

# Upgrading 6X2 to 878

Hardware hacking the BTECH 6X2 to Upgrade to an Anytone 878

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This guide is to show how you can update a BTECH 6X2 to an Anytone 878. This should apply to the Anytone 868 as well, both of these radios have identical hardware. At power up you can see that the radio is stock BTECH 6X2.



Before starting you will need.

1. 878MCU.Hex  
[878MCU.Hex](#)
2. 878 1.10 Firmware Update with Icons  
[878 1.10 Firmware Update with Icons](#)
3. ST-Link Utility  
[St Link Utility](#)
4. ST-Link V2  
[ST Link V2 - From Amazon](#)

Instructions:

1. Back up your current codeplug with your CPS.
2. Remove all knobs and antennas from the top of the radio.



3. Remove the battery from the radio.
4. Remove the two T8 screws at the bottom corners of the radio.



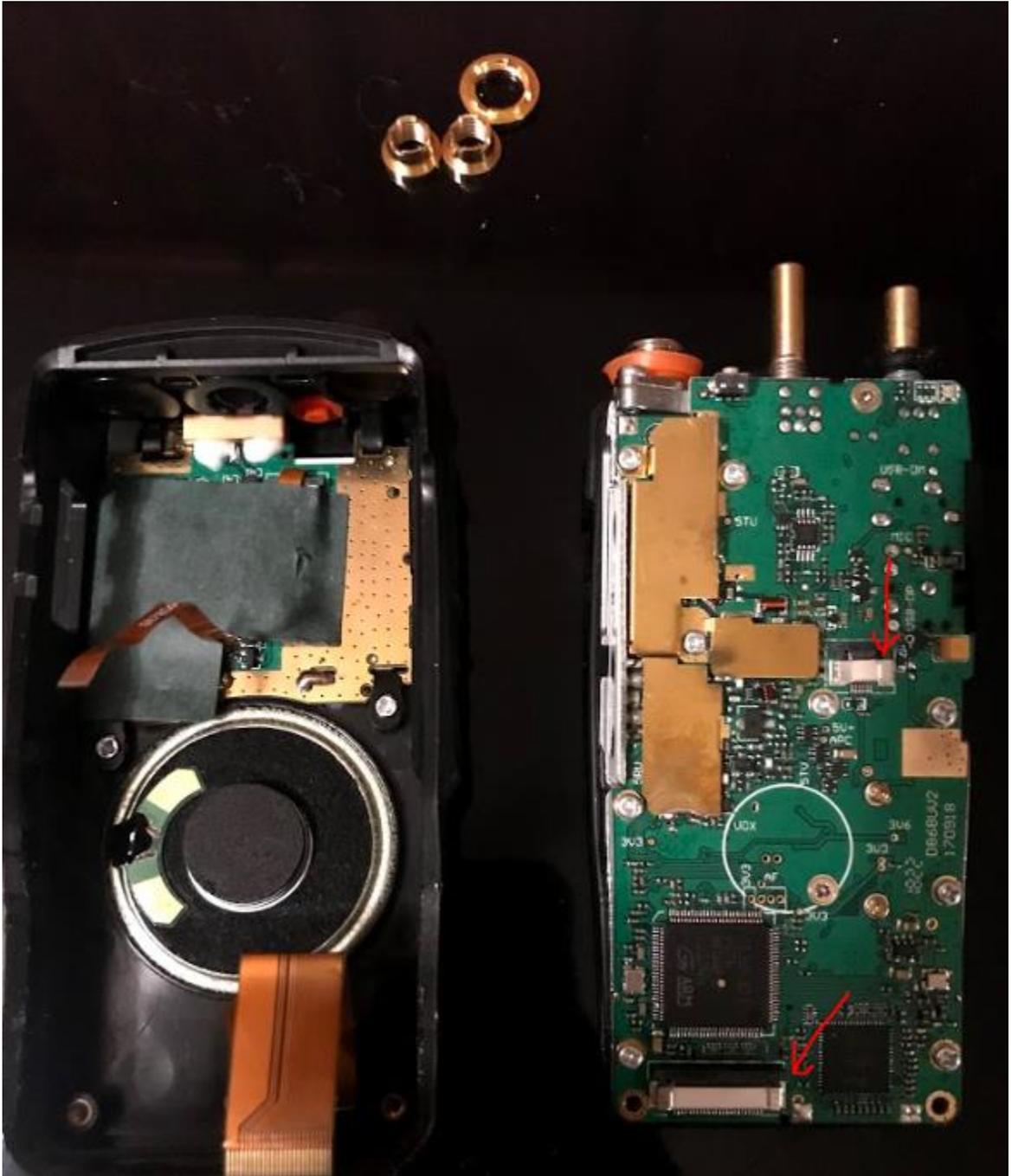
5. Remove the 3 ring nuts around the knobs and antenna. There is a specialized tool for this, I just used a nice pair of needle nosed pliers.



