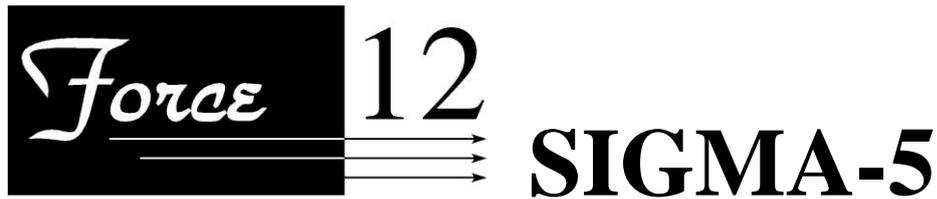


Extract from G1FON webpage. Published with approval by G1FON.



Review

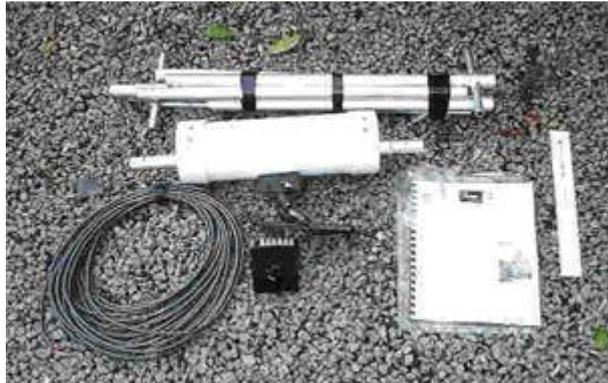
This is a small antenna I was using from early 2004 until 24 September 2008. During that time I worked 134 DXCC with it. As this antenna is very small and doesn't require a groundplane, it would be very suitable for Amateurs with limited space and also for /P operations. Here are the details:

The Sigma-5 is a true vertical dipole, and covers 20-17-15-12-10 meters. It has no traps and is greater than 90% efficient on all bands. It is rated at 1200w PEP SSB, and 700w CW. The size is only 9' not including the 18" base post, it comes in 2' sections, and the weight is 7 pounds.

This is a high performance vertical for the 20-17-15-12-10 meter bands, and is the answer for an efficient, non-trapped, low profile, lightweight vertical. The sigma-5 follows in the footsteps of the Sigma-40 and Sigma-40XP single band 40 meter antennas, which were first in the Sigma line - the result of 4 years of research, testing and development, including DX competitions with 'Team Vertical' and several DXpeditions. The only thing to enhance a Sigma antenna is to place it adjacent to salt water. - The Sigma-5 answers the need for everybody who wants an efficient antenna and either has limited space, or needs to be portable. It assembles in about 5 minutes, then add your coax and go!

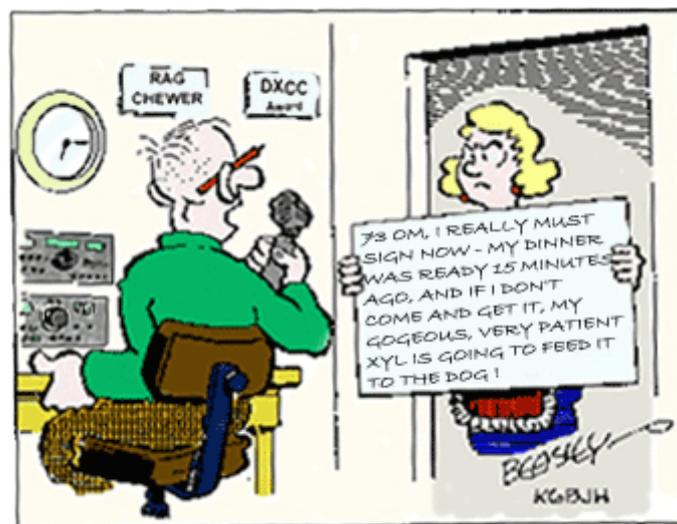
As mentioned before, the Sigma-5 is a true vertical dipole, so it does not require radials, and the ground required is minimal. It is fully balanced and fed at the center with the balun provided. The relay control comes complete with 50' of 5 conductor control cable and a remote switch, needing only 95ma at 12VDC. The efficiency of the antenna is greater than 90% on 20m, rising to 99% on 10m. VSWR is less than 1.8:1, except on 20m, where it covers almost the whole band at less than 2:1. It is possible to set the 20m response anywhere in the band.

The Sigma-5 antenna efficiency is the same, regardless of where it is located. The antenna system efficiency (antenna + ground + feed line) is determined by proximity to nearby objects, quality of surrounding ground and coax loss. To enhance the low angle energy, one could add extensive ground screen (dense for 20-30') under the antenna (then more screen wires out to perhaps 5 wavelengths), or locate it adjacent to salt water.



The first picture above show the Sigma-5 assembled (in this case a garden umbrella stand is used to keep the Sigma-5 upright. The second picture shows how the Sigma-5 looks when ready to transport to your /P site. (The white strip on the right of the picture is a 12" ruler, to give you some idea of the compact size when dismantled.)

NOTE: As this antenna is a center fed vertical, you must ensure that the coax does not run down the antenna, it should run at least at a 45 degree angle from the antenna (see photo above left).



73 OM, I REALLY MUST SIGN NOW