

I have had some questions on what and how many **ferrite cores** should be used for an Icom IC M802 Installation.

Small Cores

The 17/64" are approximately .25" cores which is also a common size. These cores are used for data cables and should be installed on all of the smaller cables including the DERA coaxial cable, modem cables, and any computer connections.

Large Cores

RG213 has an outer diameter of approximately 0.405 inches or 10.28mm. This is approximately 10.3mm. Most radio suppliers here in the US sell the right snap on cores to go with their radios for the RG 213 coaxial cable.

Not all cores are created equal. The specifications for cores includes the hole size and the ohms or in other words the impedance of the installed core. The better the material the core was constructed of, the more opposition to the RF coming down the cable. The higher the ohms/impedance of the core, the better it will isolate the RF from the radio. For Example, given a 20 ohm core and a 150 ohm core at 25MHz, use the 150 ohm will provide the most isolation.

Since this is High Frequency radio, we are only interested in the 25MHz specified impedance. The VHF impedance specification will be higher as a result of the higher frequency.

Bottom Line

1. All wires going in or coming out of the tuner should have at least one core.
2. The Coax should have an RF Isolator (5 large cores in a PVC tube or 5 large cores attached to the coax directly) at the transceiver end and at least two large cores at the tuner end.
3. A large core is placed on each end of the tuner control cable.

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