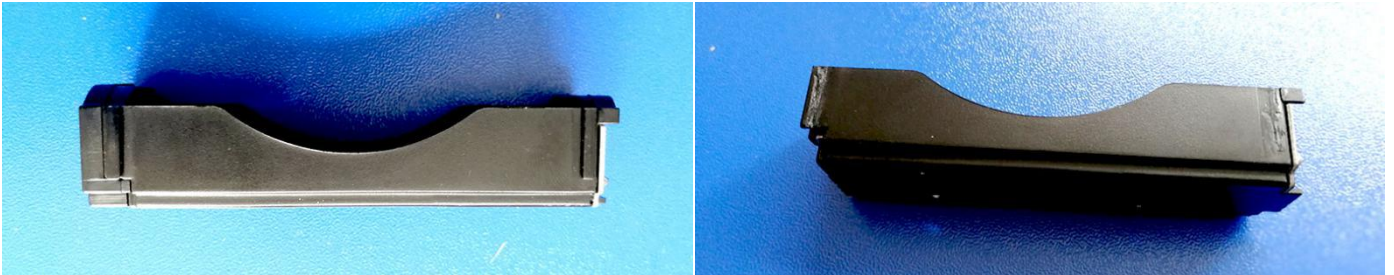


Some Notes on FAA-450 Antenna Analyzer Assembly V2.1

1. Battery Holder

In order to fit the limited space in the aluminium case, we have to cut the 2 jutting ear on one long side of the battery holder, see the picture, please make sure they have been cut before the final installation.



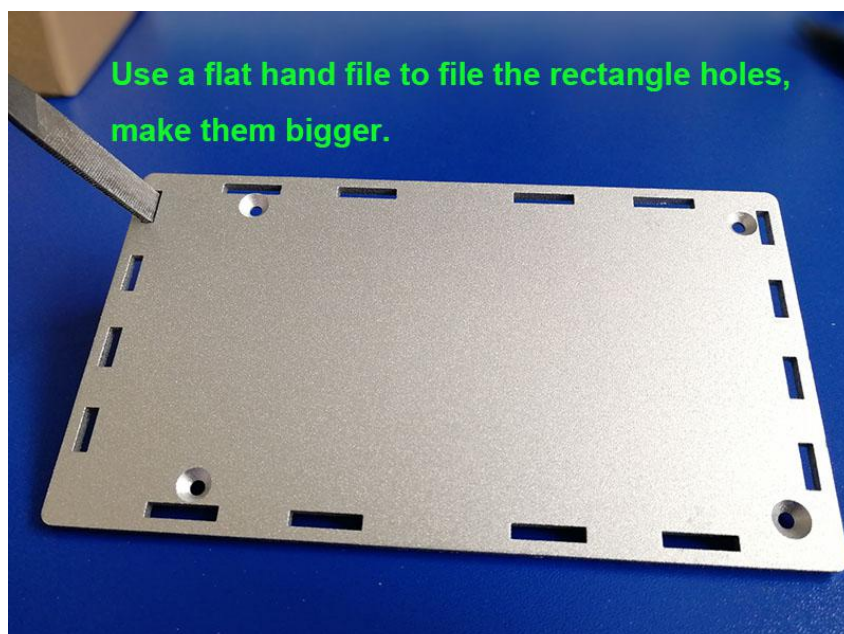
2. Power Module

A flat hand file may be needed to file the edge of the power module so as to fit the outer aluminium enclosure well.



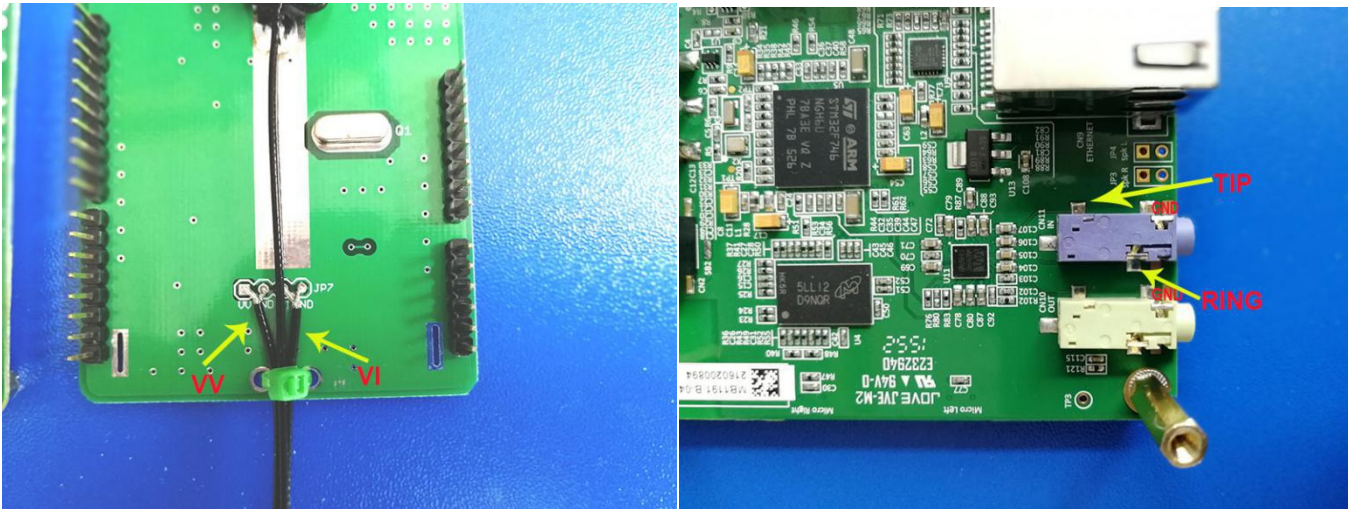
3. Aluminium Enclosure

If you find it hard to put the back cover on to close the whole enclosure, please use a hand flat file to file the rectangle holes a little, make them bigger than the original ones.



