

DESIGN OF ANTENNA UA 1 DZ

by Leonid Hmyz, UA4PNT

Credit Line:

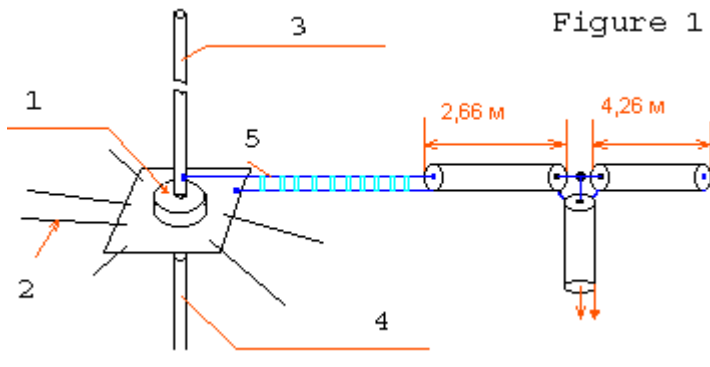
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 Path:! RW6AT! RW3SB! RU9MN! RA9XF! UA9UMR!



Antenna UA1DZ was published at ANTENTOP –01-2003. I was received some questions about design of the antenna. Now, the article contains design of the antenna, suggested by UA4PNT, Leonid Hmyz, and this one gives answer to all questions that I have received from readers.

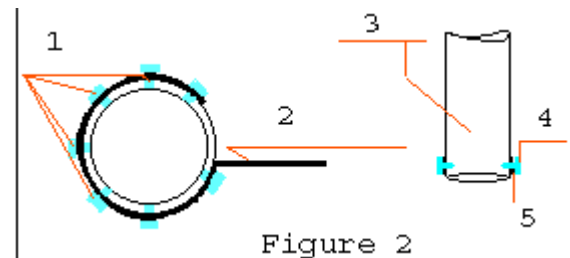
73! I.G.

Figure 1 shows the design of antenna UA1DZ



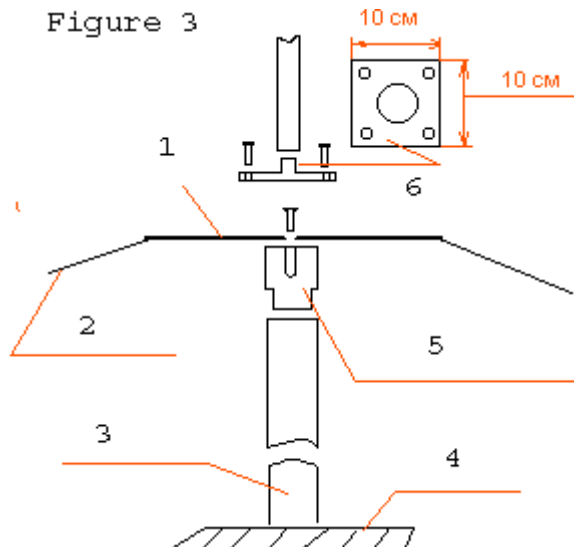
1. Base Insulator
2. Counterpoises, (10-14) pieces, made of Aluminum Wire, (4- 6)-mm in diameter, or # (2-6)AWG, 9.4 meters in length
3. Vibrator of the Antenna, made of Aluminum Tube, (60-130)-mm in diameter, 9.3 meters in length
4. Base Mast, any hard stuff, wood, plastic, metal tube (2. – 3) meters in length
5. Two Wire Ladder Line

Figure 2 shows the connection of the two wire ladder line to the vibrator of the antenna UA1DZ



1. Screw-bolt, M4
2. Upper Wire (see Figure 1, item 5) of the Two Wire Ladder Line
3. Vibrator of the Antenna UA1DZ
4. Screw-bolt, M4

Figure 3 shows the design of the Base Insulator and the connection of counterpoises



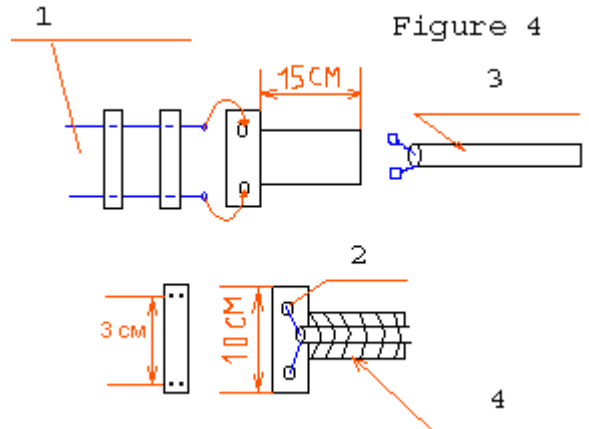
1. Aluminum Plate in Square Shape, 20x20-cm in sizes, holes for counterpoises (item 2, Figure 3)
2. Counterpoises, (10-14) pieces, made of Aluminum Wire, (4- 6)-mm in diameter, or # (2-6)AWG, 9.4 meters in length
3. Base Mast, any hard stuff, wood, plastic, metal tube (2. – 3) meters in length
4. Roof of House
5. Base Insulator, Teflon or Textolite, 40 centimeters in length
6. Insulator, Teflon or Textolite

General Info

1. Two stacks of Guys
2. Guys made of synthetic rope, or metal wire broken by insulators to 1.5 meters lengths
2. Take care about waterproof for all electrical connections
3. If you have not a room to place counterpoises in straight line, place them in zig - zag line
4. Two Wire Ladder Line goes in straight line

73! UA4PNT

Figure 4 shows the design and the connection of two wire ladder line to coaxial cable



1. Two Wire Ladder Line, distance between struts near 5 centimeters
2. Connection with help of Screw-bolt
3. Coaxial Cable
4. Fix Coaxial Cable with help of Scotch or with help of two clamps to T-Plate made of plastic or Textolite

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<http://rrt-kazan.narod.ru/>

Kazan, Radio- Club

