

# Alinco DR-235 Receiver Noise Fix

VA3DDN Dec 10, 2019

My **DR-235TMK3** (s/n: 1461) was taken out of service from my car for a few weeks, to allow for some car repairs to take place, After re-installation, the radio had developed a really bad case of receiver noise. Noise loud enough to almost totally mask incoming signals. Kind of a roaring, crackling sound.

I also noticed that the squelch setting had no effect at all on the noise level.

After Googling “DR-235 receiver noise”, I found that other amateurs had had similar receiver noise issues which had responded to either replacement of the 8V regulator (JRC NJM7808FA ) or to a general cleaning of the pcbs and tightening of pcb mounting screws.

Neither seemed to quite fit the issue I was having.

The main pcb assembly is easily exposed by removing the 4 screws on the bottom-side of the radio and removing the cover. The 8V regulator seemed to be working fine and measured right on 8.00 V with negligible ripple or noise. All screws were found tight.

What attracted my eye was that the 2 band-pass ceramic filters, FL101 and FL102, indicated with the 2 red arrows on the photo below, seemed to have a light, frosty looking coating of some kind on their external surfaces. Enough so that the part number markings were not readily visible.

To my surprise when I touched one with my finger, the noise level actually increased.

I used several “Q-tip” cotton swabs moistened with isopropyl alcohol, and began to swab off the surfaces of FL101 and FL102 as well as the surrounding pcb areas.

.As I was doing this, the noise level suddenly disappeared completely and **has not returned!** Little was visible on the Q-tips, just some residue with a pale blue color.

I don't have a very good explanation for this, but it seems likely to me that the “frosty look” was actually flux residues, likely so-called “No-clean”, that had become partially conductive through moisture adsorption. How did it get on to FL101/2 ? Don't know – just that my noise issue is completely gone.

73

VA3DDN

Don Dorward

Photo follows p2

