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Creators of True Multi-Band Low SWR Antennas

160M OCF Antenna Manual

160M-800K and 160M-1500k, 160 Meter OCF Insulator Kits



800W Load



1.5KW Load

160M Materials:

2 - RC Load Insulators (800W or 1.5KW)

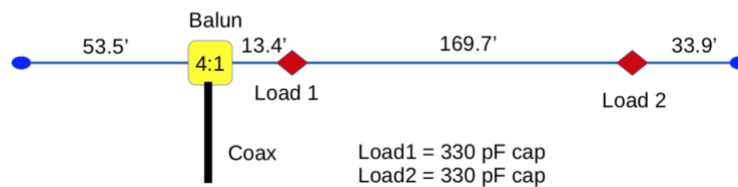
2 – End Insulators

Balun – Balun Designs 4116et OCF Balun

Wire- 275 feet #14 THHN from Home Store or Davis RF Flex Weave (Add 3 feet if you intend to droop the ends)

Cable – 100 Feet RG-8X

Shrink tubing or Electrical Tape



160M OCF Antenna Schematic

- 1- Cut 15 feet of wire and connect it to the Balun and Load 1 using about 8" of wire to secure the wire to the Balun's ring bolt for strain relief. Secure and Solder the other end to the Load pigtail making sure that the length of wire between the Balun and Load is 13.4 feet including the length between the Balun bolt and Balun connection.
- 2- Cut 171.5 feet of wire and connect it between Load 1 and Load 2 soldering the wire to the pigtails on both loads while assuring the length between the loads is 169.7 feet.
- 3- Cut 55.5 feet of wire and connect it to the Balun using about 8' or wire to secure the wire to the balun ring bolt for strain relief.
- 4- Connect the other end of the wire to the end insulator making the length between the Balun and end insulator 53.5 feet including the wire between the Balun bolt and Balun connection. Wrap excess wire back on the antenna to be used for tuning.
- 5- Cut 36.5 feet of wire connecting one end to the Load and soldering it to the Load pigtail.
- 6- Connect the other end of the wire to the end insulator making the length between the Load and the end insulator 33.9 feet.
- 7- Loft the antenna at least 40' and connect the coax to an antenna analyzer or a rig with an SWR meter.
- 8- Adjust the lengths of the ends in the ratio of 4:1 long to short end to maintain the 20% feed point – 3" on the short end for every foot change in the long end – for best SWR across the 160M band cross checking on 15M to make the minimum SWR on 15M about 21.35MHz. The length of the center wires can remain the same throughout the tuning process.
- 9- Secure the ends, cut off excess wire and shrink or tape all soldered connections.
- 10- The 160M-800 is rated 800 Watts max. power and the 160M-1500K is rated 1500 Watts max. power.