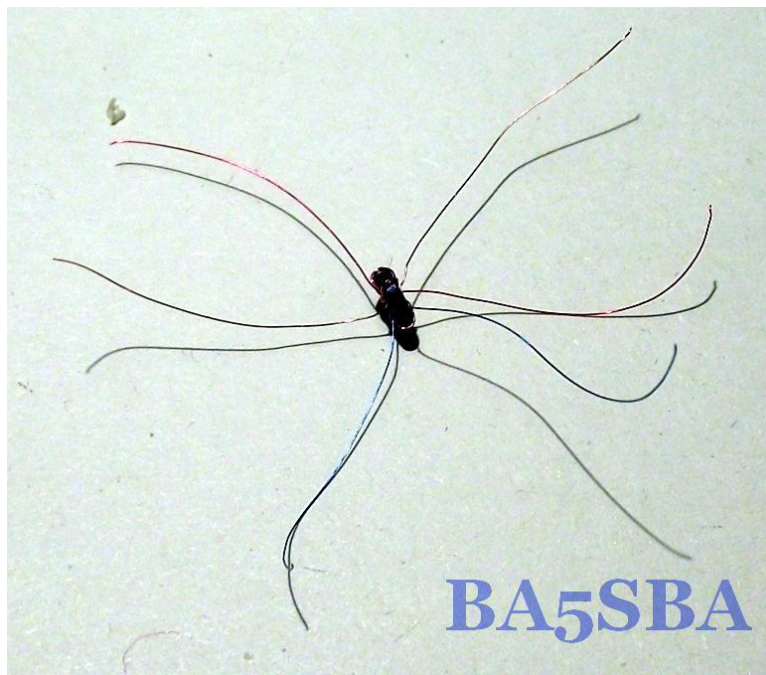


7; production of RF impedance of transformer. Please find the ferrite bead and three color enameled wire.

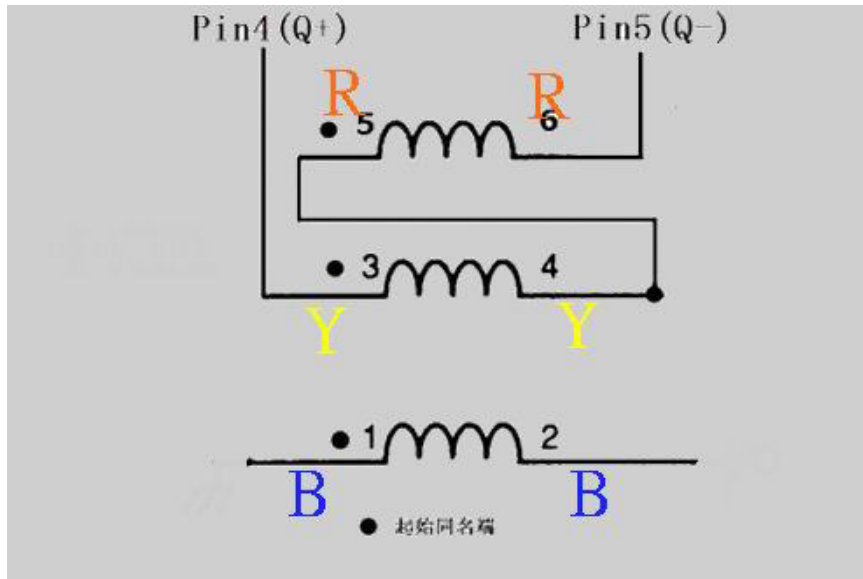


On the magnetic ring to wear around 9 turns with tricolor enameled wire.

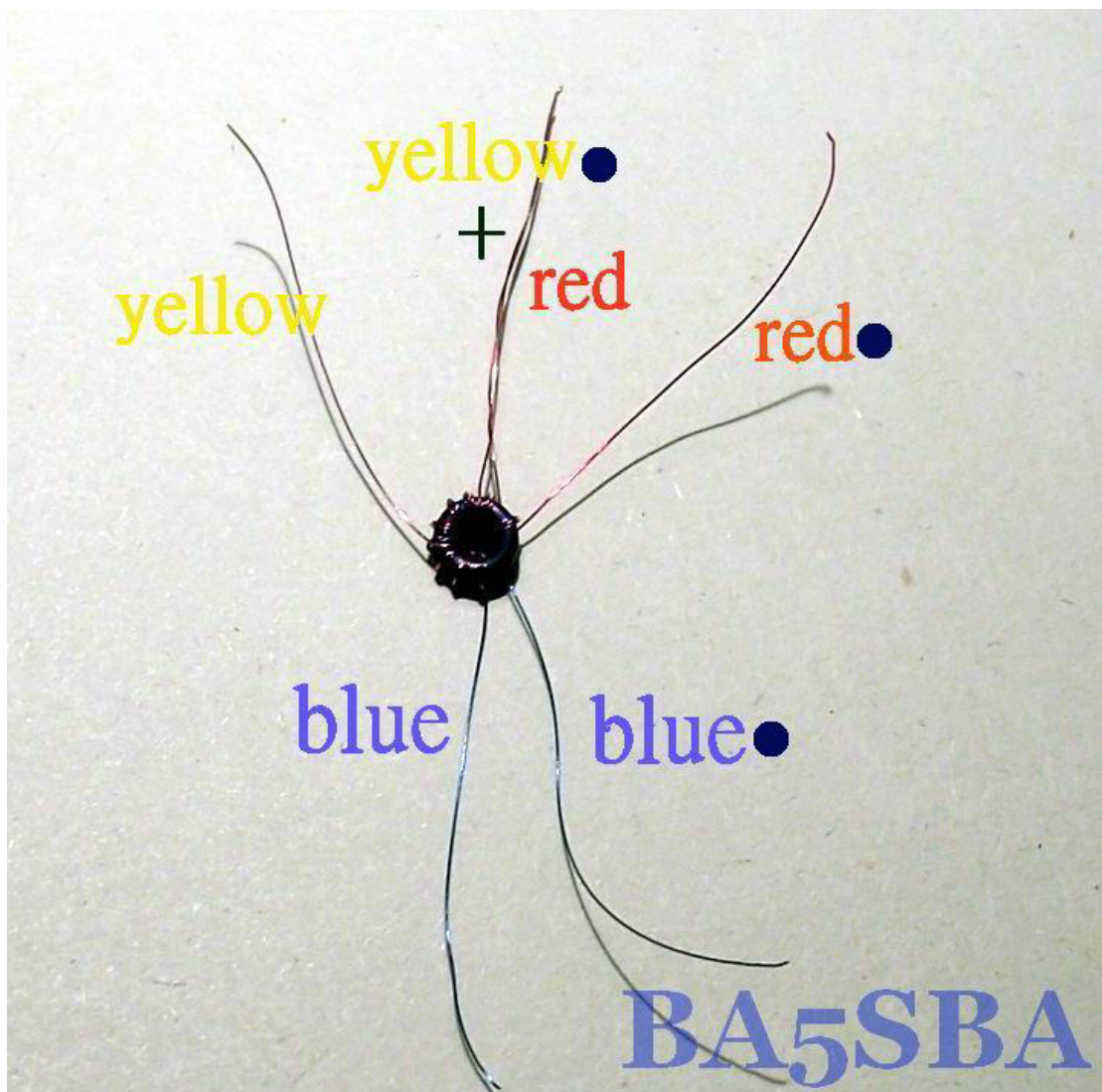
Cut off the excess, take good care of the excess part, will also use.

