

Inverted V Antenna for 80-, 40-, 30-, 20-, 15- and 10 meter Bands

Dmitry Belousov, UR4LRG

Credit Line:

<http://www.cqham.ru/forum/showthread.php?4981-Inverted-V/page129>

The I.V. Antenna contains three lengths of wire on each side (the longest length a trap included) and provides operation on seven ham bands- 80-, 40-, 30-, 20-, 15- and 10 meter. The antenna is installed and works at three ham station- UR4LRG, UT5UY and Kharkov club station UR4LZZ.

Operation and Tuning of the antenna:

80- meter: Longest wire with a trap provides operation on the band. Trap almost do not influence on the operation on the band.

40 meter: Middle wire has resonance on the band. Antenna tuned with help of the wire to 7010- 7020- kHz. In this case the antenna should have resonance on 21150- kHz.

30 meter: Longest wire with a trap provides operation on the band. Reactance of the trap provides electric length in $\frac{3}{4}$ lambda at the band. When antenna is already tuned to 20- meter band the antenna should tune to 30-meter band with help of the short length in 3.85 meter placed after the trap.

20 meter: Wire before the trap provides operation on the band. The wire has electrical length in $\frac{3}{4}$ lambda at the 20 meter band. Antenna tuned to 14150- kHz with help of the wire.

15 meter: Middle wire has electrical length in $\frac{3}{4}$ lambda at the band. Antenna should have resonance on the band when it is tuned at the 40- meter band.

10 meter: The shortest wire has resonance at the band. It has passband near 500- kHz so the length as usual does not require any tuning.

Antenna may be installed at mast in 10- 15 meter length. Antenna may be fed by 50 or 75- Ohm coaxial cable. It would be useful to install an RF- Choke at the feeding terminals of the antenna. It may be done from 5- 10 ferrite rings sitting on the cable near the feeding terminals.



Inverted V Antenna
for 80-, 40-, 30-, 20-, 15- and 10 meter Bands

MMANA file may be loaded at:
http://www.antentop.org/021/ur4lrg_021.htm

73! UR4LRG



UR4LRG

