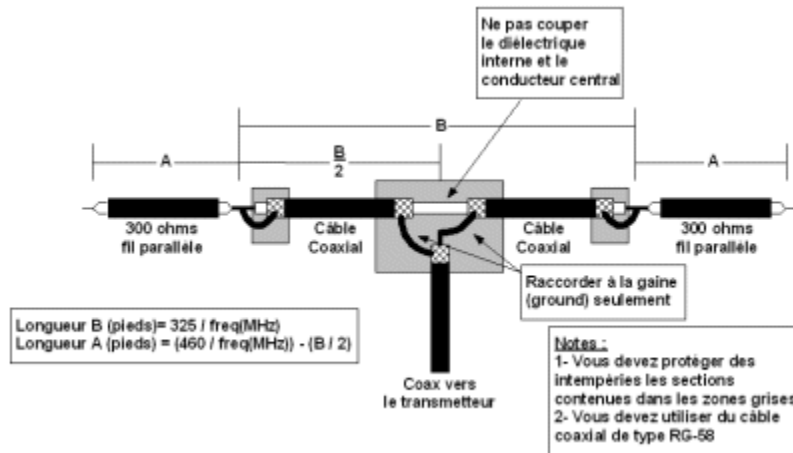


Double-Bazooka Antenna

By Camille VE2SO

The Double Bazooka is a single-band antenna, which has similarities to the dipole and the Folded dipole. This antenna is constructed of closed coaxial line and is configured as the Folded dipole except that instead of using the 300-ohm coax is used.

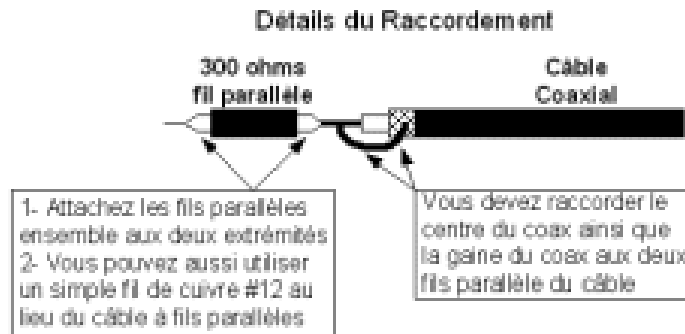


Because it is closed, it eliminates noise in reception because it represents a short circuit on the other bands that own and in doing so, it emits less harmonics such as ITV.

To calculate the antenna must be taken into account the velocity of the coaxial cable used. Usually, we use polyethylene so the velocity will be 0.66.

So for the coaxial part of the antenna, we will use the following formula: $492 / F \text{ (MHz)} \times 0.66$.

And to adjust the resonance is added at each end is a single wire, line 300 ohms or 450 ohms shorted at each end as shown in the photo.



The formula for calculating reach the ends, is the total formulation of the antenna is: $460 / F \text{ (MHz)}$ minus the result of the above formula divided by 2.

Why 460 instead of 468? This is an average that takes into account the first calculation. It's okay to use 468 unless you have to cut the excess, the antenna resonates below. It may be that it does not change much, the antenna is large inside the band. It is not uncommon to be able to cover the entire band. The use of RG-58 is safe even at 2 KW. For 80 meters, I recommend cutting to 3750 khz, it should satisfy the band up to 3.5 CW 4.0 with a reasonable SWR.

This antenna is well adapted to a hostile environment, it is less affected by obstacles and even after

an ice storm we do not see any difference in the SWR. No need for Balun, or antenna tuner. To the multi-band FORGET IT! Here I have 4 Double Bazooka, 80, 40, 20 and 17 meters.