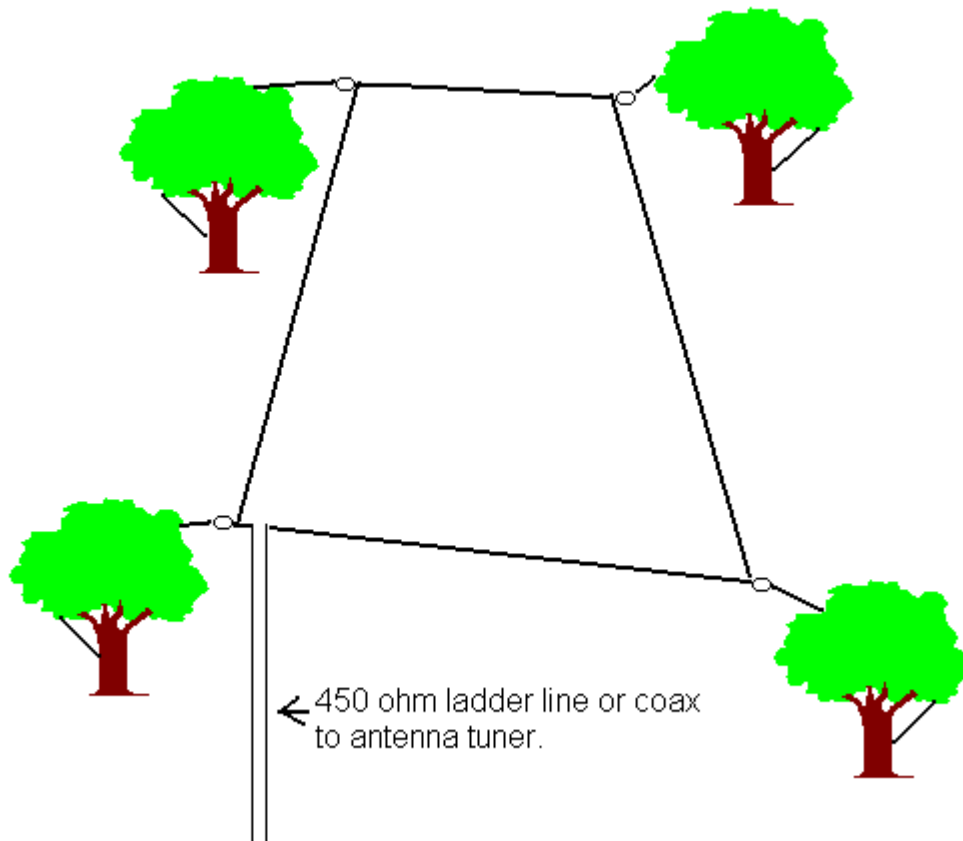


## Quad loop skywire.

This antenna is easy to install and use. An antenna tuner is required for multiband operation. 450 ohm ladder line or coax is used to feed the antenna. If you use coax RG-58 will be fine as the loss on HF frequency's are minimal. The formula for wire length is  $1005 \div \text{frequency in MHz} = \text{length in feet}$ . A loop for 160 to 10 meters will require 530 feet. An 80 meter loop for 80 to 10 meters will require 272 feet of wire. The smallest loop skywire uses 140 feet of wire and will operate on 40 to 10 meters.

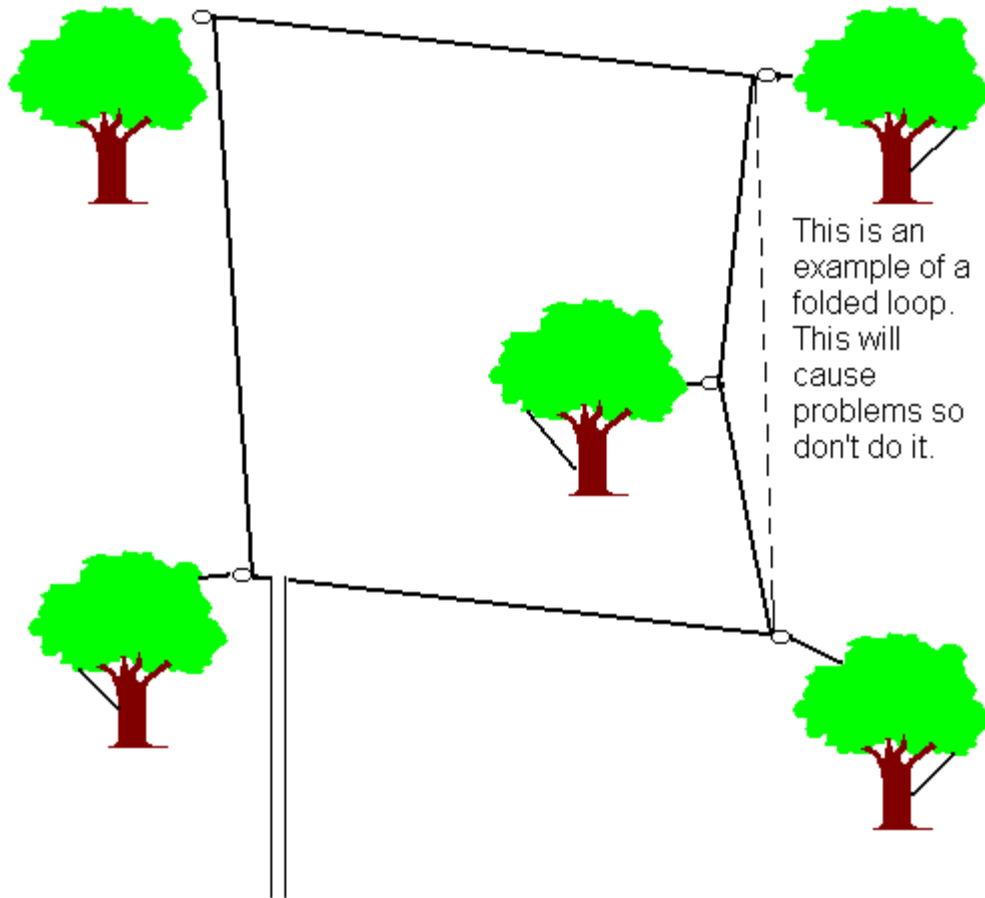
If you use ladder line it is possible to tune the 80 meter loop on 160 meters and the 40 meter loop on 80 meters but the performance is very poor. Below is a picture of a skywire installed in four trees. A minimum of 3 trees will produce a delta loop skywire and 5 or more trees will make for a better skywire. Of note here is to never fold a loop back on it's self. Below is a typical skywire properly installed between four trees.

### Quad loop Skywire



The first question about this antenna is. Doesn't this present a short circuit to the transmitter? NO! At DC with a volt/ohm meter you will read the small resistance present in the length of the wire used. At RF this is not a short circuit. This is a handy feature of this antenna. After you install it take a resistance reading at the very end of the feed line in the shack where it connects to the antenna tuner before you connect the feed line to the antenna tuner. It should read the total resistance of the feed line and loop. Write the resistance down and check it if the antenna tuner setting change or check it every week or so. If the resistance increases you know that you have a bad connection somewhere in the loop or feed line.

If you read an open circuit then the antenna wire or feed line is broken somewhere. Below is an example of a loop that has been folded in on it' s self. Do not do this as it causes problems.



I use a loop Skywire as my only HF antenna and I am pleased with it very much. I am sure if you install one you will be very happy with it also. You can e-mail me at [n4zou@hotmail.com](mailto:n4zou@hotmail.com) if you have any comments or questions.