

An Emergency J-Pole Antenna

Are you ready to use your amateur radio communications skills in a real emergency? In emergencies, you are likely to have to put up an antenna somewhere. The J-Pole described here is cheap, easily made, and works very well. Plus, it's portable!

The 2-Meter 300 Ohm TV Twin-lead Roll-up J-pole.

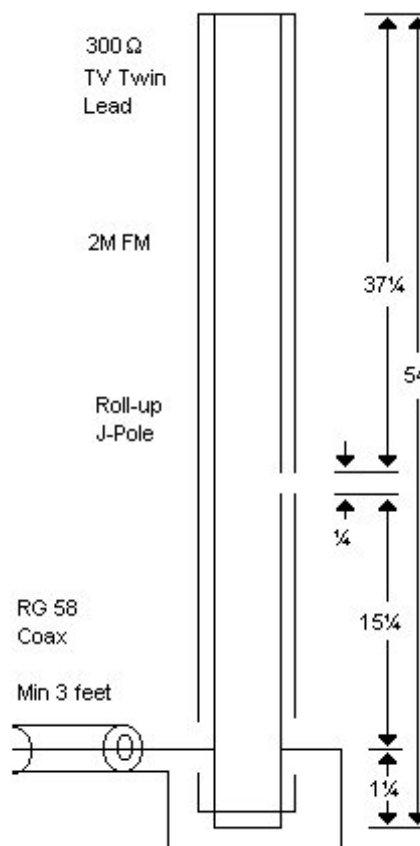
As we all know, the antenna is the most important part of any transmitter system. It must be placed as high as possible, properly matched to the transmitter, and designed to effectively radiate the power applied to it. The antenna that we are going to construct will be made from ordinary 300-Ohm TV Twin lead wire. This wire is available at almost every hardware, drug store, and other stores that carry such items as telephone extension cords.

In the diagram below you will see the construction details of the antenna.

Now, on to the step by step.

Tools: Ruler, Wire strippers, Wire Cutters, Soldering Iron.

1. Measure 54" of Twin lead and mark this spot with some masking tape. Cut the wire about 1 ½ inches longer than this measurement. If this is your first attempt at building something, you may want to leave 4 " of extra wire on the piece you are working with. This will allow an additional attempt of the critical portion of construction.
2. Remove the center insulation from the bottom 1-inch of twin lead. Strip the insulation off of the bottom section of twin lead (only the 1 "). Connect the wire together at this point and solder.
3. From the splice you just made at the bottom, measure up about 1 " and remove ½ " - ¾ " of insulation from each conductor. This is where we will be attaching the coax.
4. From the splice measure up one side 16 ½" . CHECK THE MEASUREMENT TWICE. Cut a gap on this side about ¼" wide. Be sure to remove the conductive material from the notch.
5. From the splice, re-measure the total length to 54 " and trim the top.
6. Attach some coax to the opened area of the wire about 1 ¼" from the splice. The shield of the coax **MUST** connect to the notched side.
7. Attach a suitable connector on the end of the coax for your transmitter and GO!



Note: The antenna can be hung from almost anything using some string through a hole in the insulation about 1" from the top.