

VHF-UHF Antennas: 144 Models

The collection of VHF and UHF antenna models covers 50 MHz through 1296 MHz. Models are in both the .EZ (EZNEC) format and in the .NEC format for use with NEC-Win Plus/Pro and generic NEC-2/-4 cores. The EZNEC-format models use a wide variety of dimensional units, but all .NEC files are metric. The filenames are roughly descriptive of the kind of antenna, the frequency band, and any features that discriminate between models of the same general kind and frequency. As well, models with a known designer identify the person in the filename.

The collection has samples of many kinds of antennas, including Yagis, quads, corner reflectors, planar reflectors, simple and collinear verticals, and dual rhombics. However, Yagis dominate the collection, since there are so many sizes, designs, and variations on them. This situation reflects amateur antenna use in the VHF and UHF region. The collection only touches on quads, since the separate collection of quad designs includes both HF and VHF/UHF quad beams. Some designs, like the DL6WU Yagi, may only have a small sample on a particular band, because you may create other lengths simply by removing directors one-at-a-time from the forward end. As well, many designs for 50 through 432 MHz scale readily to the upper UHF region. There are also a few FM band antennas, including a triplet of LPDAs. However, most VHF/UHF LPDAs appear in the separate LPDA collection.

Some of the models are quite large (up to 2200 segments). This limit surpasses the abilities of some, but not all, entry-level programs using NEC-2. Vertical antennas generally appear above average ground, but horizontal antennas are most often in free space. No collection can be complete in every aspect, but this set of wire arrays may provide a basis for your own development work.

Although many of the designs may be directly built from the models in this collection, the models themselves are for study purposes. Perfecting the design to a level that permits construction of an antenna that is both electrically and mechanically sound is your responsibility.

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