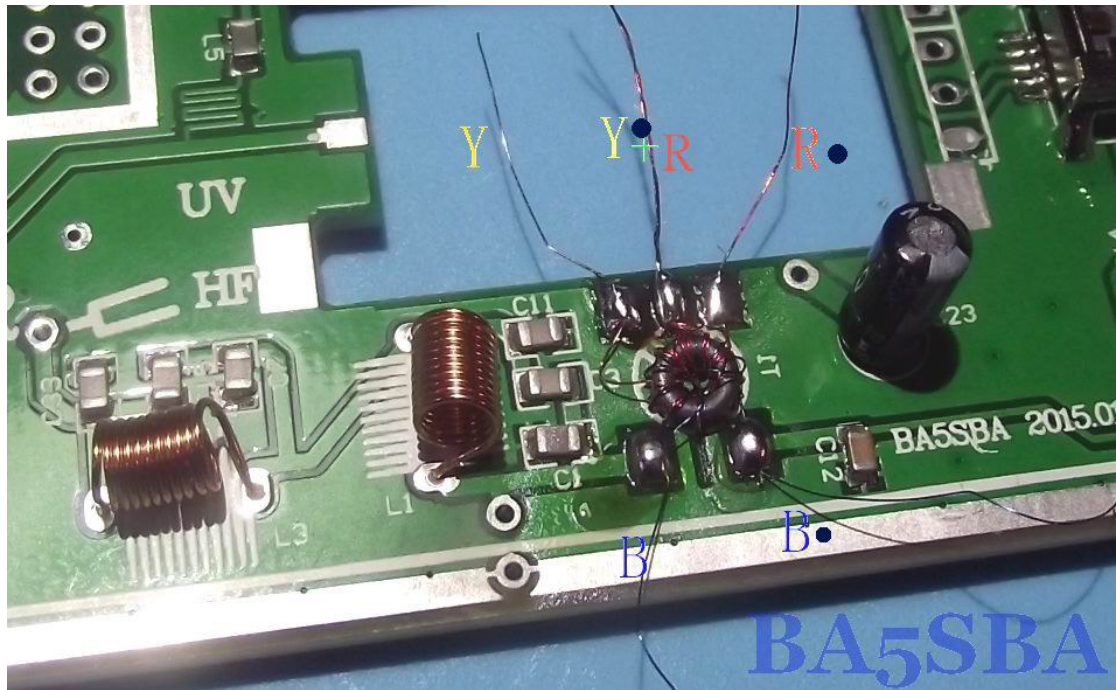


The color of enameled wire to separate, pay attention to the head and tail to be separated into different sides



The tail section of the yellow line head and red lines are connected together.

