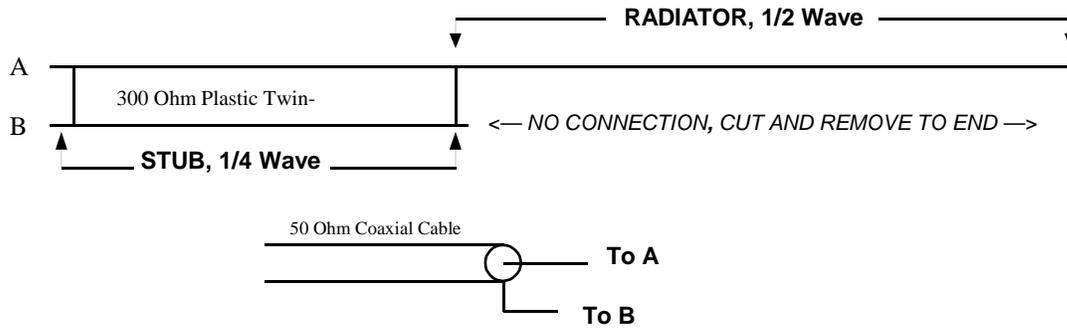


TWIN-LEAD J-POLE VHF ANTENNA

This is a design from an article by W9VZR in 73 Magazine ©, August 1977, P. 60

TV antenna 300 Ohm plastic twin-lead ribbon cable is cut to make a 50 Ohm VHF portable antenna



FREQUENCY (MHz)	28.0	28.5	29.0	50.0	51.0	52.0	144	145	146	147
RADIATOR (Inches)	197.8	194.3	191.0	110.8	108.6	106.5	38.4	38.2	37.9	37.7
STUB (Inches)	102.8	101.0	99.3	57.6	56.4	55.3	20.0	19.8	19.7	19.6

Note that the upper end of the stub is simply cut and does not connect to anything. The lower end of the stub connects to the coaxial cable's shield braid. Cut and strip away the excess plastic and the wire from the point where the stub is cut to the tip of the twin-lead.

The twin-lead "J" antenna can be cut for any frequency from about 26-500 MHz. The formula is shown below:

$$\text{Radiator (in inches)} = \frac{5540}{\text{Freq. in MHz}}$$

$$\text{Stub (in inches)} = \frac{2880}{\text{Freq. in MHz}}$$

The total length of twin-lead needed is the radiator length + the stub length.