

## 4 COMMERCIALY AVAILABLE FERRITE LOOPS

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To the best of my knowledge, there are 4 commercially available amplified ferrite loops for the BCB dxer. The McKay Dymek DA-5/7 series, the Worcester SM-2, the Radio West Ferrite Loop, MW1, and the Palomar Engineers Loop Antenna. Being fortunate to have all of these antennas, I will try to shed some light on the different aspects of each. Hopefully if there is someone in the market for such an antenna, this article can be useful to them.

McKay Dymek is basically a company with hi-fidelity AM in mind. They also make AM-5, and AM-7 tuners, the DR-22 General Coverage Synthesized Receiver, and the DA-100, 56 inch General Coverage Vertical Antenna. They have 2 ferrite loops now available. The DA-5 which covers the BCB, and the DA-7 which covers the BCB as well as longwave 150 kHz to 300 kHz. I own the DA-7. These antennas are successors to the DA-3 which can be found reviewed in the NRC reprints. To the best of my knowledge prices are as follows: DA-5, \$175; DA-7, \$195. They are available from the McKay Dymek Company, 675 North Park Ave, PO Box 2100, Pomona, CA 91766. The DA-5 is also available from Edmuad Scientific for \$177.50. The antenna is an electrostatically shielded ferrite loop 12 inches long and 3/4 inches in diameter. It can be tilted and rotated, and is amplified by a FET 2 stage amplifier. It has a sensitivity pot, as well as an input for an external antenna. When the amplifier is turned off the external antenna is fed straight through to the receiver. I have found this is a very useful feature. It is very easy to switch the longwave in and out this way. The antenna is very tastefully done, being finished in real teak wood and textured black enamel. There is a built-in AC power supply.

The Worcester SM-2 doesn't need an introduction. It is available from Worcester Electronics Laboratory, RD1, Frankfort, NY 13340 for around \$60. It is available with either battery, or AC power. The antenna is electrostatically shielded, alt-azimuth, and uses a .6 inch ferrite rod 12 inches long, wound with heavy litz wire. For amplification it uses a bipolar transistor amplifier with a 2 position sensitivity switch.

The Radio West Ferrite Loop MW1 is an assembly of 3 ferrite rods 15 inches in length, mounted on a small wooden stand. The loop does not have electrostatic shielding. The wood is stained and gives the antenna a very professional look. A FET preamp handles the amplification. Battery power is used. Besides the BCB the loop is available with replaceable heads to cover either longwave or shortwave 3 - 5 MHz. The loop sells for \$90, and the optional loop heads for \$42 a piece. They are available from Grant Manning's fine company, Radio West, 3417 Purer Road, Escondido, CA 92025.

Palomar Engineers Loop Antenna is a brand new entry into the field. It too has replaceable heads for longwave, and for 1.6 - 5 MHz. The Palomar Engineers entry is much more compact than the other models. It has a ferrite rod approximately 8 inches long encased in a short piece of PVC pipe, supported by 2 semi-circle pieces of aluminum sheet metal. The amplifier is housed in the base, which is colored dark pink. A 9 volt battery supplies the power. The appearance in the writers opinion is good, but is a little gawdy. I happen to like pink, but I know a lot of people who don't. The loop amplifier is \$67.50 with the plug-in loop antennas \$47.50 each plus \$2 shipping.

I will try to compare these antennas in the next few paragraphs. There is no clean winner here. All thoughts are based on my findings, opinions, and prejudices, and while as accurate as I could make it, it may or may not be the gospel truth.

Sensitivity The SM-2 consistently on both the R-390A, and the SPR-4 pulled in weak stations stronger than the other antennas. The difference was very slight over the MW1, with the DA-7 close behind, and the Palomar Engineers antenna bringing up the rear. A qualifying statement must be added to this however. True the SM-2 amplifier offers high gain, it seemed the MW1 had more usable sensitivity. There seemed to be a lot of hissing from the SM-2. The signal from the MW1 was a lot cleaner. The DA-7 produces a very clean signal also. The gain pot allows you to adjust the gain for almost any condition. The Palomar Engineers did not have the pick-up of the other three, and on weak stations produces a noticeable hiss apparently from the high gain amplifier.

Nulling The Palomar Engineers antenna is a clear cut winner here. Nulls are very shallow at this QTH for the other three. Nulls of the ferrite loops don't seem to match a balanced air cored loop, but are a definite improvement over a long wire. After the Palomar engineers antenna the other antennas are almost equal, perhaps a slight advantage to the MW1.

Appearance Probably a surprising category to evaluate DX antennas. This definitely is not a prerequisite to the dxer, but I guess there are some wives out there who would want an antenna to be pretty. The DA-7 is definitely the solid winner here. The teak wood and textured black enamel finish really give it a smashing appearance. The MW1 is also very sharp looking with its wood frame. While very professional the Palomar Engineers antenna is gawdy. The SM-2 looks homemade.

Tilting and Rotating Tilting is a tie between the Palomar Engineers antenna and the MW1 both being very smooth. The SM-2 binds and the DA-7 after a little wear wants to stay tilted all the time. Rotation is a different matter with the SM-2 being the smoothest of the lot. The Palomar Engineers antenna and the MW1 are so close behind, it could be called a three way tie. The DA-7 tends to bind up at times.

Extra Features The SM-2 cannot really compete here. The MW1 and the Palomar Engineers antenna have the changeable heads, but the DA-7 can tune longwave at the flip of a switch. The external antenna switch has to be rated a big plus.

Overall In my opinion the nod has to go to the Radio West MW1. Reception quality and nulling are the big factors for the dxer and the MW1 seems to be the overall best in these two categories. While the DA-7 or for that matter the DA-5 have their added features and good looks, the price is prohibitive. I think McKay Dymek has taken a lot of unnecessary abuse over the performance of their antennas. I have found the DA-7 to be a very good antenna, very useful to the DXer. The nulling ability of the Palomar Engineers Loop Antenna make it a useful addition to any receiver. The low price of the SM-2, and its performance has made it a favorite for a long time. It has been pulling in DX for many top flight dxers, and is still a super antenna. I wouldn't throw my SM-2 in the trash and run out and buy a MW1, but I have to give the MW1 a slight edge overall. But don't let me make the choice for you, everyone has different requirements, and receivers. Make your choice based on your needs.

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