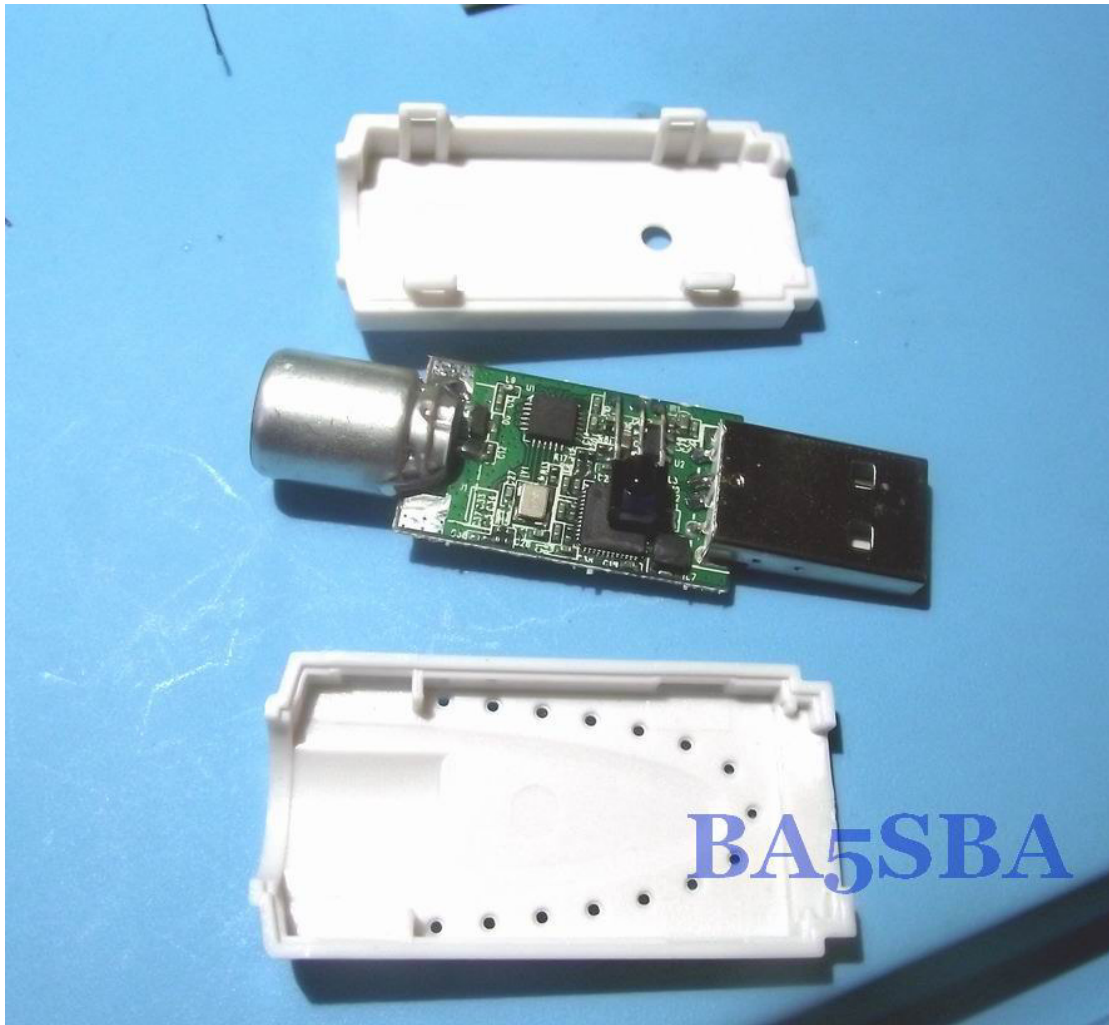




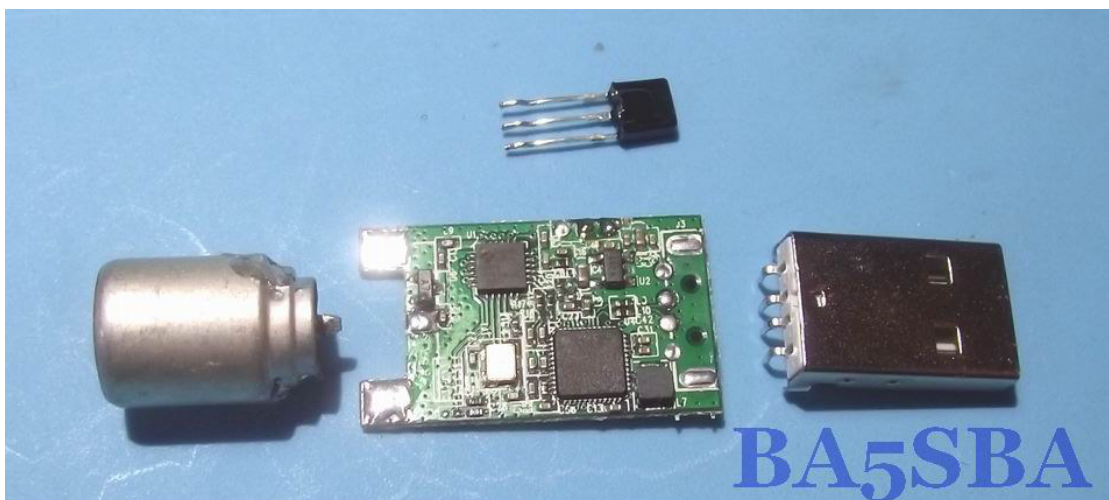
In the PCB board welding position reference above.



8; decomposition of DVB-T Dongle Stick.



