

KX3 Internal Speaker "buzz" Fix Phil Salas – AD5X

I love my Elecraft KX3, but I had a speaker buzz in the 400-800Hz range at low-to-moderate volume levels (15-20) that was so bad that it made using the internal speaker completely unusable for CW. It appears that the case itself has a natural resonance in this frequency range, and the speaker mounting bracket acts as a resonator that couples energy into the case. The biggest improvement occurred when Elecraft sent me a new speaker as the original speaker cone was offset and was just touching the grill. However, I could still get the buzz at higher volume levels (>25). I improved this by putting layers of black electrical tape between the bottom of the speaker bracket and the bottom case - i.e. I inhibited the mounting bracket vibration some with layers of tape. But I've never been happy with the tape.

For my final "fix" I took a 0.375"ID 0.625"OD rubber grommet (Mouser part number 534-745), snipped it, unfolded it, and installed it between the speaker bracket and bottom cover. This completely eliminated the buzz, except at maximum audio level (where the buzz is only just apparent). Photos 1 & 2 illustrate this better than words. This works great, and I'm a happy camper now! The only issue would be the hassle of keeping track of the snipped grommet were I replacing internal batteries frequently, but I use external power.

Incidentally, for serious operating I do use headphones. But I use the internal speaker for casual operating and general listening while working on projects in the shack.

