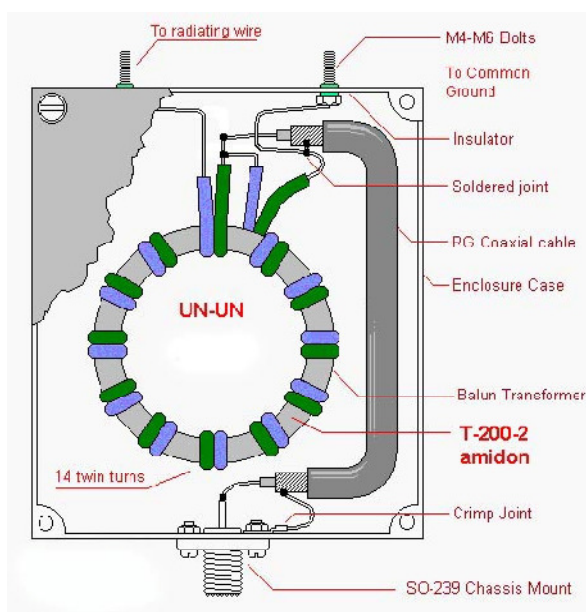


Multiband Vertical Antenna

Multiband NO TRAP NO GAP Antenna. This Antenna is a small wonder, easy to build and will allow you to work the whole HF spectrum with your TRX and its internal ATU.

It consists of a matching device at its feed point to enable lowering the impedance of a random wire. Winding 14-18 turns of twin insulated copper wire, 1.75mm thick, over an AMIDON T-200-2 RED Toroid type and wiring as the image below shows, will enable you to perfectly feed the radiating element. Once finished, place it in a waterproof plastic casing used for electrical wiring suitable for UV radiation. Complete it utilizing a SO 239 socket and two Stainless Steel Bolts to ensure long life under external conditions. Connect a length of wire ranging from 7,6m onwards depending the frequency range we would like to obtain, to the terminal marked Radiating wire. With 7,6m we can easily cover from 7Mhz upwards, for better performance we suggest to lengthen the wire up to 18m so as to have a better performance starting from 1.5 Mhz. The Antenna will perform well in a vertical position utilizing a retractable fibreglass pole (we used a 9m fibreglass fishing rod) to deploy the Antenna in seconds just hook the wire to the top part and extend the elements fully. You are now ready to operate ALL BAND NO GAP making use of the internal ATU of your TRX for portions of the band where SWR is above 2:1. This antenna shows a very low Radiating Angle mounted on the ground too, outperforming poorly installed Trapped Vertical and Triband antennas where proper height cannot be achieved.



For field station use I am experimenting using the coiled artificial ground as suggested by Jake N0LX. My experiments are progressing well and the results are favourable. No counterpoise needed and the coil below mounted on the mast at 700mm above ground. The ground feed is fed from the centre of the coil.