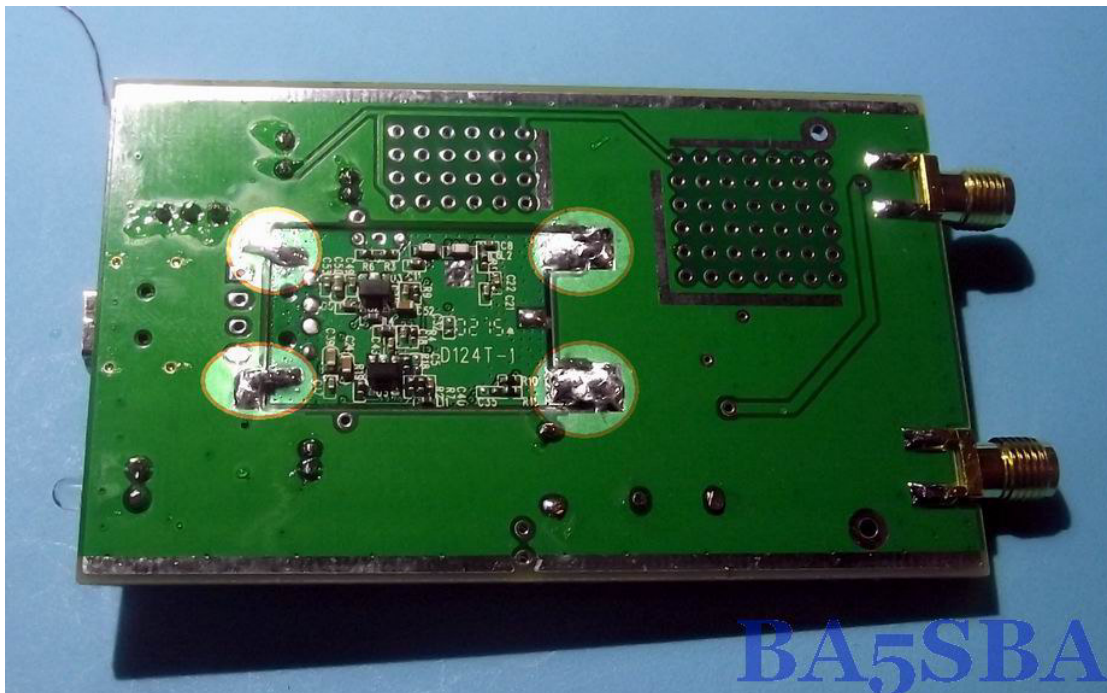
decomposition



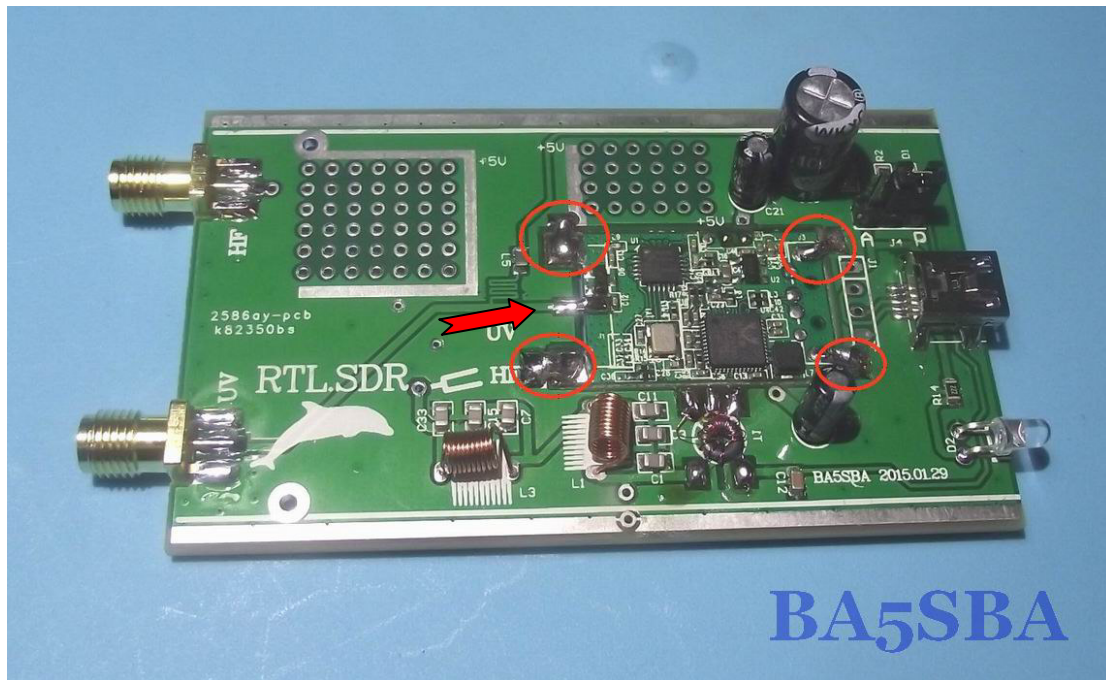
Note that you must protect the middle PCB,



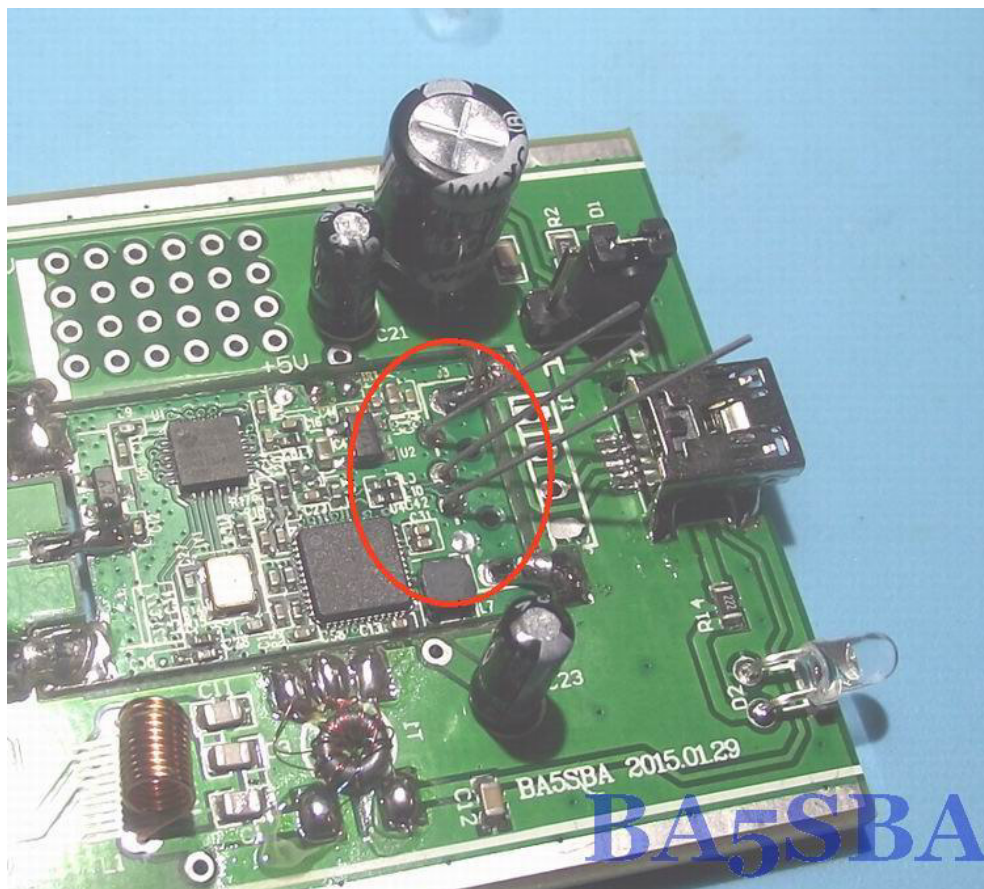
The circuit board is removed to the circuit board is embedded into the kits of the.



