Loop Antenna Trials: ALA 1530

Wellbrook Communications in the UK is clearly out to compete in the hobby antenna market

Owner Andrew Ikin says his range of products are aimed at urban dwellers who need to keep background noise to a minimum. He's developed the ALA 1530 active loop antenna, designed for use in small gardens where hanging a passive longwire antenna would be physically impossible. The unit comes with a head end unit, an antenna interface and a 12 volt regulated power supply. The user has to supply the feeder cable. The 1 metre loop is made of aluminium (a light-weight polyethylene version-is also available) and is designed to operate near the ground where the ground reflected wave and the incident wave are in phase.

The loop reacts mainly to the magnetic component of the electromagnetic wave and has a figure of eight reception pattern. In use very close to a 400 kW medium wave station we did suffer from some faint breakthrough problems when trying to pick up weak signals coming from the same direction. In that respect we found that on medium wave the Wellbrook loop was much better than the Liniplex loop we tested a few years back, but not quite as good as the indoor mediumwave loop from KIWA. The indoor antenna was used in a situation when there were no computers or fluorescent lights operating in or adjacent rooms.

Outside the medium wave range though, the KIWA loop is not suitable. When the Wellbrook loop was facing 90 degrees away from the medium wave station, no problems were encounted. The loop amplifier has a third order intercept point around 42dBm, confirming the manufacturer's specifications and that is fairly constant throughout the frequency range of 150-30 MHz. If you use such a garden loop for medium wave listening, then a rotator will be needed if you want to hear stations from all directions. The noise level was indeed low, comparable to the T2FD (the T2FD was slightly quieter on the tropical bands around 60 metres) and better than a simple longwire and a dipole set up for comparison. We used an AOR-7030 and JRC NRD-535 for our listening tests. We installed the loop in September 1997 and did listening tests over a period of four weeks.

We note that Wellbrook use the BNC connector as standard rather the PL-259 connector. After waterproofing the connection, we're curious to see how it survives the Dutch winter. The Wellbrook Loop Antenna costs £119.95 including UK Value Added Tax (post free in UK and Ireland), plus £20 shipping costs to addresses outside the UK. Note however, that the loop is not available in North America. More information is available from:

Wellbrook Communications,
The Farthings,
Beulah,
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Phone 01591 620316.

The same company manufactures an antenna feeder isolator, which they claim, stops noise getting into the feed line through mainsborne interference. A side-by-test alongside a similar device called the MT isolator from RF Systems is being organized at press time. Results in a future edition of the WRTH since it takes some extensive listening to be fair to all devices. However, it is already clear that the biggest benefit from devices like this comes when there is heavy local electrical interference (e.g. a   hotel full of televisions, an electrical substation or business with lots of computers.) Once again, when space is no object, passive antennas are always best.

CREDITS: This edition of "Listen to the World" was compiled from contributions by Richard Dixon, Diana Janssen, Stephen Newlyn, Lou Josephs, Harold Sellers. Technical measurements were made by Willem Bos of Universal Micro-Electronics. Additional thanks go to Marian Meeuwissen & Fred Haanebeek for their background research. Section coordinator: Jonathan Marks - Media Network, Radio Netherlands.

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