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ELIMINATION OF DISPLAY NOISE IN THE DX-440 - By Leonard Hyde

One of the major limitations of the DX-440 for use as a casual listening and DXing receiver on long and medium wave is the presence of large amounts of noise from the digital display. This noise appears to be directly radiated into the receiver's internal antenna. The following simple procedure, which entails installation of an internal shield between the antenna and the digital display, will solve this problem.

Remove the back of the receiver, which is secured with six screws. One of the screws is hidden under the "D" batteries. As receiver power must be disconnected to perform this procedure, do not hook up an AC adapter in this case, as was recommended in the "tweaking" procedure I have previously described.

It is necessary to remove the main circuit board. Take out the rest of the screws securing it, and gently remove it from the chassis. DO NOT attempt to remove any wires from the board.

Cut a piece of cardboard from a cereal box, about the same size as the circuit board. Cut a piece of aluminum foil to match. Be sure the cardboard & foil come right up to the inside of the cabinet at the top, where the ferrite bar is. Here's where the shielding is most critical.

The shield installs under the circuit board. Check it for fit, and trim both cardboard and foil if necessary. Now, tape the foil to the underside of the cardboard (away from the circuit board) with Scotch tape around the edges. Locate the position of the screw holes on the cardboard, and bore small holes to allow the screws to pass through.

One of the circuit board screws enters a grounded metal post. This will ground the foil shield; thus, other grounding is unnecessary.

Place the shield in the radio, UNDER the board, with the foil AWAY from the board. Gently replace the board, and install the screws. DO NOT force the board: if it does not reinstall properly, determine why, and correct. NOTE: the shield WILL cause the board to be a little difficult to align. Just don't force it: doing so may cause breakage of conductors on the board itself.

Test the radio for proper operation before reinstalling the cover. You will immediately note the absence of display noise. If all is OK, put your DX-440 back together, with the satisfaction that you have improved your radio.

Of course, this will do nothing to prevent pickup of display noise from any EXTERNAL antenna used. However, I have never noted this to be a problem, unless the antenna is positioned directly in front of the receiver

My fear was that installation of a grounded shield so close to the ferrite bar antenna might detune and desensitize it. I am happy to report that I noted nothing of the kind. In fact, more stations are now heard, which were previously drowned out by the display noise.