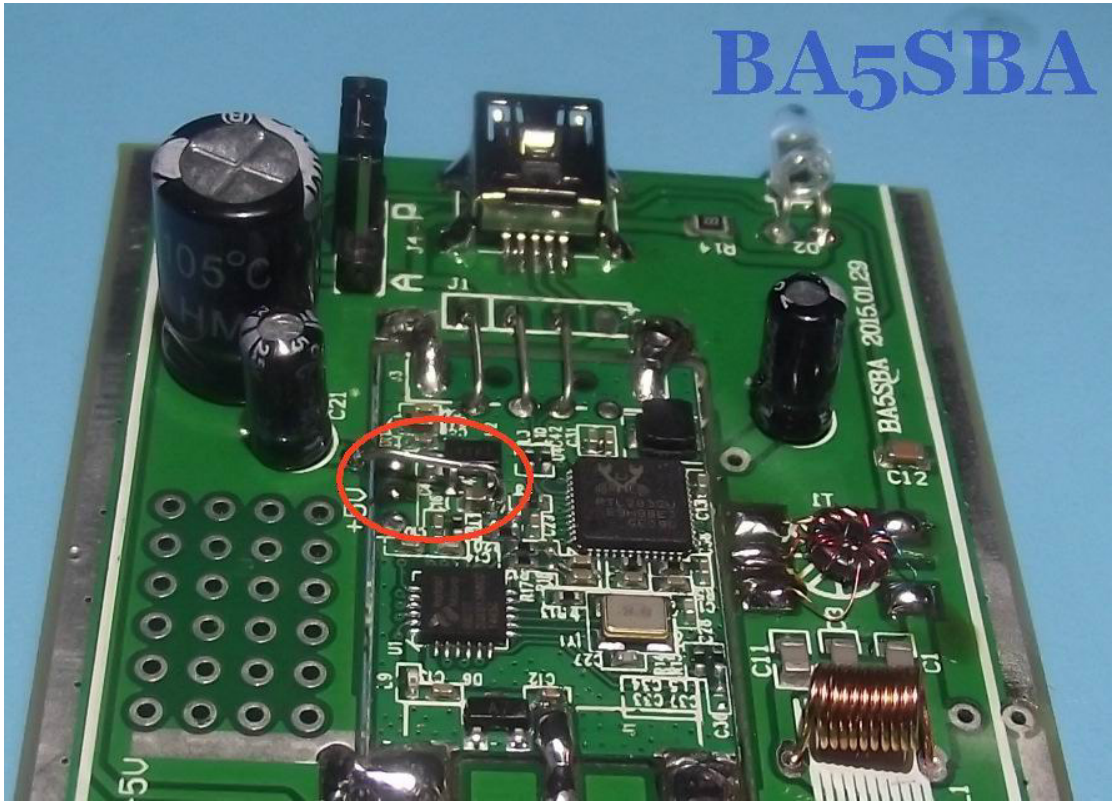
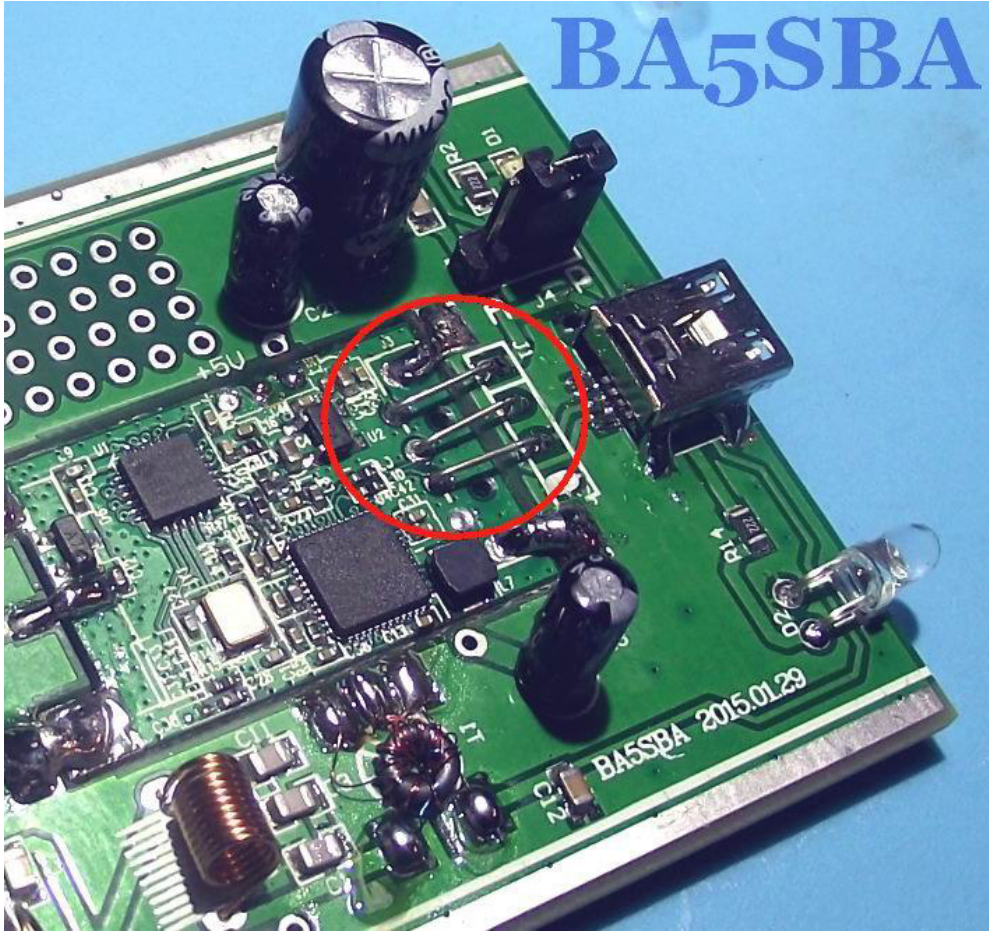
Reliable welding solder red circles part.

