

# UR0GT Chireix- Mesny Directional Antenna for the 145- MHz Band

*The publication is devoted to the memory of UR0GT.*

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Chireix- Mesny Directional Antenna may be used for operation on 145 MHz. designs of the antenna is presented here. The antenna has wide passband, high gain, not critical to installation and nearest environment. Chireix- Mesny antenna has input impedance 200 Ohm so it is possible match the antenna with 50- Ohm coaxial cable with help of 4:1 transformer. Classical example of the 200/50- Ohm transformer made on coaxial cable shown in:

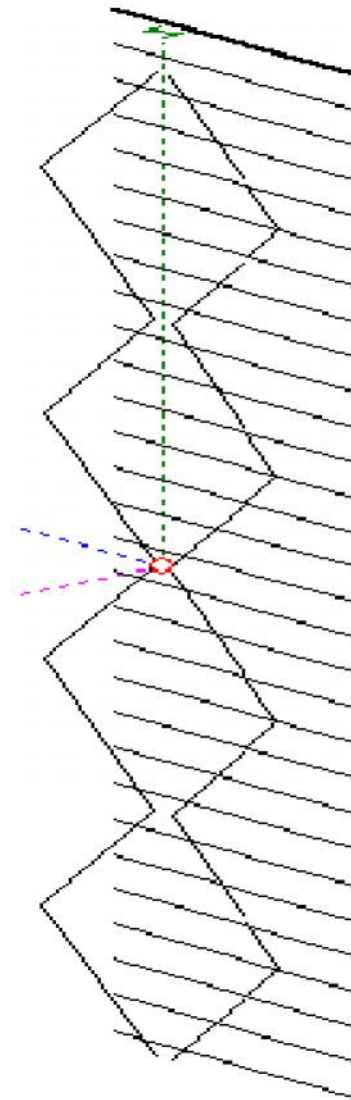
[http://www.antentop.org/018/files/ub5ug\\_018.pdf](http://www.antentop.org/018/files/ub5ug_018.pdf)

However, you may find lots design of such transformer in the internet. **Figure 1** shows design of the antenna. Reflector wire (30 each) has length in 1302 mm. Side of the rhomb has length in 920 mm. Length of the rhomb is 1400 mm. Distance between reflector and rhomb is 340 mm. The antenna has wide pass band. So it is not a strictly demands to keep the sizes as shown in the drawing.

It is possible to bridge four such antennas to feed the system with 50- Ohm coaxial cable. In this case DD of the system would be narrow compare to one element antenna. Antenna may be made from almost any stuff, copper, aluminum or stainless wire in diameter of 3- 10 mm. You may play with model to see how the parameters will be changed depends on the used stuff.

**Figure 2** shows Z of the UR0GT Chireix- Mesny Directional Antenna for the 145- MHz. **Figure 3** shows SWR of the UR0GT Chireix- Mesny Directional Antenna for the 145- MHz. **Figure 4** shows DD of the UR0GT Chireix- Mesny Directional Antenna for the 145- MHz.

**73 Nick, UR0GT**



**Figure 1**  
UR0GT Chireix- Mesny Directional Antenna for the 145- MHz

The MMANA models of the UR0GT Chireix- Mesny Directional Antenna for the 145- MHz Band may be loaded:  
http://

[www.antentop.org/022/CM\\_145\\_ur0gt\\_022.htm](http://www.antentop.org/022/CM_145_ur0gt_022.htm)

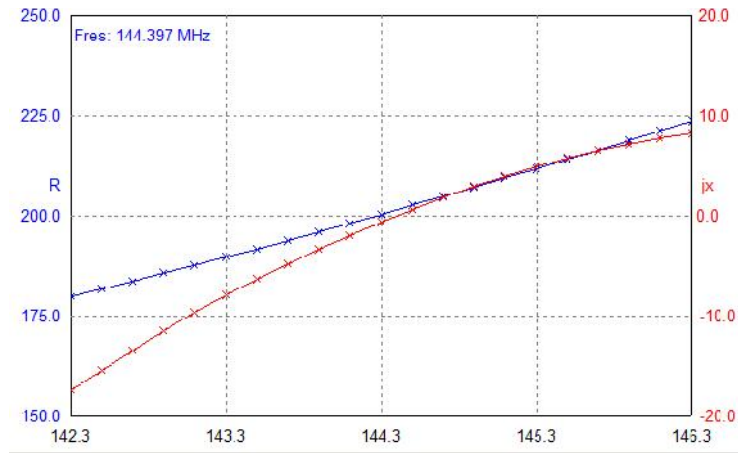


Figure 2

Z of the UR0GT Chireix- Mesny Directional Antenna for the 145- MHz Band

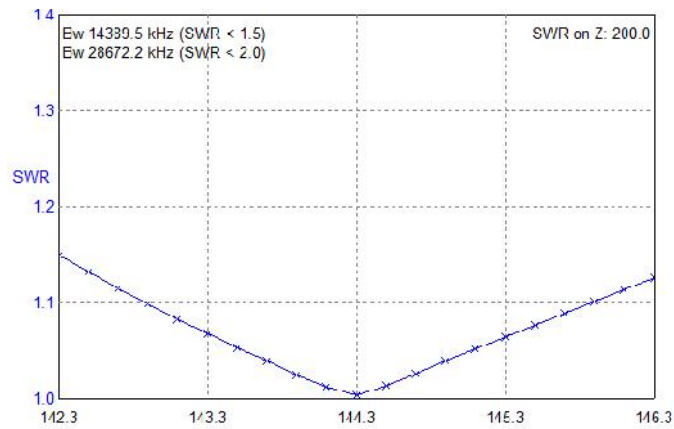


Figure 3

SWR of the UR0GT Chireix- Mesny Directional Antenna for the 145- MHz Band

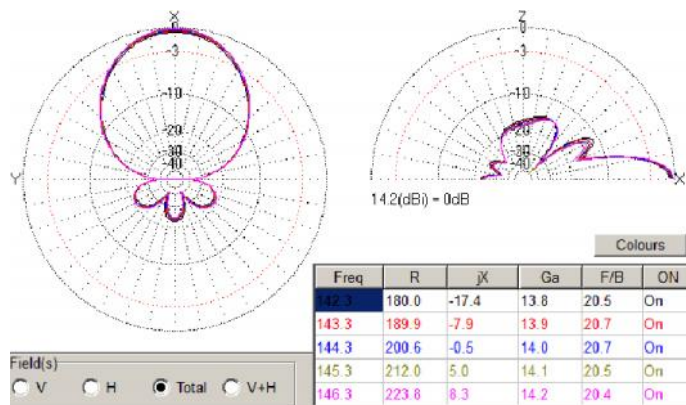


Figure 4

DD of the UR0GT Chireix- Mesny Directional Antenna for the 145- MHz Band