Antenna for 80-, 40,- 20,- 17,- 15,- 12 and 10- meter Band

The two- level antenna works at 80-, 40-, 20-, 17-, 15-, 12- and 10- meter Bands. Upper level works on 80-, 40-, 20-, 15- and 10- meter Bands. Lower level works on 17- and 12- meter Bands. **Figure 1** shows design of the antenna.

Upper level has input impedance of 180... 220- Ohm. Lower level has input impedance of 50-Ohm. Each level feeds by its own coaxial cable. **Figure 2** shows feeding of the levels. Antenna at the upper level is fed through a transformer with ratio 1:4.

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The transformer is wound on a ferrite ring with OD 60-mm and height 10-mm. The ring may have permeability 400... 600. Transformer has 10 turns wound by a pair of wire in diameter 1.5- mm (15- AWG). Then the turns are connected with antenna and together accordingly to Figure 2. The antenna may be fed through one coaxial cable. It needs to install RF Relay at the lower level that would be turn the cable to a chosen antenna. The RF Relay should switch both- central core and braid of the coaxial cable.

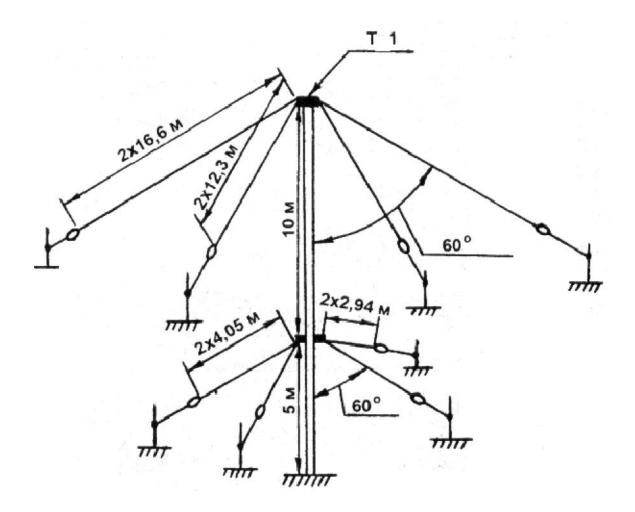


Figure 1 Design of the Antenna for 80-, 40-, 20-, 17-, 15-, 12-, and 10- meter HF Band

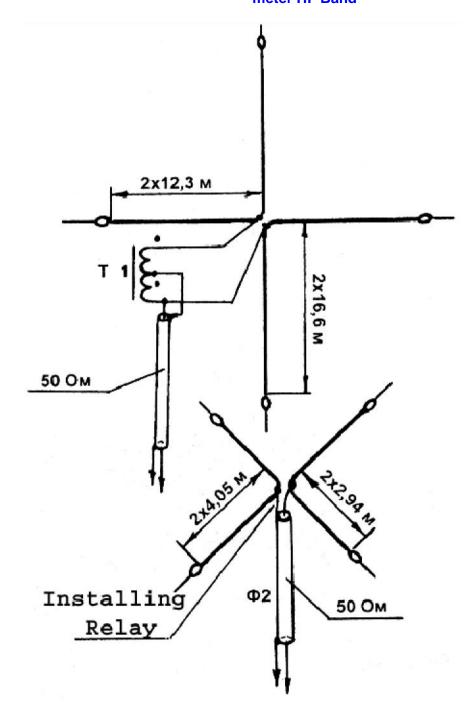


Figure 2 Feeding of each Level of the Antenna for 80-, 40-, 20-, 17-, 15-, 12-, and 10- meter HF Band

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