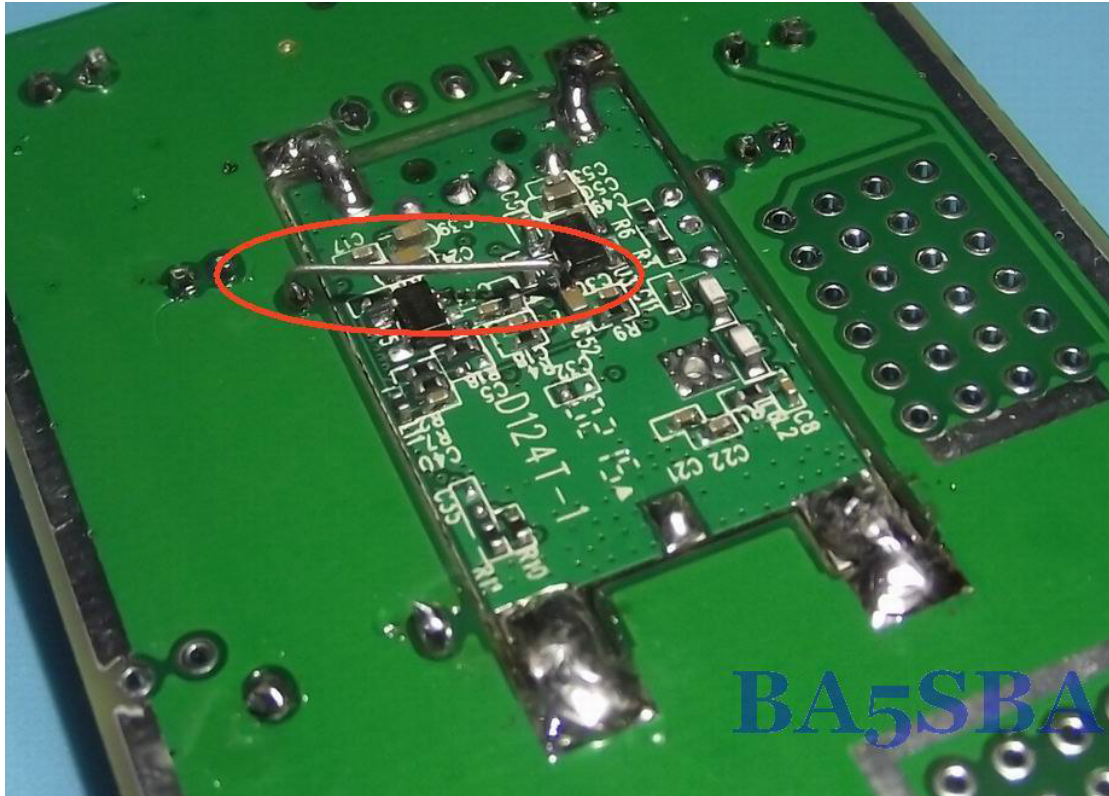


Reliable welding solder red circles part. Note do not leak welding red arrow part



9; with capacitor pin retention of various welding wire jumper.

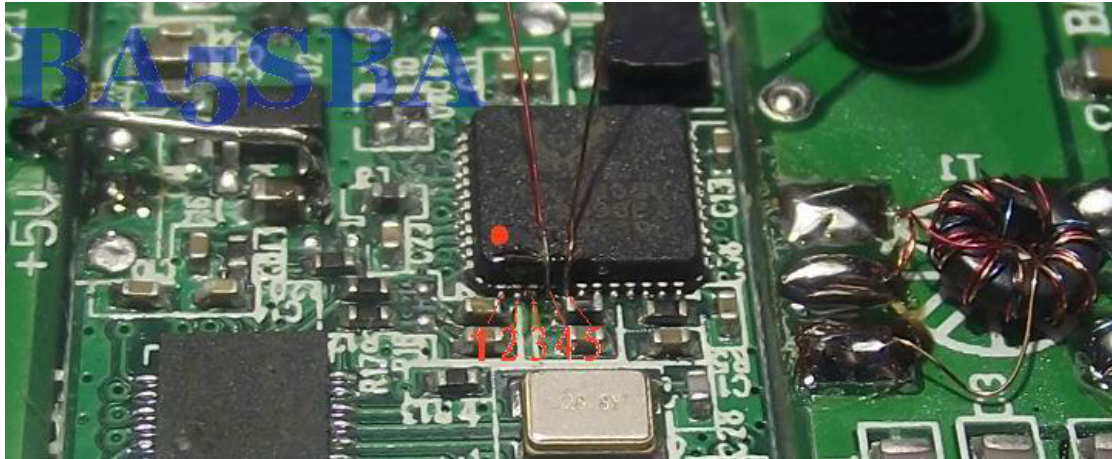




10; cut two 1 inch with the rest of the three color enameled wire, and then in the end of tin.

