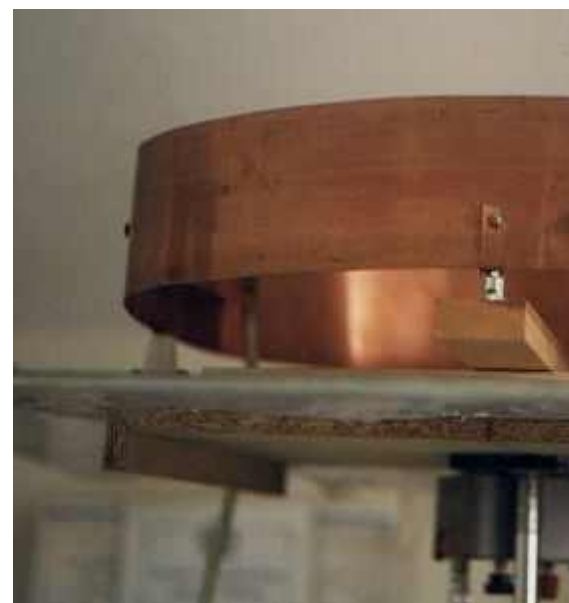


An Indoor Loop Antenna for 6m

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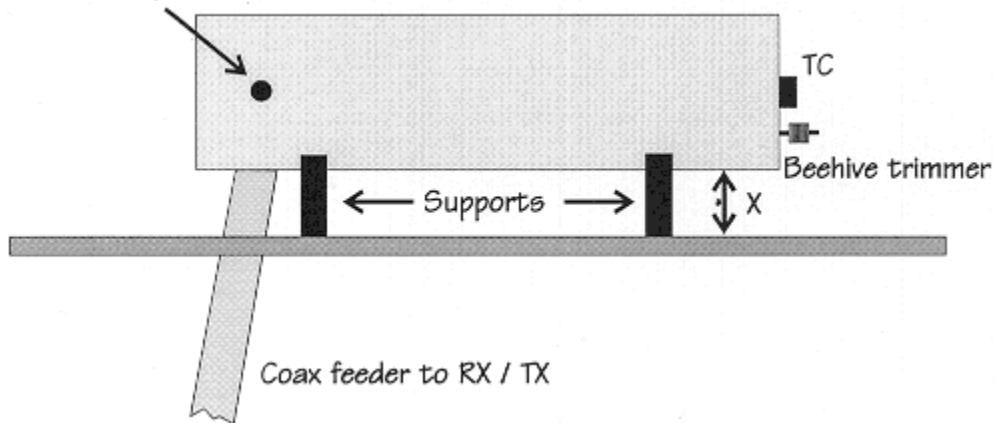
The 6m 20" high Loop.

I have worked 24 countries with my 20 inch loop. Living as I do in a flat with a complete ban on external antennas, I turned to the loop, having for many years experimented with this type of aerial in various forms. I now use them for six metres (20" diameter), four metres (10" diameter), two metres (6" diameter) and 70 centimetres (3" diameter).

G8BTK's vertically polarised loop

The six metre loop (figures 2 and 3) consists of a four inch wide strip of copper formed into a ring, the ends of which are joined by a butterfly trimmer and beehive trimmer in parallel, for ease of adjustment of resonance. The loop is mounted above a ground plane of a three foot square aluminium sheet - hardboard covered with kitchen foil would do just as well. The loop is centrally positioned, about four inches from the ground plane.

Internal coupling connection



The feed-point is taken at right angles from the opposite side to the capacitors. Good quality (ceramic, PTFE or similar) insulators should be used. The feeder coupling consists of a strip of copper or heavy-gauge wire as shown in the diagram.

The horizontally polarised

version of G8BTK's loop

The separation of the loop from the ground plane ('x' in the diagram of the horizontally polarised version) determines, to a great extent, the radiation angle, as does the size of the ground plane. With a three foot ground plane I have found between four and 12 inches to be the best.



6m Loop Coupling and feed

For six metres a resonated loop also works very well and the vertically polarised version exhibits a very pronounced null.