

## 40 meter shortened dipole project

Interesting little project with a couple of loading coils. Works super and saves you about 5 meters off a full sized 40 meter dipole. It was the driven element of a 2 element beam for 40 meters based in the loft, pointing at the USA. I stopped using it because it kept setting off the alarm system!



Here's some coils I made from plumbers pipe together with a dipole centre.



It's all ready for testing. In full, 8 meters each leg and ready to be strung up







Now I add the coils in the middle; 40 turns, about 3.5 meters of insulated wire.





Now I'm on the 45 meter band. This brings back memories. Trial and error brought the resonant frequency into the 40 meter band at around 7.38 meters each leg. Try it - but careful when you start chopping the odd centimeter off the ends, each centimeter was worth about 50KHz in resonant frequency as I remember it.



Close up of the coils under tension. The conclusion was that it worked really well and compared well to the (40 meter delta loop). Less than 1.3:1 SWR at 7.120 MHz with less than 3:1 SWR band edge from 7.04 MHz through to 7.2 MHz, the whole UK 40 (7 MHz band) meter band for five quid. Let me know how you get on.