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

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## **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.

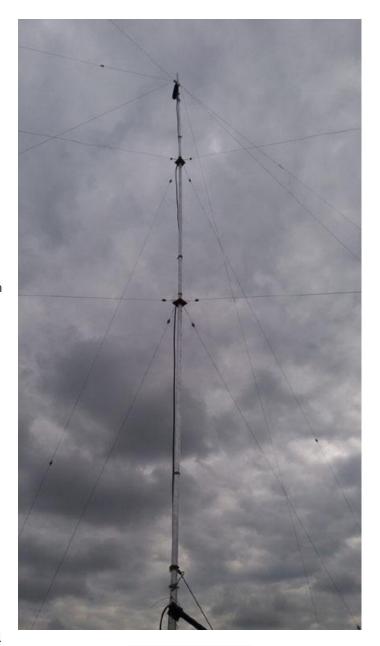
30 meter: Longest wire with a trap provides operation on the band. Reactance of the trap provides electric length in ¾ lambda at the band. When antenna is already tuned to 20- meter band the antenna should tune to 30-meter band with help of the short length in 3.85 meter placed after the trap.

**20 meter:** Wire before the trap provides operation on the band. The wire has electrical length in <sup>3</sup>/<sub>4</sub> lambda at the 20 meter band. Antenna tuned to 14150- kHz with help of the wire.

**15 meter:** Middle wire has electrical length in ¾ 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.



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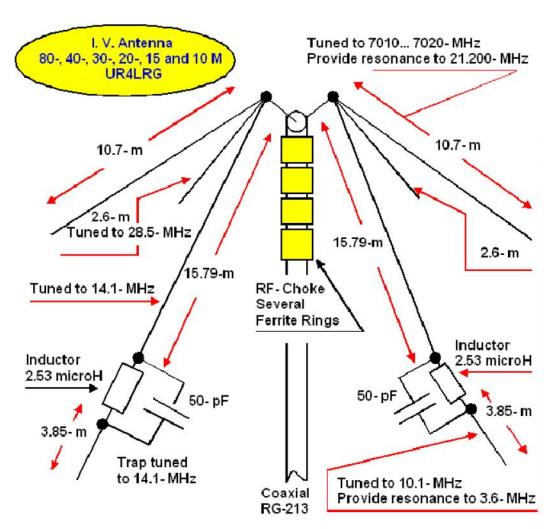
MMANA file may be loaded at: http://www.antentop.org/021/ur4lrg\_021.htm

**73! UR4LRG** 





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