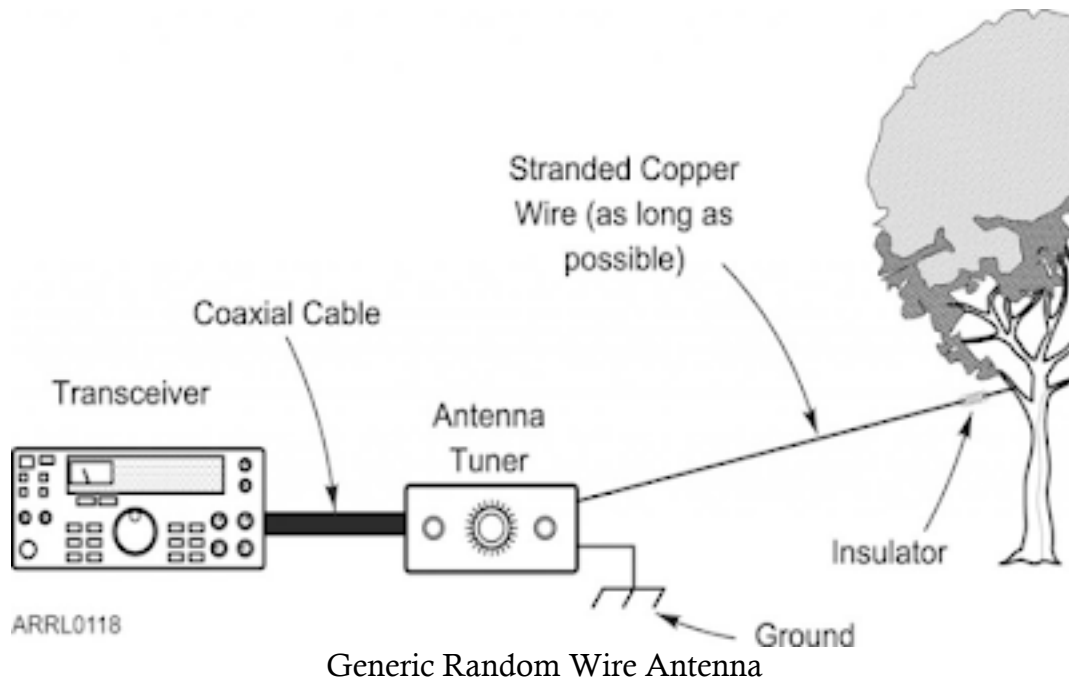


Random Wire Antenna



Best Lengths

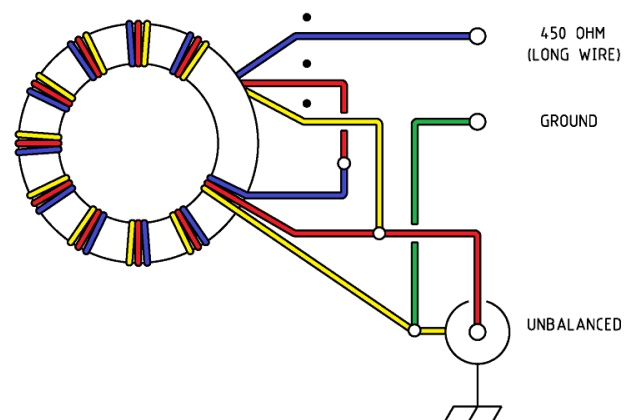
- Not all lengths are good lengths.
- Good lengths in feet: 29 35.5 41 58 71 84 107 119 148 203 347 407 423
- Another recommendation based on the various USA bands of 160-80-60-40-30-20-17-15-12-10-6 is 64 to 67 feet.
- Note that all these lengths require an antenna tuner.

