

Wideband RX Antenna for 1.5- 30- MHz

This simple wideband dipole has SWR not more then 1.5:1.0 at the 1.5- 30- MHz. Dipole is not critical to location. It may be just lay down on the concrete roof, like it was made by author of the antenna, man with nick name "professor" from radioscanner.ru forum. **Figure 1** shows design of the antenna.

In the wire parts of the antenna it was used braid of RK75-9-13 coaxial cable. It is not critical, it may be used thick wire or braid of the RG58/RG59 coaxial cable. The antenna should feed through 200/50- Ohm RF transformer. **Figure 2** shows one possible design for the transformer. Transformer may wound on ferrite ring in OD 7- 10- mm with permeability 2000... 200. When used ferrite ring with high permeability- 2000, the quantity of turns in the transformer may be near 10. When used ferrite ring with low permeability- 200, the quantity of turns in the transformer may be near 20

Capacitor at the coaxial cable serves for compensation of the transformer reactance at the high frequency (15- 30- MHz).

Credit Line:

<http://www.radioscanner.ru/forum/topic36746-3.html>

It is very desirable to pick up this capacitor for minimum SWR of the antenna.

The antenna was used at the Special Receiving Centre and showed good workability compare to others receiving antennas.

It is only receiving antenna, it has low efficiency in transmitting mode. However, I (VA3ZNW) did some experimenters with such antennas and may say that that antennas work at good propagation. However, if the antenna will be tried for transmitting mode it should be used proper RF power transformer and resistors in the design of this one.

73! de "professor"

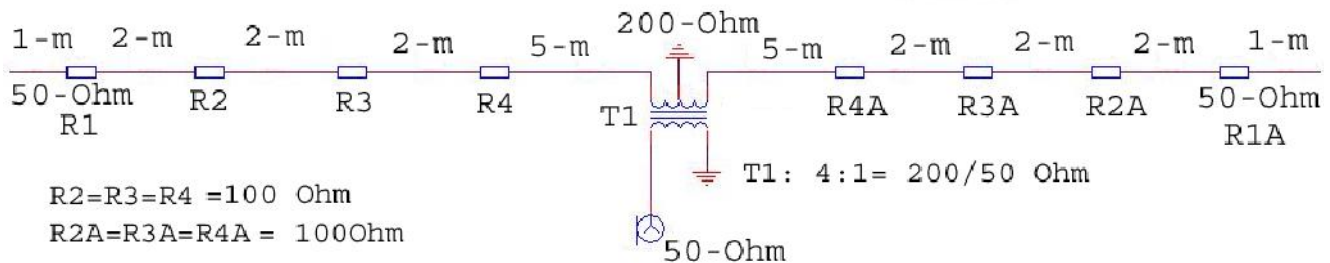


Figure 1 RX Antenna for 1.5- 30- MHz

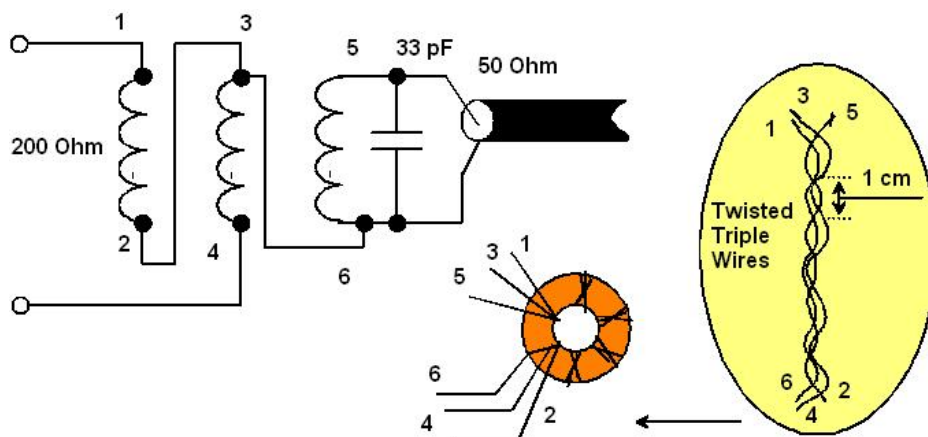


Figure 2 200/50- Ohm Transformer for RX Antenna for 1.5- 30- MHz