

Alinco DX-70TH mobile HF + 6 meter rig bhi NEDSP1061-KBD Install

By Kevin McCracken - KC8GIA

1. With DC power removed from the unit, remove the front panel and disconnect the two connectors from the front panel. Note the way the cables are routed through the plastic blank plate on the front of the radio. Also, remove the Microphone.
2. Remove the radio's top cover (5 screws) and the bottom cover (7 screws). Remove one screw holding the blank plate to the front of the chassis. The blank plate then snaps off the upper and lower front chassis rails.
3. Remove the two screws securing the speaker bracket. Lift the speaker and bracket up and away (and you can disconnect it at the PC board connector if you want to get it out of your way).
4. Remove the two screws securing the front top rail, and remove the top rail. Remove the two screws securing the front bottom rail, and remove the rail by pulling it forward to disconnect the connector that is located near the microphone connector.
5. Pull up and remove the small PC board (Connector Unit) that the front-panel cables attach to. * This board has R14s connection point for 13.8 volts, and a convenient ground too, see pictures*
6. Remove the two spring clips that secure the two ICs (IC11 and IC20) to the chassis on the left side of the unit.
7. Disconnect the two coax cables (J3 and J4) near the front of the Main Board.
8. Disconnect the ribbon cable that goes into the front of the Main Board. To release the ribbon cable from the connector, use a pointed tool to push forward the locking tabs located at each end of the connector.
9. Remove the 6 screws holding the Main Board to the chassis and carefully lift the front edge of the Main Board up and lay the board back onto the transmitter's heat sink. The remaining cables to the Main Board are left connected.

bhi Ltd: NEDSP1061-KBD into the Alinco

>Pull R309, which is a 6.8K chip resistor, located just in front of IC20, on the bottom of the Main Board. Output is the side towards the "0" ohm jumper, input the opposite side.

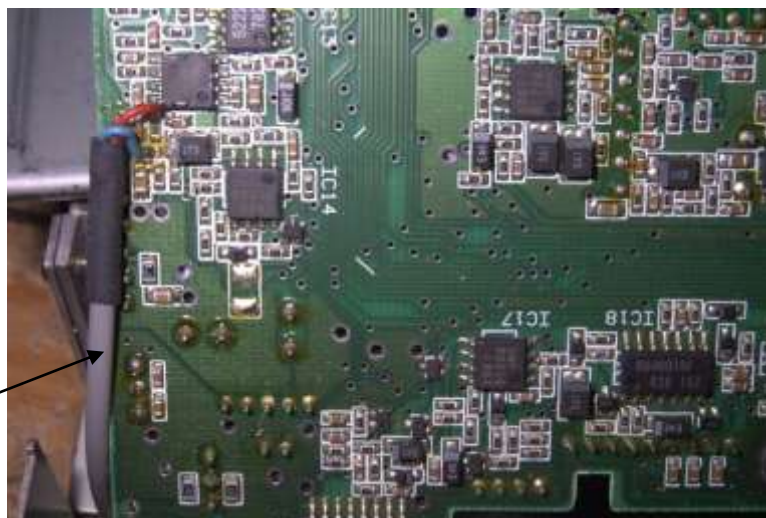
One must very carefully adjust the output pot. down, and leave the input pot all the way up. Alternatively, you could add a 6.8K resistor to the BLUE output lead, at the NEDSP1061 board which is what I did because it tamed a tendency to hear audio feedback through the speaker when modulating.

As has been stated elsewhere, do NOT attempt this unless you have a steady hand, good eyesight with excellent lighting and magnification as well as good soldering skills. If in doubt, leave it to a professional.

Download the service manual with schematic, and refer to the attached images. Note - I installed everything with double sided foam tape. Not much room to work with in this little radio, and because it's so cramped, things can't move around very much to start with.

This modification made a night and day improvement to this radio. The high noise level inherent to them made for uncomfortable listening at best, and coupled with a very poor noise blanker, the rig was nearly unusable for me. With the DSP added, it now fully compares to popular rigs from Icom, and Yaesu and is better than my old Kenwood TS-50, IMO.

* these instructions are from the noise blanker modification found via the internet. Seems to be free to use. as desired*



bhi audio
input/output
lead