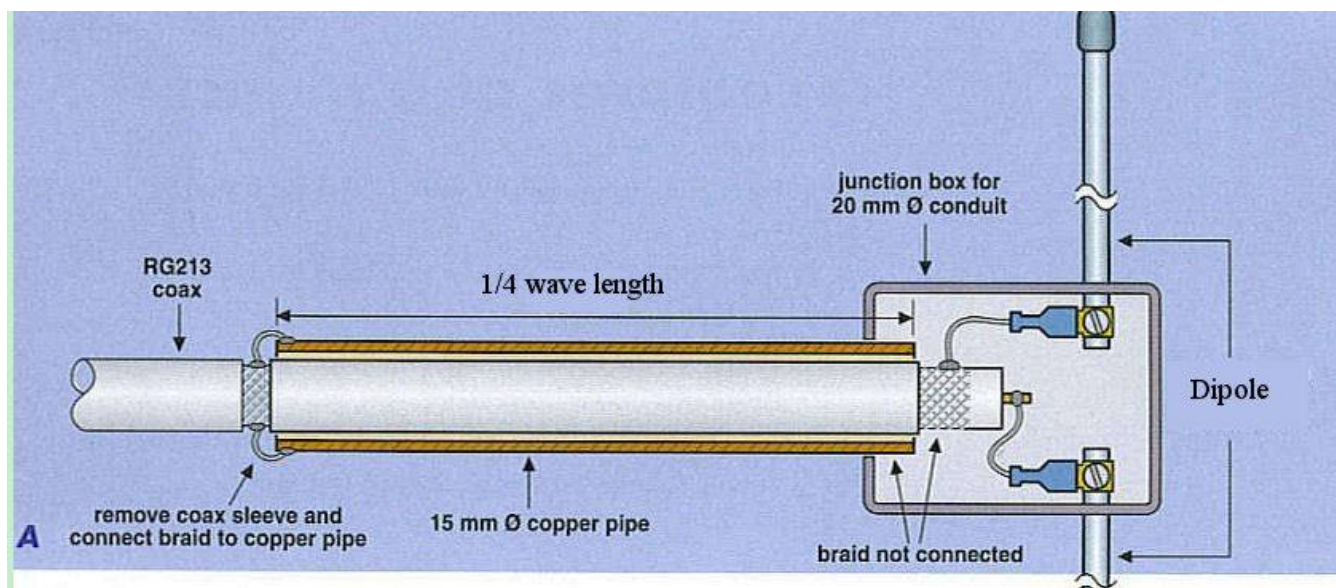


Bazooka or Sleeve Balun

Bazooka balun is a sleeve around the coaxial cable, short circuited to the copper mesh of the coax shield and resembles a bazooka. It is also known as a sleeve balun. Bazooka balun increases the impedance to ground seen by the outer shield current and minimizes the outer shield current.

Length of the external sleeve in bazooka balun is quarter wavelength and it is grounded to the copper mesh of the coax shield, away from the dipole antenna feed point. Inner conductor of the coax and outer shield of the coax at its end are connected to the dipole antenna feed points. The shorted combination of quarter-wave sleeve and outer surface of the coax shield presents infinite impedance and the RF current flows only on the inner surface of the coax shield, thus making it a balanced transmission line.



This shows the basic electrical connections for the bazooka or sleeve balun. It can be made using 1/2 inch copper pipe as show or the copper pipe can be replaced with a second layer of copper mesh shielding on the outside of the outer coax sleeve.