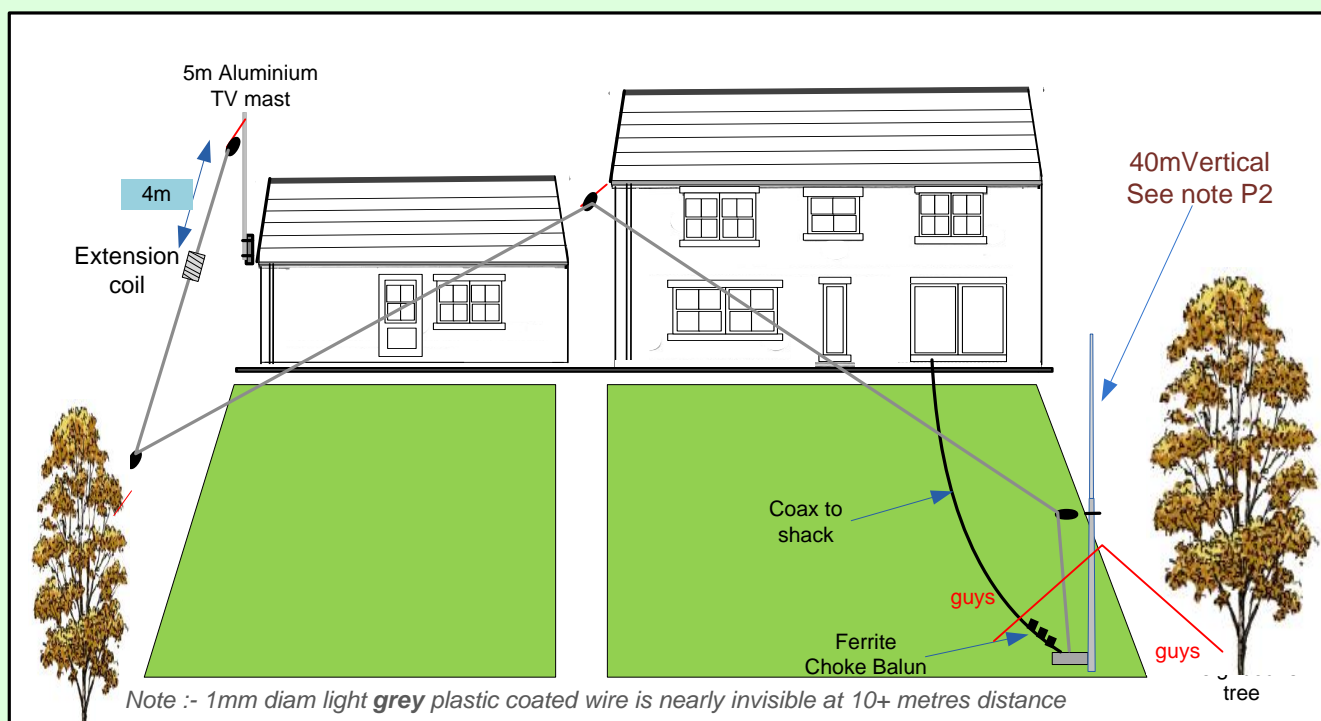
