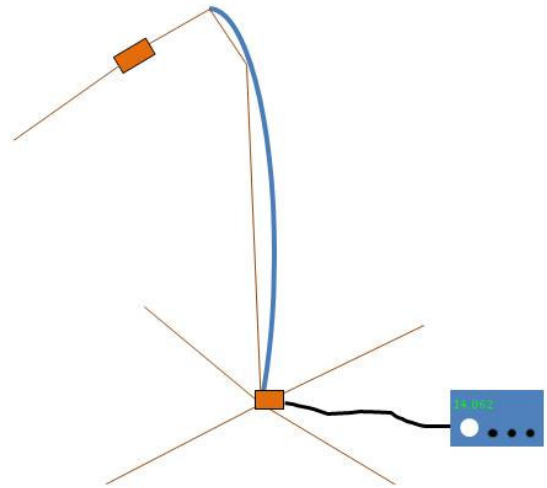
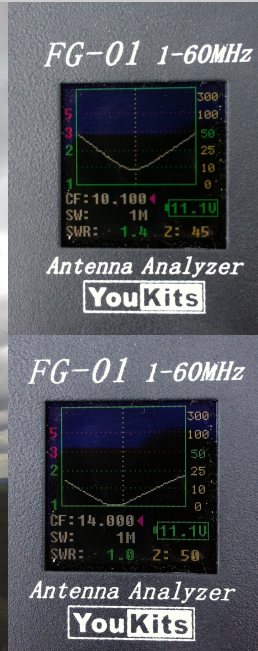


SOTabeams

Antenna without a name

An efficient two band resonant antenna for 20m and 30m or 20m and 40m



Ingredients

SOTabeams Hi-Vis or Stealth Wire (amount to taste)
SOTabeams Minipole (1)
SOTabeams Minipole Accessory Kit (1)
SOTabeams Antenna link (1)
Crocodile clips (6)
SOTabeam terminated RG174 (1)
SOTabeams Liquid Tape (1)
SOTabeams Wire Winder (1)
Thin braided nylon cord
Solder
Fishing swivels (3)

Utensils

Soldering iron
Wire cutters
Tape measure
Small vice
SOTabeams FG01 antenna analyser (optional)

Recipe

Radials

Heat up a soldering iron.
Cut 4 x 5.00m lengths of wire.
Solder a crocodile clip to one end of each wires
Starting at the end without a crocodile of one of the wires, wind it onto a Wirewinder using a figure of eight technique. Clip the end of the next radial on and wind that round until all four are on the winder.
The radials are now complete.

Radiator

Cut another 5.00m length of wire
Thread on the base insulator as shown in Figure 1. The tail after the knot should be 2cm long.
Thread on the other insulators—also Figure 1
Pass 8cm of wire through the link insulator, tie off with two overhand knots (Figure 2)
Solder on a crocodile clip.

Cut a 2.44m length for wire (30m band) or ???m length of wire (40m band)
Pass 8cm of wire through the link insulator, tie off with two overhand knots
Solder on a crocodile clip (see Figure 3).

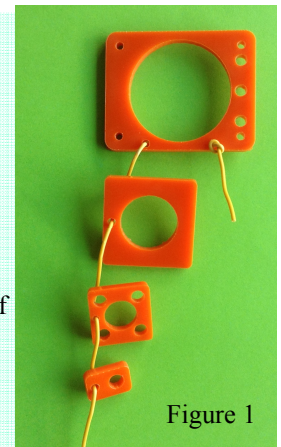


Figure 1

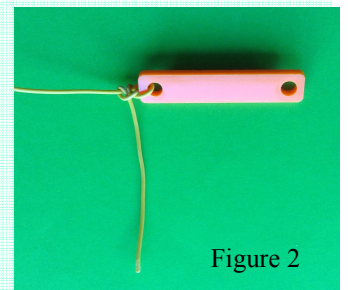


Figure 2

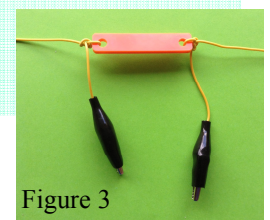


Figure 3

<http://www.sotabeams.co.uk>

Fold back 10cm of wire at the open end of the radiator and tie a figure of eight knot to form a loop (Figure 4).

Cut the pre-terminated feeder to your desired length (we suggest about 3m)
Thread the feeder through the base insulator.
Strip the end and make off as shown in Figure 6.
Crimp or solder a terminal to the braid
Waterproof with SOTabeams Liquid Electrical Tape (optional).

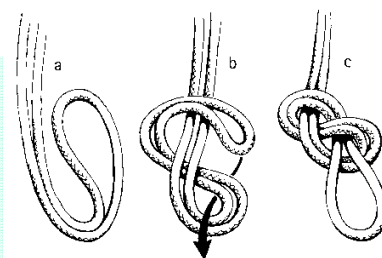


Figure 4

Cut a 4m lengths of nylon cord.
Make a loop on one end using a figure of eight knot
Tie the other end to the loop that you made at the end of the radiator using a couple of overhand knots.

Pick up the Wirewinder and clip the last crocodile clip on the radials already on the winder to the end of the nylon cord on the radiator.

Wind the radiator onto the winder using a figure of eight technique.
The BNC connector should be the last thing that you wind on at this stage.

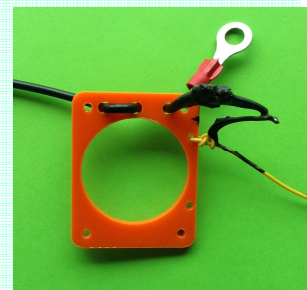


Figure 5

Guys

Cut 2 x 5m lengths of nylon cord
For each guy: tie a fishing swivel to one end using two overhand knots (Figure 6)..
Make a loop in the other end using a figure of eight knot.
Clip one of the swivels to the BNC plug on the winder and wind the guy on using a figure of eight technique.

Your antenna is now ready for final construction and testing.



Figure 6

Final construction and Testing

If you have followed the instructions above, each part of the antenna should come off the winder in the correct order. There is a short video at: <http://tinyurl.com/nonameantenna> showing how to erect the antenna. The first time you erect it you will need to attach the third fishing swivel so that it will clip to the loop at the top of the Minipole. Be careful with the loop—they are fragile.

- 1) Extend the pole and unwind the two guys.
- 2) Unroll the antenna element.
- 3) Attached the base insulator and slide the other insulators down the tapered pole.
- 4) Clip the radiator fishing swivel to the top of the Minipole
- 5) Peg the ends of the guys.
- 6) Lift the Minipole—keeping the guts taut.
- 7) Peg the radiator
- 8) Lay out the radials
- 9) Clip the radials to the coax screen (crimp ring).
- 10) You're good to go!

For operation on 20m the link crocodile clips are disconnected. Join them up to add in the additional wire section for 30m or 40m—your choice. Tip: I tend to seal the ends of the nylon cord using a flame—it makes the antenna look neater.

**SOTabeams stocks a wide range of accessories and equipment
all for portable operating.**