

Coiled Coax Choke Balun for VHF

By G8MNY

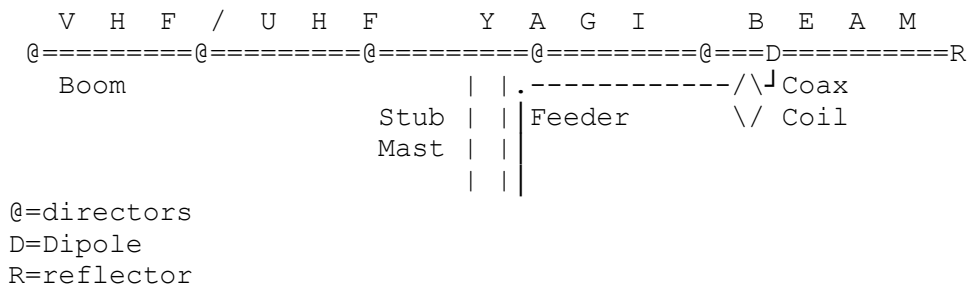
(Update May 09)

(8 Bit ASCII graphics use code page 437 or 850, Terminal Font)

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. :-)

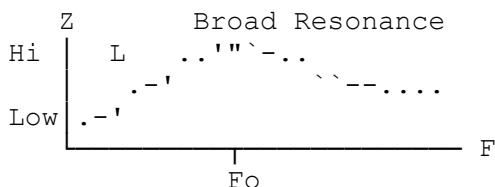
All it is, is a length of coax tightly coiled up, & as close as possible to the aerial feed point. The length needs to be slightly shorter than a physical 1/4 wave, so that with the added inter turn capacitance it is still high Z. It is tapped/cable tied to the boom making sure the coil is at right angles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

The rest of the feeder must be RF earthed for the choke to do it job, so it is tightly tapped to the boom. Then the coax outer's capacitance to it will reduce outer's free space impedance & stop currents flowing down the coax outer & maintain it free from RF pickup.



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.



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73 De John, G8MNY @ GB7CIP