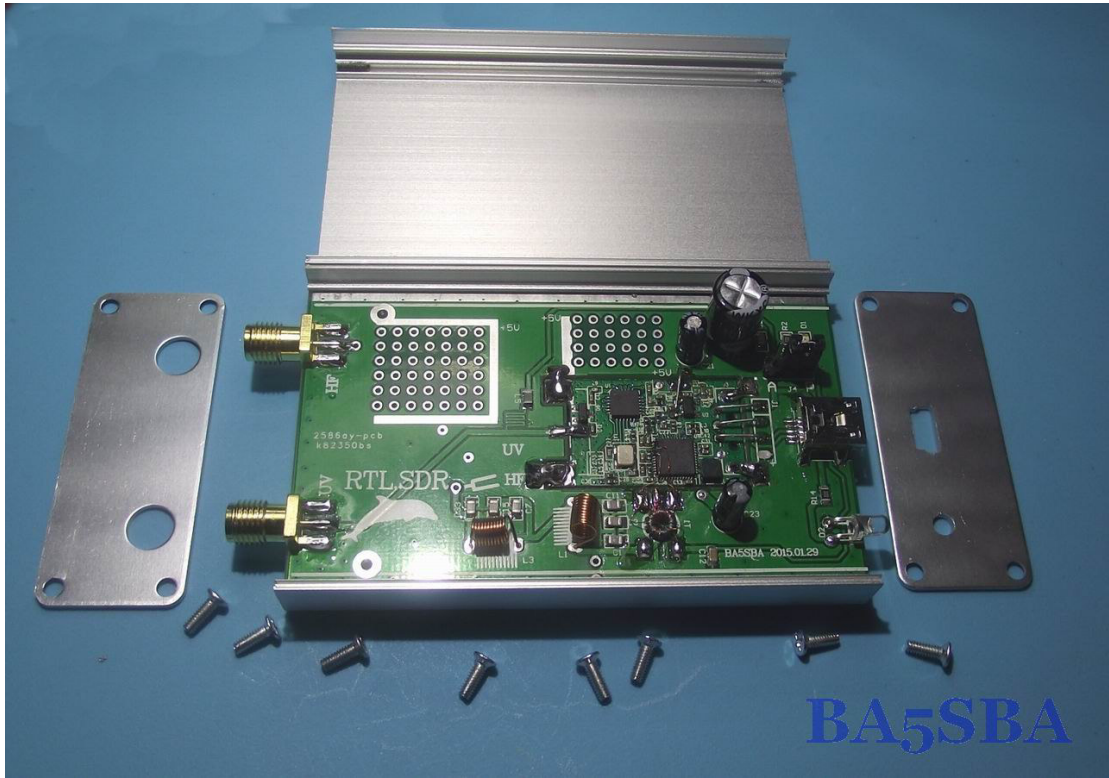


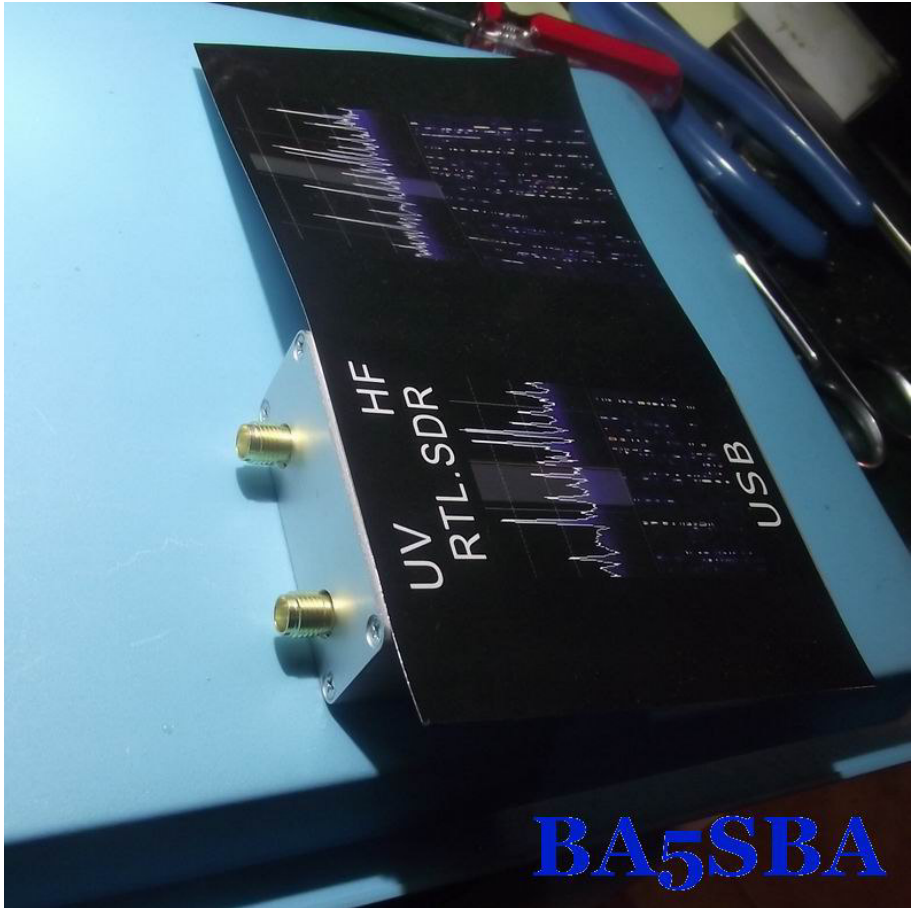
Welded to the RTL2832 pins 4 and 5.