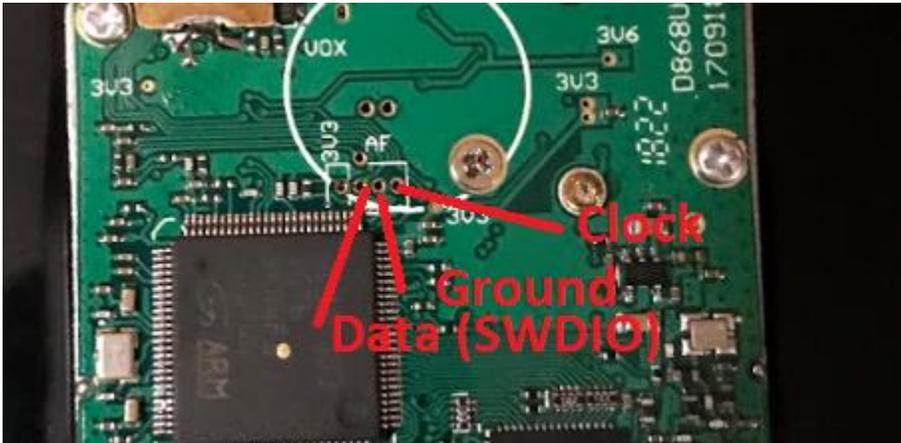
6. Very carefully with a guitar pick or other object pry the housing from the cast aluminum backing.



7. Making sure to not damage speaker/mic and screen ribbons remove the ribbons from the connectors, after pushing the clips up with a thin screwdriver. The speaker ribbon has already been removed in the photo below.



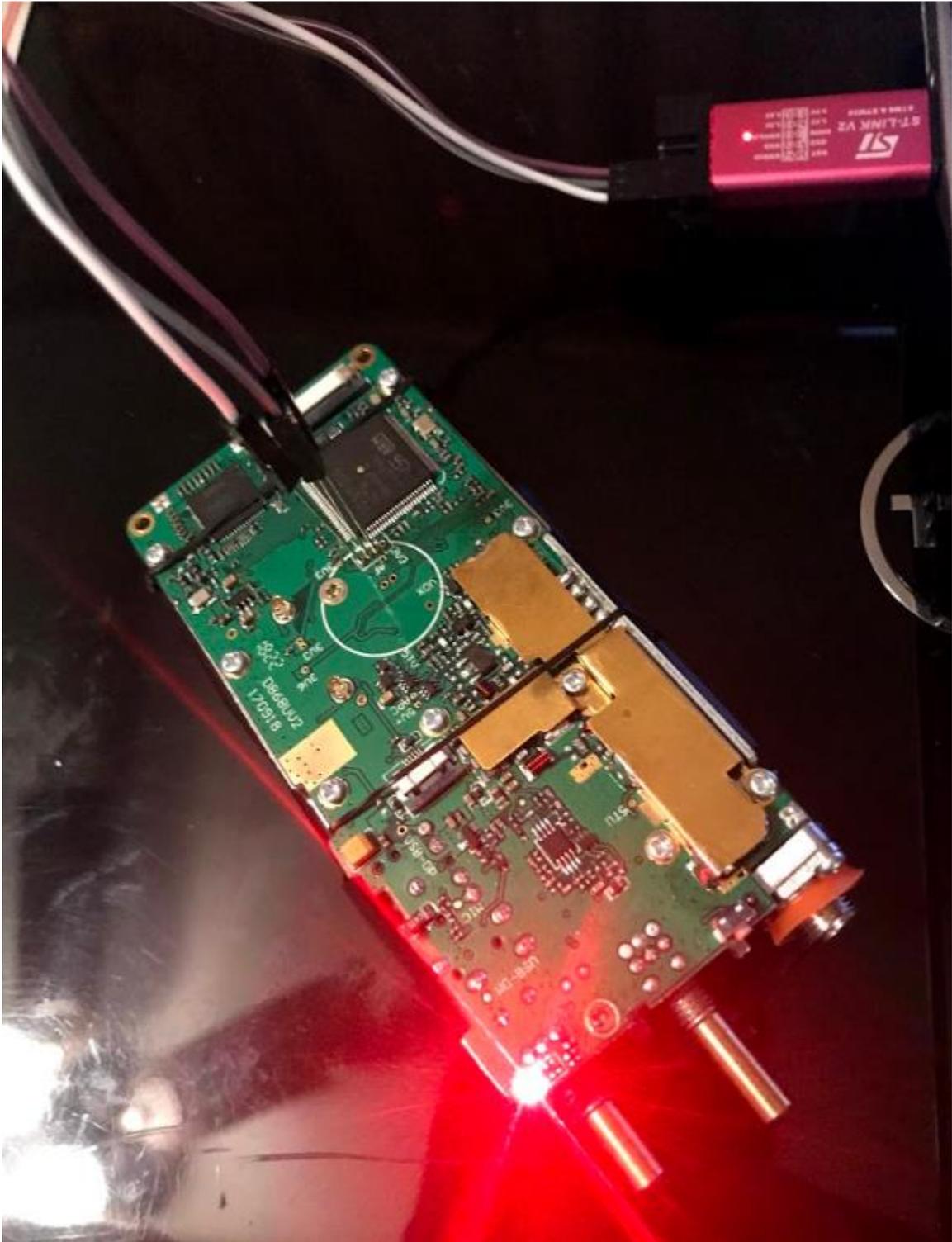
8. Locate the 3 programming pins that we will be using to update the radio.