4. 10KHz Cable

When soldering the signal cable to the 3.5mm stereo socket on the STM32 board, please connect signal VV to the Ring, and VI to the Tip, see the picture below.



5. Installing a 18650 Battery

Open the back cover carefully and slowing, if it's tight, use a rubber hammer or wooden hammer or a screw driver's handle to knock the back cover out slightly. Do not use too much strength, as this may make the aluminium sheet deformed.



Also follow the instructions below to activate the battery holder:

1. Insert the battery to the battery holder, pay attention to the Positive and Negative polarity when doing this.
2. Connect the analyzer to your PC or a USB charger by the MINI USB cable (ST-LINK).
3. Slide the switch to CHG to activate the battery holder. When it is in CHG, the ORANGE led will be light. That says the battery is being charged.
4. To test battery, dis-connect the MINI USB cable and slide the switch to ON, and this will power the analyzer on.

6. Operational Guide

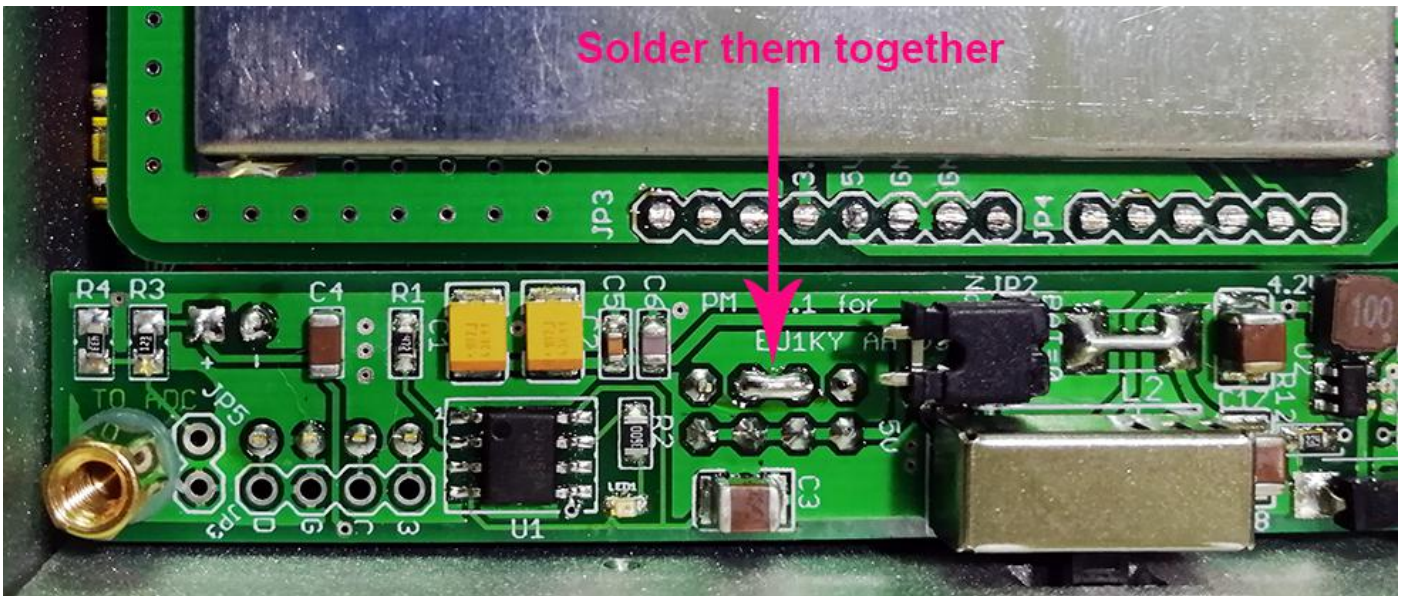
Currently, there is no operation manual for this analyzer, we will try to write one soon. So, please visit EU1KY's blog for the basic operational guide for this analyzer, https://bitbucket.org/kuchura/eu1ky_aa_v3/wiki/Home. Read it thoroughly before a further operation, especially the calibration method. **A fully assembled unit is calibrated before the shipment, so there is no need for the second calibration.**

7. USB Charging Issue

So users has reported that the unit can not be powered on or charged up by using a cell phone charger, which is connected to the ST-LINK port by a mini-USB cable. However, it could be charged up or powered on while it is connected to a PC to the some port. After some tests, this is because the ST-LINK controller does not deliver the 5V voltage to the circuits after it if it finds it is not connected to a PC. This problem does not exist in some earlier versions of STM32F7 boards. There is no this problem in our sample STM32F7 boards which were produced in early 2017.

Solution A:

We can still use the USB-FS port for charging the unit, but we need to make a small modification on the power module. Locate the parallel 4-pin headers on the board. Use a solder iron to solder the 2nd and 3rd pins together on the left one. Look the picture below as the example. This modification will deliver the 5V voltage from the USB-FS port to the charging circuitry on the power module.



Solution B:

Download the ST-LINK utility from st.com and upgrade the ST-LINK firmware to a newer version, for example, V2J28M18. This will fix the problem smoothly.

For other issues problems on this analyzer, please contact support@elekitsorparts.com for help, DO NOT forget to read EU1KY's blog for the detailed info on this analyzer.