You may need a magnifying glass observation and operation.







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QUICK START GUIDE

This page is a guide aimed at helping anyone set up a cheap radio scanner based on the RTL-SDR

software defined radio as fast as possible on a Windows system.

<http://www.rtl-sdr.com/rtl-sdr-quick-start-guide/>

SDRSharp Guide

A good guide to learning how to use SDRSharp and what all the options do can be [found here](#).

<http://www.atouk.com/SDRSharpQuickStart.html>

Another great illustrated guide can be [found here](#).

<http://tylerwatt12.com/tips-for-using-sdr/>

RTL-SDR.COM

THE BIG LIST OF RTL-SDR SUPPORTED SOFTWARE

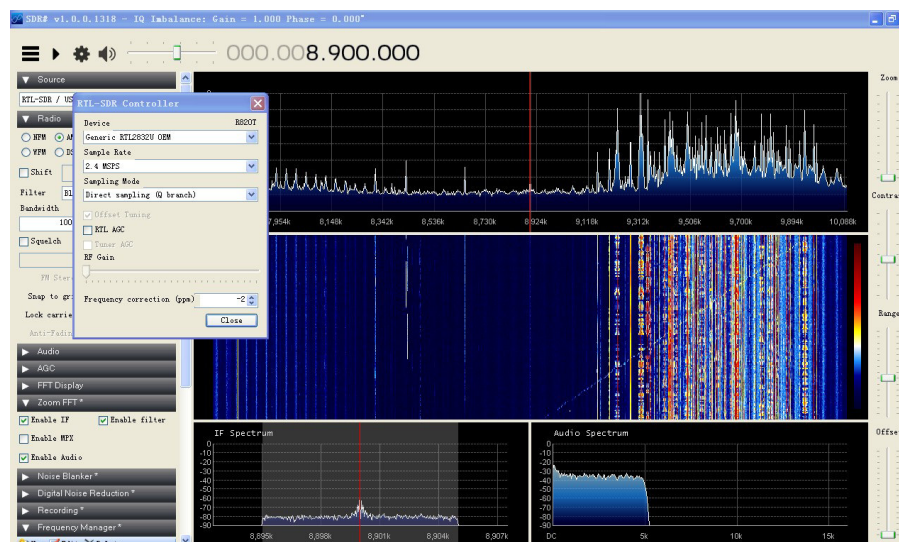
<http://www.rtl-sdr.com/big-list-rtl-sdr-supported-software/>

Antenna Long Wire con Balun 9:1

<http://www.radioamatoripeligni.it/i6ibe/balun9a1/balun9a1.htm>

Alternative Installation Procedure for RTL.SDR and HSDR

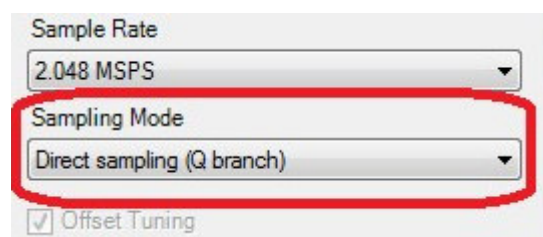
<http://www.hamradioscience.com/alternative-installation-procedure-for-rtl-sticks-and-hdsdr/>



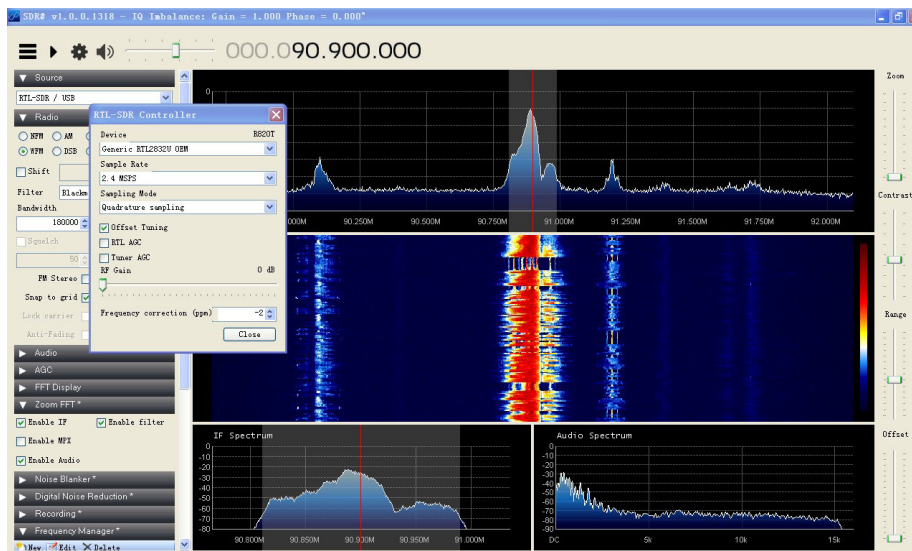
Receiving LF/MF/HF (0 - 30 MHz)

The antenna must be connected to the HF input port

The program of SDR # with RTL configured to direct sampling of the signal Q, as shown in the following figure:



signal receiving HF band needs to meet the HF Antennas such as Long Wire, Random Wire, Dipole etc.. To have a good effect need matching antenna.



How to set the Gain

The gain can be adjusted in SDR# by clicking on the Configure button which looks like a cog. When tuning the RF gain you are trying to get the signal as strong as possible, whilst keeping the noise floor as low as possible. Start with a low gain setting, and slowly increase the gain slider. Watch in the frequency spectrum as the signal strength increases, but stop just before the point at which the noise floor starts to rise.

The noise floor is the part of the frequency spectrum where there are no signals.