

Subject: Coiled Coax Choke Balun for VHF

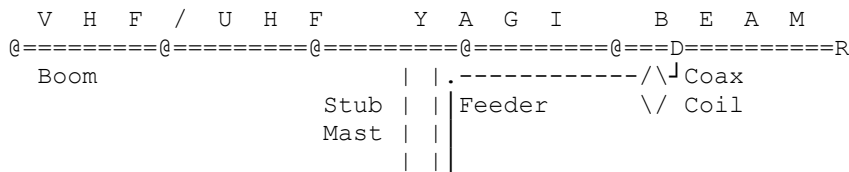
From: G8MNY@GB7CIP.#32.GBR.EU
To : TECH@WW

By G8MNY (Update Dec 04)

A very practical Balun for aerial work is the choke type. It reduces RFI to & from the feeder & at next to no cost or loss. :-)

All it is, is a length of coax tightly coiled up, & as close as possible to the aerial feed point. The length needs to be slightly shorter than a physical 1/4 wave, so that with the added inter turn capacitance it is still high Z. It is tapped/cable tied to the boom making sure the coil is at right angles (hanging down) to the horizontal dipole & so it does not "couple" to it!

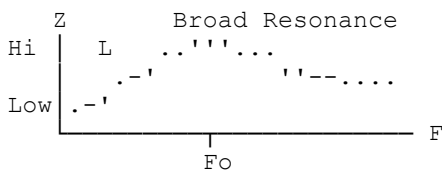
The rest of the feeder is then tightly tapped to the boom so the coax outer's capacitance will reduce any outer feeder currents flowing down the coax & maintain the feeder outer free from RF pickup.



@=directors
D=Dipole
R=reflector

This type of balun can be used in most cases, especially TV & FM designs that have omitted a balun for cheapness.

Common mode Z is high at & above the resonant frequency, where it eliminates any outer feeder current on the unbalanced coax.



Why don't U send an interesting bul?

73 De John, G8MNY @ GB7CIP
/EX