

MOPZT Technical Article : Sorbie Balun and Bottle Choke

Permission to copy/distribute this article is granted on the basis that this file is un-modified and the author, MOPZT, is credited.

I like experimenting with HF wires/dipoles in the garden and in the field - I use a Watson 1:1 Balun for my main 40m dipole but wanted something lightweight and cost-effective for temporary use - In short, I didn't want to spend £30 on another one! The Sorbie Balun got it's name thanks to the plastic pot used to make it - As I'm still a young slip of a lad, I'm blessed with a full head of hair so using gel/moulding cream is a daily chore - These little screw-tubs are usually thrown into the recycling or used to store *odds 'n' sods* in the [Shack](#). I then had the thought that they'd make a good Balun/Dipole Centre - So the *Sorbie Balun* was created!

The balun itself consists of 4+4 turns of RG-58 coaxial cable over a large ferrite core - see the image below for a wiring layout. These kind of baluns are well-documented online so I won't go into further detail.



The lid of the pot is used to mount the SO-239 connector which is then soldered to one end of the coax. The other end has a solder tag on each - These are then attached to the screws on the side - Add a couple of solder-tags for your dipole wire and off you go.

As a finishing touch, you could mount a small screw-hook at the top if you wanted to hang the balun from a tower or supporting pole. Some PVC tape is used to secure the lid and provide basic weather-proofing - Bear in mind that this isn't a fully weather-proof unit! However, it's a lightweight item, great for using portable and a fun "coffee-break" project.

The Sorbie Balun : Original tub, and the complete item



Bottle Choke

The Bottle Choke is a simple-to-make and useful item to have if you're into HF operating - particular antenna experimentation and portable operating. Using 20ft of RG-58 coax and a 1-2litre plastic bottle, you wrap the coax around the bottle and terminate the ends with a PL-259. On mine I have a double-ended SO-239 adapter as I didn't have an in-line socket (actually, I don't think they exist!) - this then allows me to put it "in-line" with any regular co-ax feed.

There is about 4-inches of coax at the base of the bottle, with the top-end coming out of the lid and having about 8-inch of coax. This arrangement permits the choke to stand upright.



There are many other sites online that detail how these are made - any non-conductive material can be used as a former: water bottle, waste pipe etc. You can even mount 2 screw-hooks through the plastic and use it as a dipole centre!

- Link 1 : [Ugly Choke - Ham Universe](#)
- Link 2: [Ugly Choke - Other Ways to Form It](#)
- Link 3 : [G4APL Ugly Choke - PDF File](#)

Permission to copy/distribute this article is granted on the basis that this file is un-modified and the author, MOPZT, is credited.