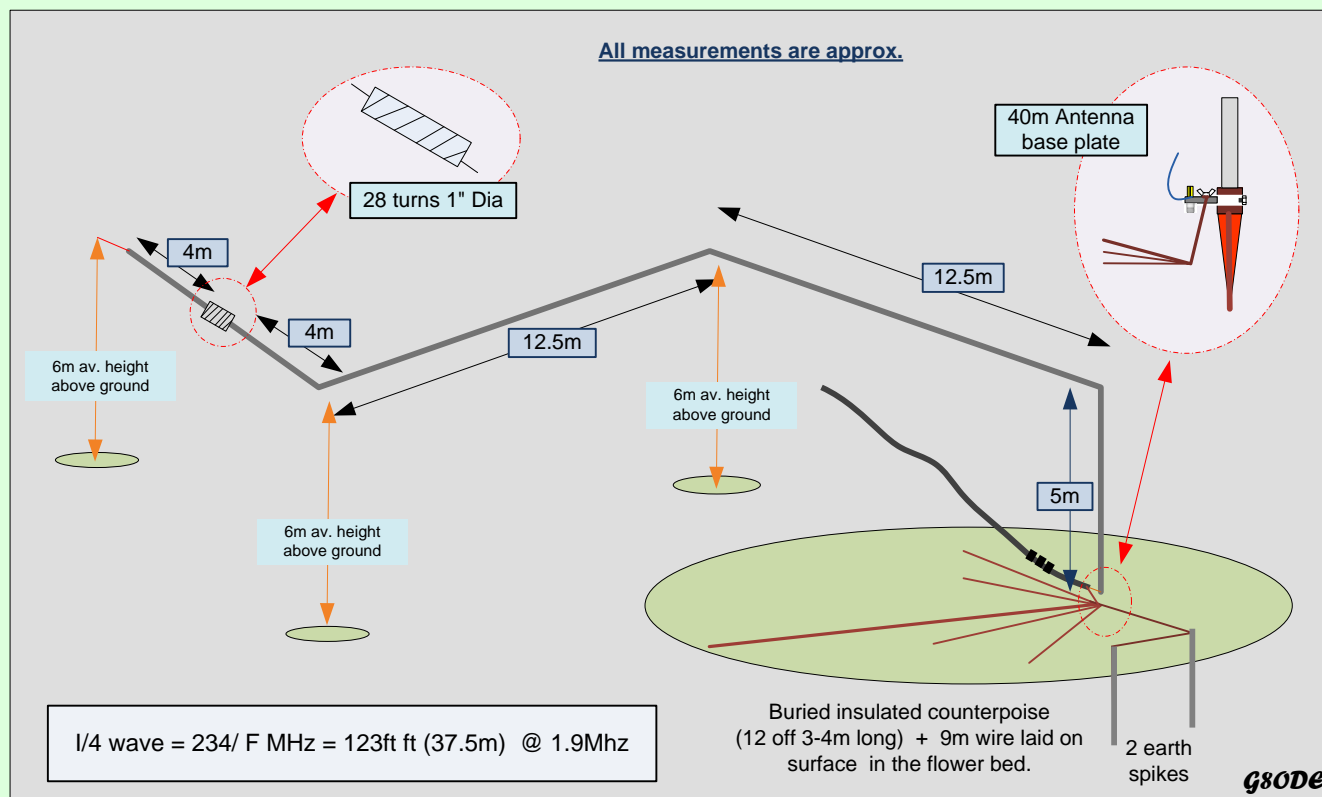