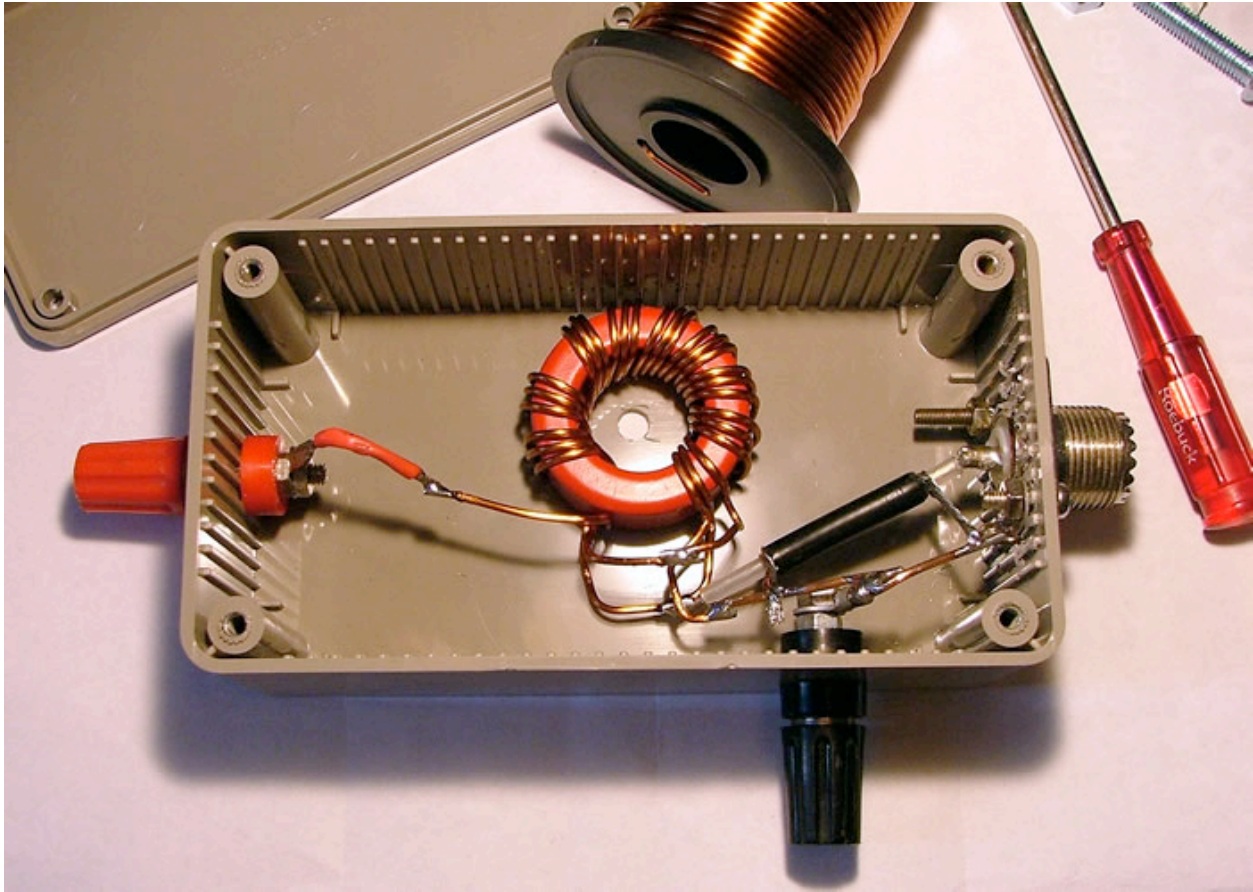
Information

End Fed Antennas, Palomar Engineers. <https://palomar-engineers.com/tech-support/tech-topics/best-hf-end-fed-antenna>

9:1 Balun

- Toroid T130-2 Iron Powder core
- 3 x 9 turns of 18 AWG enameled copper wire





Brands

- Nelson Antennas, UJM150-50, End Fed "Random Wire" HF Dipole 9:1 Antenna. 50' marine grade tinned 18AWG Stranded Copper Wire. Stainless/ 80-6 Meters 150W PEP, eBay item number 202786935032, \$79.99. Recommended RF choke: Nelson Antennas HF Common Mode RF Choke With High Choking Impedance & Test Specs, eBay item number 264946030545, \$41.99. **Problem:** The balun should be placed 5' above the ground.
- Palomar Engineers, Bullet BAS-500NF, Bullet Antenna System 80-6 Meters, 71 foot 14 guage wire, 500W PEP, \$169.95, needs choke (the one from Nelson Antennas looks best). **Problem:** Wire is 14 AWG.
- Ultimex Antennas, Ultimex 100 \$90.00, 500W PEP, 66' radiator, 80 to 6 meters needs choke (the one from Nelson Antennas looks best).
- Ni4L Inverted L 160/6 meter band HF Antenna SWL 3KW Dipole Marconi. 123' Poly Stealth 18 wire. \$151.98
 - The Inverted "L" is a 1/4-wave Marconi, fed against ground or a counterpoise such as radials. The antenna displays a low feed impedance, which allow you to feed it directly with 50-ohm coax cable. The vertical section should be as high as possible, with the remainder of the antenna run horizontally to a support, such as a tree or a mast.

- If one has a good RF ground, simply drive a suitable ground rod and attach the short end of the balun directly to the ground rod. The balun must be vertical to prevent moisture build up. An array of 20 #18 copper wires, 25-30 feet long - attached to the ground rod, will provide an excellent counter poise. (NOT INCLUDED)
- MyAntennas.com EFLW-3K 140 feet long, \$161.75
 - Covers 160-6m 3kW-ICAS maximum.
 - #16 AWG XLPE wire with end insulator
 - TUNER needed
 - This is an End Fed Long Wire antenna that will cover all bands from 160 to 6 meters, including the WARC bands, as well as 60 meters and MARS frequencies. It utilizes a 9:1 UNUN transformer in order to bring the impedance of the antenna to more manageable values for your antenna tuner. For some frequencies, a wide range antenna tuner might be needed.
 - Frequency coverage: 1.8-54MHz
 - Non-Resonant on any amateur radio band, TUNER is needed.
 - Wire length 44, 60, 73, 88, 107, 140, 173 and 202 feet available
 - Standard #16 AWG XLPE wire with end insulator.
 - Power Handling: 3kW I.C.A.S
 - Stainless Steel hardware
 - Connector: SO-239

Videos

Ham Radio - My second HF antenna. A stealth end fed wire for 80 - 10 meters.

<https://www.youtube.com/watch?v=oMchB-bML98>

Erecting the MyAntennas.com EFHW-8010 End-fed Half Wave Antenna and Initial Testing. <https://www.youtube.com/watch?v=zTqGUwwAHi8>

Unboxing End Fed 80-6 Meter HF Antenna 200 Watt.

<https://www.youtube.com/watch?v=2ZGSz8jXxRE>

End Fed Half-Wave Antennas - Tips and Tricks.

<https://www.youtube.com/watch?v=PKJ77POxQdE&t=18s>