

80m Top-Loaded Vertical/160m Inverted L

- 80m and 160 coverage in one antenna. Based on article in QST, but I made vertical longer as I has space and mounting points.
- Easy construction, trap enables operation in 160m.
- Measures in the picture are just rough values, tune it by using antenna analyzer or SWR meter
- 3650kHz trap construction:
 - Air coil 34 turns on an electric installation pipe, diameter 50mm (15,4μH)
 - Capacitor is made of RG-213, length ~ 120cm (~30.8pf/foot = 121pf)
- Make first 80m vertical with top loading. Adjust to resonance (I used 3650kHz) by tuning the top loading wire lengths.
- Add the trap and then adjust the 160m horizontal wire length. Re-adjust 80m if necessary.
- Add a choke to feedpoint (e.g ugly balun etc. I rolled three turns of coax on to yellow material toroids – as I happened to have those on hand)
- Some internet application for coil and trap calculations:
 - http://www.m0ukd.com/Calculators/air_core_inductor_calculator/
 - <http://www.daycounter.com/Calculators/LC-Resonance-Calculator.phtm>

80m Top-Loaded Vertical/160m Inverted L

