

## 2 Metre Soda Pop Can Vertical Dipole

Construction Details  
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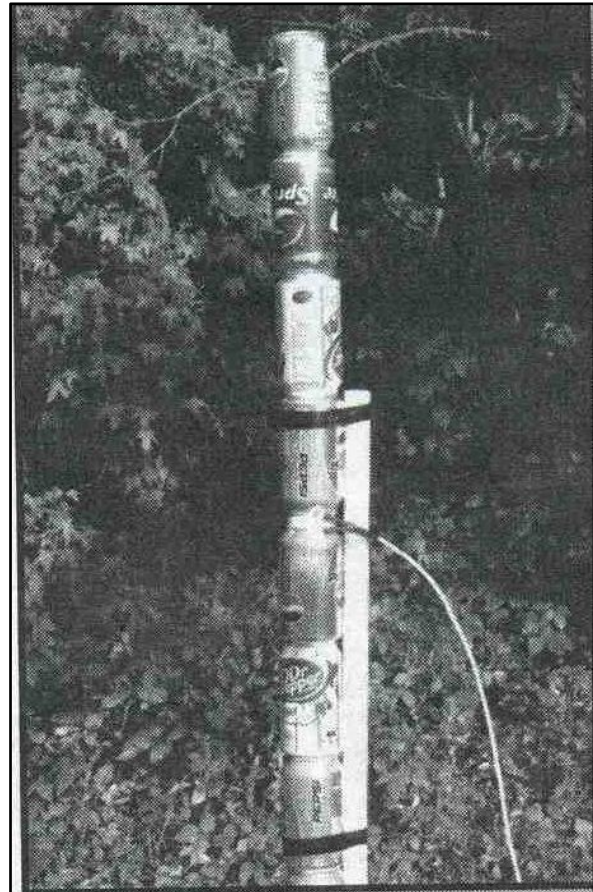
The original 2 metre Soda Pop Can Vertical Dipole was constructed for the 2007 Strange Antenna Challenge. After measuring a number of different can types, it was determined that a stack of four aluminium soda pop cans was within 5,08 mm of the calculated value for a 1/4 wavelength element. After completion of the antenna, a SWR of 1.7:1 was measured during testing.

To construct an antenna, each can is fastened to the can below it with three sheet metal screws to form an antenna element. The secret to fastening the cans together is to use hex head self-drilling #6 x 12,7 mm sheet metal screws. A 6,35 mm magnetic tipped nut setter is used with a 11 cm shaft extension to reach through the wide mouth opening of the can to drive the screws. Each element consists of four cans.

After the two elements are completed, the tops of the two elements are removed with a set of circular cutting aviation snips. The two elements are joined together with a short piece of 38 mm schedule-40 PVC pipe. The connection points to the feed line are sanded to remove the can's outer coating. The coaxial feed line is joined to the cans, with sheet metal screws tapped into the PVC pipe. It is recommended that a good quality coaxial cable of foam or Teflon construction be used with VHF antennas to prevent unnecessary losses.

Before installing the completed antenna, it should be tested for SWR on 2 metres using the low power setting of your 2-metre transmitter. As SWR bridges are frequency sensitive, a VHF bridge should be used to insure accurate readings. The original antenna was designed for only temporary use, so no effort was made to seal the antenna with a coating of protective clear paint.

With acknowledgement to WorldRadio, April 2008



The finished product.



The feed point.

The ZS4BS version of the antenna, indicating you can use cold drink and beer cans!

Andries, ZS6VL, says there are not enough beer cans in the antenna.

Use it for serious VHF work? No, but it will work at your JOTA / CQ Hou Koers station or that station you set up at the local shopping complex.

