

Travel loop antenna type 40-10 and 80-10

Haunted as many others by radio interference and noise I started looking for a wideband portable antenna . Soon I became focused on a magnetic loop antenna. The only catch was the method of feeding by a Faraday loop , it made the project hand sensitive In the Rothammel Antennabook I found a complete different way of feeding made by capacitors . This was a big improvement and made a perfect match possible between 6.5 and 30 MHz.

Both tuning capacitors come from old AM radios and because their sections are switched in series , they can be used up to 30 Watts without arcing. They interact so it's wise to make some markings on the front for fast tuning.

The loop is made of RG-213 coax and rests on a cross made of 6 mm. fibreglass rods(kite shop)

Inside the tuner is a shortcut between the centre and the braid of the coax loop to form a solid ring . By simply adding a second loop with a 5 cm.spacing and a switch to put the loop's in parallel or in series, the antenna becomes a 80-10 m. portable low power loop for travelling. The travelloop was born HI. It has been my travel companion for many years with many qso's even far over the Atlantic.

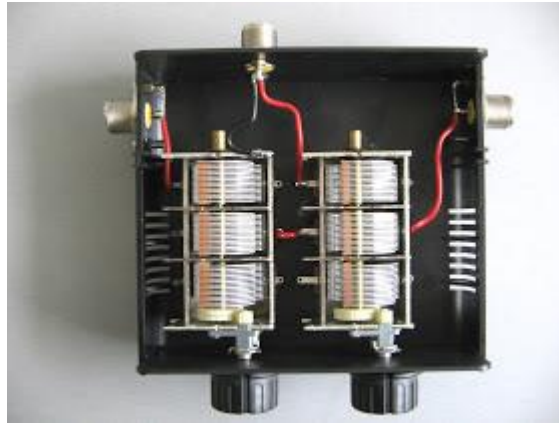
Tuning capacitors : <http://www.rfparts.com/capacitors/capacitors-antennaload.html>

GG80DE added a smart tuning indicator , ideal for home made rigs without swr meter :

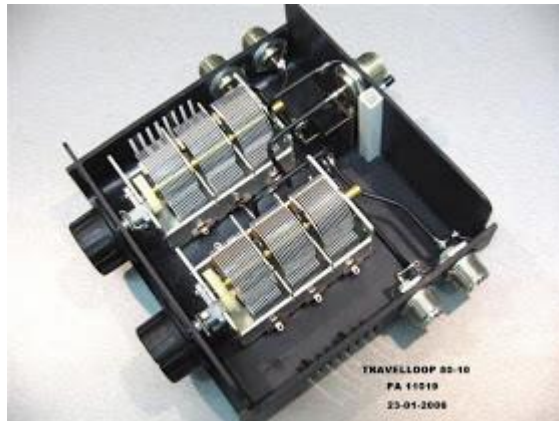
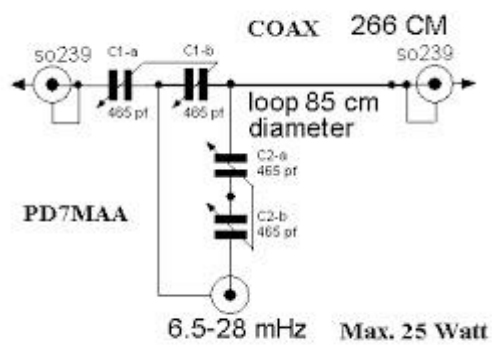
<https://rsars.files.wordpress.com/2013/01/qrp-loop-tuner-80-20m-g8ode-iss-1-32.pdf>



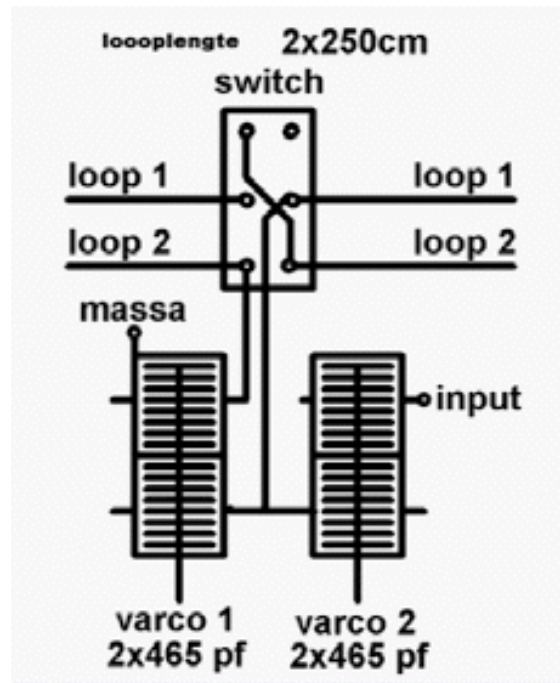
6.5-30 MHz TRAVEL LOOP



6.5- 30MHz tuner



3.5- 30 MHz VERSION WITH BANDSWITCH



THE SWITCH SHOWN FROM BEHIND



CAUTION !

Magnetic loop antennas can produce a high voltage that may be harmful to your health.

Tune your antenna at low power and take a safe distance while operating .

PD7MAA