9. connect the ST Link pins to the respective pins on the radio. ST Links usually have female to female jumpers. I have found that sewing needles fit perfectly in the female jumper connector and this radio.



10. While powering up the ST Link program, power the radio in firmware update mode by pressing the PTT and top red button while powering on. The red LED will flash.



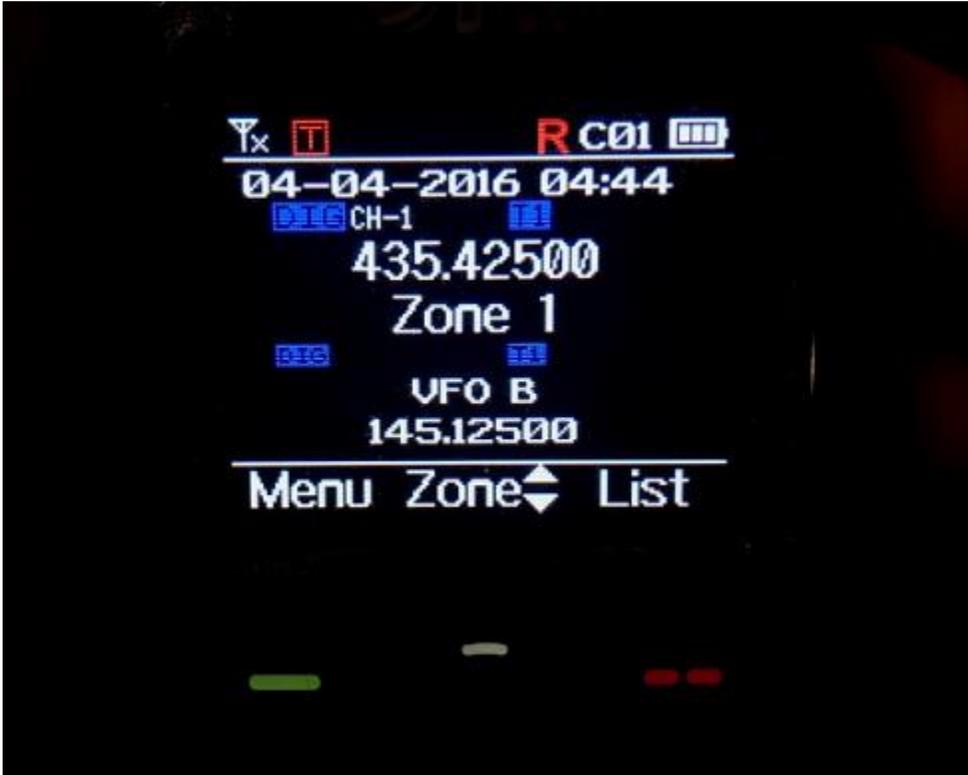
11. Connect to the radio by pressing the upward facing plug in ST Link and save a backup, file should you need to revert back for any reason.
12. Click on Binary File tab, right of the Device memory tab.

13. Open the 878 hex file.
14. Click on the Program Verify icon signified by the pen and paper icon.
15. Hex file will be loaded to the radio, the radio should reboot, if not power cycle the radio.
16. With the power off, reassemble the radio in reverse order you disassembled it.
17. If all worked correctly you should be able to see D878UV under Model Name in Device Information.



18. Put the radio in Firmware Update Mode again and update the firmware of the radio with the file contained in the Anytone 878 firmware folder.
19. Put the radio in Update Mode and update the Icons.

20. Turn the Power back on and verify that the radio upgrade is complete. If you want to have the famous black background you may need to go to Radio Settings – Background – and select Default Picture. (sometimes you need to toggle it to go black)



21. You are complete! You will now be able to modify/load your codeplug back into the radio. All future firmware updates will need to be for the Anytone 878.

Thank you to:

Chaz Holiday in the [TGIF Facebook Group](#) for bringing this mod to my attention as well as summarizing the steps up.

All of the Github contributors [here](#) for making this mod possible.