

RW3DKB Receiving Loop Antenna

By: Valery Lifar, RW3DKB

The loop antenna was designed for 160 and 80 meter bands and tested in city where receiving on long wire antenna was impossible on the bands. **Figure 1** shows design of the antenna. Loop is coiled on wooden square 1x1 meter, side sides has length in 10 cm. It was used profile 20 x 20- mm however it is possible to use any wooden bar. Antenna has 10 turns for the 160 meters, tap from 1 turn. For the 80 meter band loop has 5 turns, tap from the half of the first turn. Gap between turns for both antennas is 10- mm. It was used copper wire in 1- mm diameter (18- AWG).

Antennas in such design has input impedance close to 50- Ohm, that allows ever use the antenna for transmitting. It should be used air gap capacitor with vernier (because the tuning is a very sharp). Antenna has pass band near 10- 20 kHz.

The loop antennas provided excellent receiving in the city. Antenna may be installed on the window, on balcony or just sitting inside a room.

73! RW3DKB

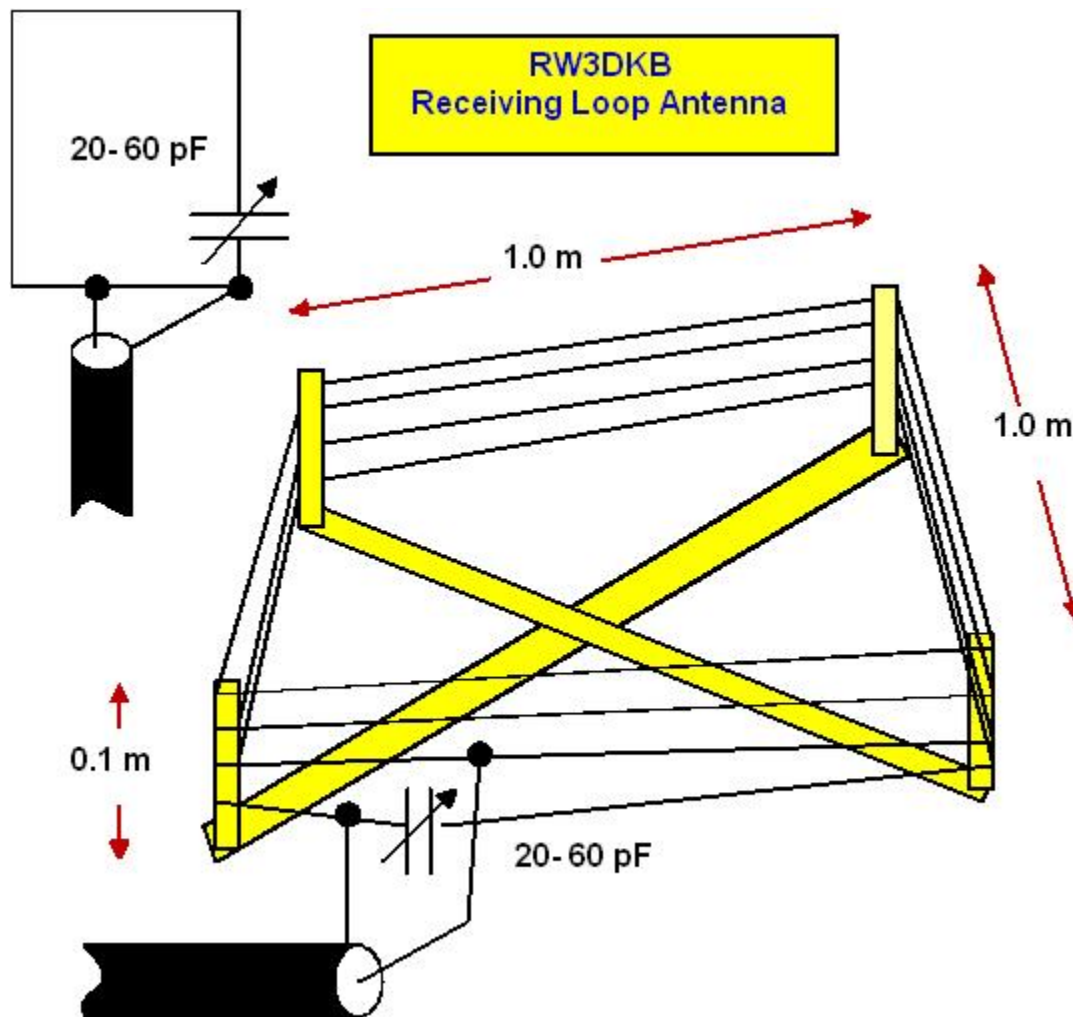


Figure 1 Design of the Receiving Loop Antenna

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