

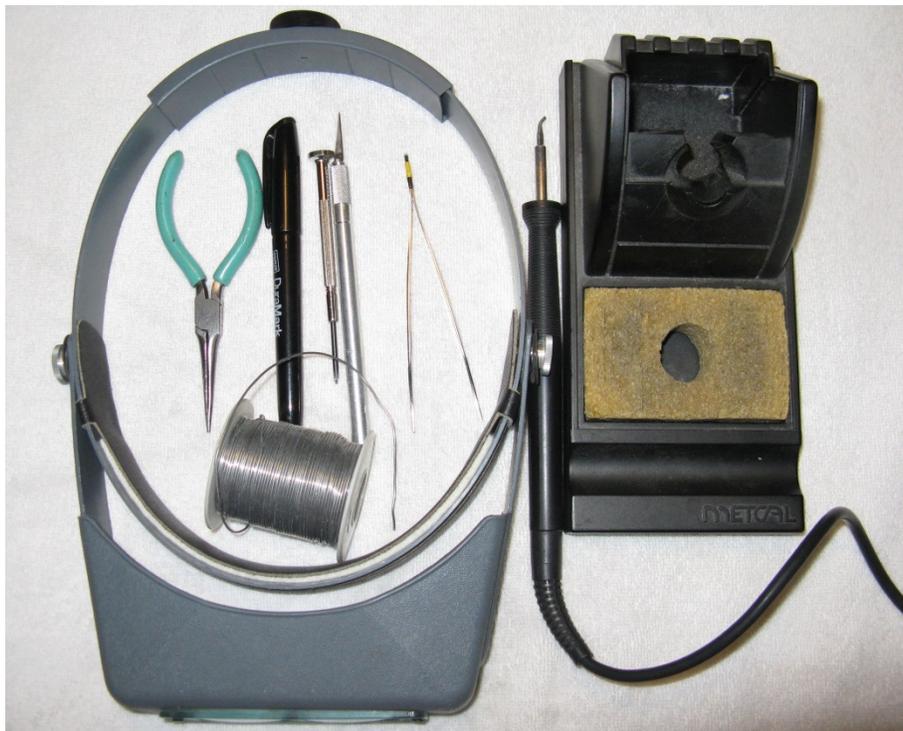
Alinco DJ-580 backup battery replacement

(Updated, 1/14/19)



Tools and supplies needed:

- Small Philipps screwdriver
- Small needle nosed pliers
- Soldering station
- Fine solder
- Xacto knife
- Magnifiers
- Marking pen
- Precision tweezers
- BR1225-1VF battery. I purchased mine on eBay. The BR1225 battery is commonly available, but as a coin battery without the 'legs'. See the photo in paragraph 11.



Procedure:

1. Remove the battery.
2. Remove the wrist strap.
3. Turn the outer UHF and VHF knobs counterclockwise until they stop. Note the location of the red marks on the knobs. Remove the knobs from the top of the radio. They pull straight off.
4. Spin the nuts off that surround the knob shafts on top of the radio.



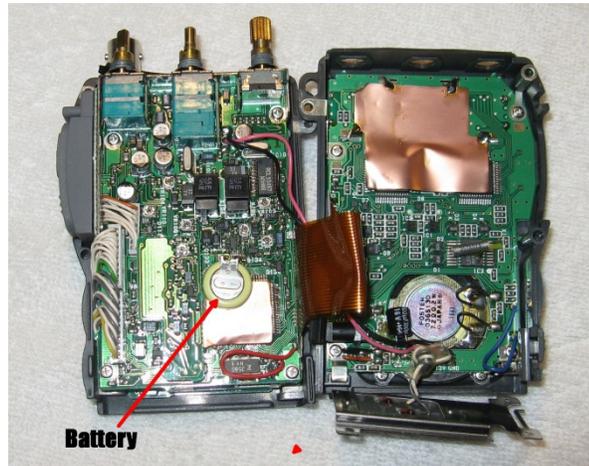
5. Remove three screws from the back of the radio.



6. Remove the front battery plate screws. Do not remove the rear ones.



7. Place the radio on a folded towel and gently pull the two case halves apart, starting from the bottom end. Be careful to not make any sudden movements when the case comes apart – the ribbon cable can tear, so be very careful with it. Slide the back side up and off the control knob shafts and lay the two halves of the radio side by side on the towel.
8. Locate the battery. It is glued on a copper plate and has a yellow cover. Mark the top of it with your marking pen. This will identify the top of the battery so you can compare it to the new battery to get the proper orientation. It will also keep you from reinstalling the old battery!



9. Touch your soldering tip to each battery solder pad while lifting the battery contact gently with a pair of tweezers. They should come off easily – they are soldered to the pad and do not go through the board.
10. Slide an Xacto knife blade under the battery and gently pry it off the adhesive pad.
11. Lightly tin the ends of the contacts on the new battery with solder.



12. Lay the new battery on the adhesive pad and gently bend the legs down to the solder pads with your tweezers and check the fit. Make sure you have the right side up!
13. Solder the battery leads to the board. Gently press the battery onto the adhesive pad.

14. You are done other than reassembling the radio. At this point I suggest that you check to see if the radio has been modified. There are two loops of wire that can be cut to increase transmit and receive capability. If the blue wire near the speaker is cut the radio has been modified to transmit out of amateur radio bands. The DJ-580T is not type accepted for these frequencies and transmission on them is illegal. If the red wire near the battery is cut it will allow receiving on the aviation band which is legal. Fortunately, it is easy to reverse these mods – just solder the wires back together and insulate the ends with tape or heat shrink tubing.
15. Reassemble the radio. The outer knobs have two inner protrusions that fit into slots on the outer shaft – be careful to align them properly and to not force them or you will mess up the protrusions. You will have to wiggle the Func and PTT button covers to get the cases lined up.
16. Test it by setting a frequency, shutting it off and removing the battery. Let it sit for an hour and if it retains the frequency you are good to go!

1/14/19 update, courtesy of Rick, K5GZR

I used the instructions a couple of years ago to replace the battery, but I was in a time crunch and had to use a locally obtainable battery that didn't have leads. Apparently I damaged the battery trying to solder leads on, because within a year it was no longer holding the memories with the main battery pack disconnected. So this time I decided to get the recommended battery... But... they appear to be non-obtainium – unless you want to buy 25 new old stock! After a bunch of searching I found what appears to be a reasonable replacement – BR1225A/FAN from BBM Battery Inc in Mississauga, Ontario. I paid US \$3.50 each for 2 batteries and \$4.99 shipping and they arrived in less than a week. Installed with no problem... easier the second time around! Might be helpful information for the next guy who needs a battery.

One other comment... Regarding the 'do not remove' instructions about two of the four screws on the bottom of the radio... The first time I changed the battery I had a really hard time getting the radio apart and back together with those two screws untouched. Finally had to loosen them, without removing them. I did the 'loosen without removing' this time and had a very easy time with open and close of the radio. Another possible update to the instructions for the next reader.

Please contact me if you have any questions or comments! n7cfo@n7cfo.com