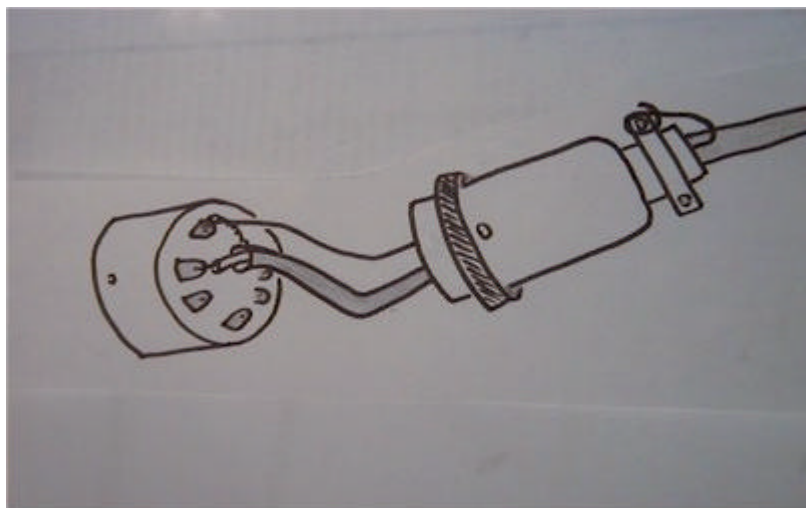


REMOVING RFI FROM AUDIO INPUTS

Many amateur radio stations today are experiencing terrific Radio Frequency Interference (RFI) that is impeding their audio signals and causing very garbled and distorted audio. Careful listening of MANY SSB signals on the air today exhibit RFI - not sometimes enough for their receiving stations to notice as they listen to a 3" speaker of a transceiver but careful listening in a wideband receiver with VERY high quality receiving equalizers and studio monitor speakers allow this slight interference to become VERY annoying. But then there are the signals that have terrific problems with RF getting into their audio lines and cause all sorts of problems.

Most of the major transceivers today do NOT ground their microphone shields! This applies to the 4 and 8 pin Foster microphone connectors so common on today's rigs.



Plug your microphone cable into the front panel of the transceiver. Remove the two small #4 Phillips head screws and the cable clamp they hold. Then remove the tiny Phillips head screw that holds the rest of the metal sleeve. Slide that back onto the mic cable. Cut off the end of a resistor or get a #20 solid tinned wire about 3" long. Locate the mic pin that has the shield of the mic cable soldered to it. With a small soldering iron, carefully solder this solid wire to that shield and pin. Bring the sleeve back up the cable and attach to the connector with the small screw. This leaves the solid wire coming out the back of the connector. Replace the cable clamp and as you do that, tightly wrap that solid wire around one of the #4 Phillips head screws and tighten the clamp assembly very well. For really tough RFI cases where the solid wire does not work, solder one end of a .01mF ceramic disc capacitor to the shield pin and wrap the other end around one of the clamp screws.

What you have accomplished is grounded the microphone shield to the transceivers chassis ground through the ring on the mic connector. (Make sure that ring is tight). This has been a big help to many stations with RFI problems and should help you clean up your signal.

Larry E. Gügle

MSEE, MBA, BSET, BSEE, AASEET, JCET

FCC Amateur Radio Service, Amateur Extra Class Operator & Station License – K4RFE

FCC Commercial Radio Service, First Class Radiotelegraph Operator License - T1

FCC Commercial Radio Service, General Radiotelephone Operator License – GROL