

What to expect

Magnetic loops are a compromise antenna and performance will be down on a full-size wire antenna, particularly on the lower HF bands. If built properly, expect the following results at QRP power levels: (i) 80 metres - contacts up to a few hundred kilometres, (ii) 40 & 30 metres - single hup contacts up to about 1000 km, (iii) 20 metres - contacts up to about 3000 kilometres with the occasional DX. The variable capacitor won't spark if transmit power is kept down (10w is fine).

80m: comparison with full-sized wire antenna

During the 80 metre SSB 2004 VK/Trans Tasman contest, the indoor loop was compared to an inverted-L approx 30 metres long installed in an RF-quiet suburban park. The results are as follows.

> Inverted-L (outdoors) Magnetic Loop (indoors)

Operating time 1hr 50 min 2hr 20 min No contacts