

## QRP 1:1 Current-type Balun (W2DU style) for Portable Use

by: Tom Hammond NØSS

In this instance, the name 'balun' is somewhat of a misnomer. This is actually a ferrite-loaded coaxial RF choke which just happens to yield the same result as a 1:1 current balun. The effect is the same, and the design is very effective at helping to keep RF off the shield of the coax a very worthwhile endeavor when you're using an antenna which might not be 'balanced', as most of ours are NOT.

For this 1:1 balun I used heatshrink to encase 35 ferrite beads (FB-73-2401, 0.38" O.D., 0.197" I.D.), 5 beads at a time, for a total seven 5-bead assemblies.

Then I slipped them over a 15' length of RG-174 and LOOSELY secured the string of 7 groups of beads with plastic ty-wraps at each end. The slack was intentional, to permit me to coil up the coax without harming the beads.

I can now coil the coax into a 3" dia. coil with no problem whatsoever.

See the accompanying pictures of the balun and ferrite beads.

Ferrite beads (FB-73-2401) are available from several sources. I purchased mine from Amidon Associates:

(<http://www.amidoncorp.com/blprice.htm>)

These particular beads may also be slipped over RG-58/U (300W) and RG-141/RG-142 Teflon(r) (1.5kW) coax for higher power 1:1 baluns.