# 160 m Top Band Inverted "L" Antenna - G8ODE

<http://www.rsars.org.uk/ELIBRARY/docsants.htm>



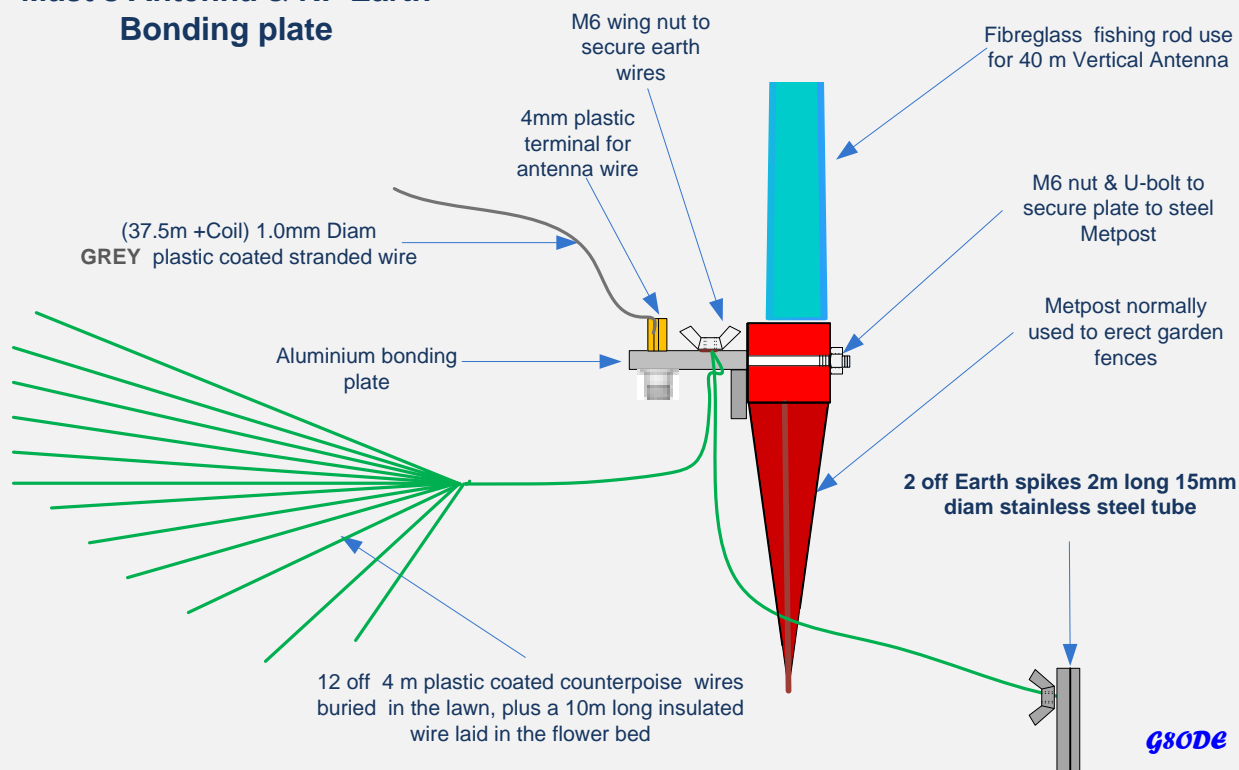
The Garden is 57ft (17.4m) wide, the garage LHS is 30ft (9.15m) deep and the RHS is 35ft deep i.e. too small for a 160m dipole. By zigzagging the antenna a horizontal wire of about 33m can be accommodated. The antenna is electrically lengthened using a 28 turn 1 inch diameter "extension" coil 4m from the end. An Autek Antenna Analyser showed that the SWR was 1:1 at 2MHz. So a tuner is used to reduce the SWR on the lower Top Band frequencies. The Coax to the shack has 5 Clamp-on ferrites to form a choke balun and stop radiation leaking back into the shack. **G8ODE**

# 160 m Top Band Inverted "L" Antenna - G8ODE

<http://www.rsars.org.uk/ELIBRARY/docsants.htm>

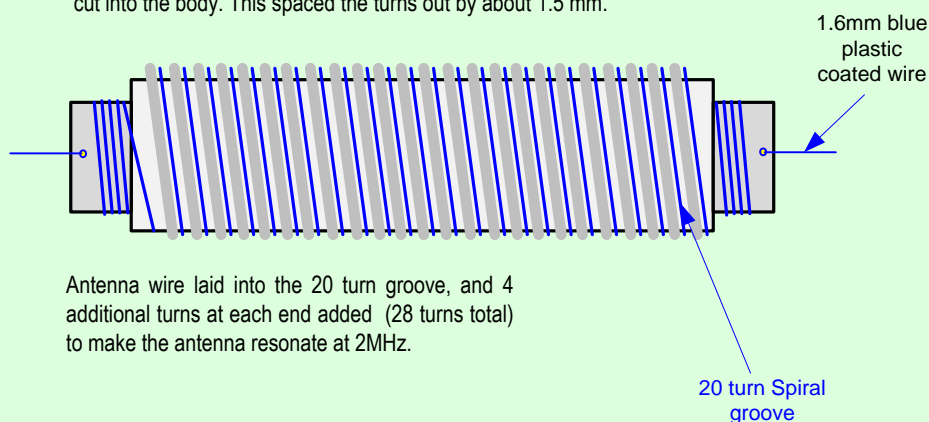


## Mast's Antenna & RF Earth Bonding plate



## 160m Antenna "extension" Coil

Nylon coil former 1 inch (25mm) OD. The one used had the ends machined down to  $\frac{3}{4}$  inch (19mm) OD with a spiral groove cut into the body. This spaced the turns out by about 1.5 mm.



**OPERATION.** - n.b. when using the 160m antenna the 40m vertical wire on the mast is disconnected.

This antenna was the mark 3, the previous two 17.5 m long and 22 m long were found to be ineffective on 160m. The reception seemed to be OK, but the reports for transmission were very poor. The conclusion was that the antenna efficiency was poor. The new antenna even during the DEC 2008-JAN 2009 period's poor conditions obtained 5/8 & 5/9 reports for distances ranging 100-500 miles.

G8ODE