

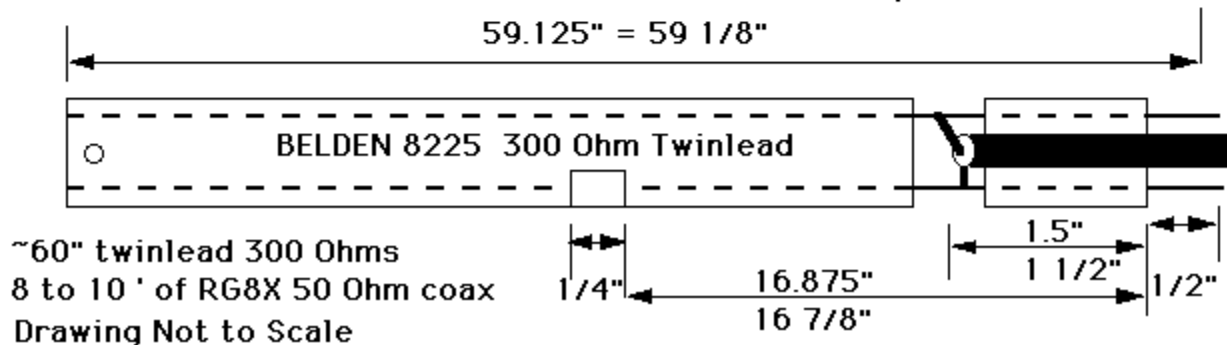
Roll-up and Copper Pipe J-Pole Antennas

By: [Dr. Carl O. Jelinek](#)

Roll-Up J-Pole Antenna for 2 Meters

KC7NS
WB6ADC
N6YNG

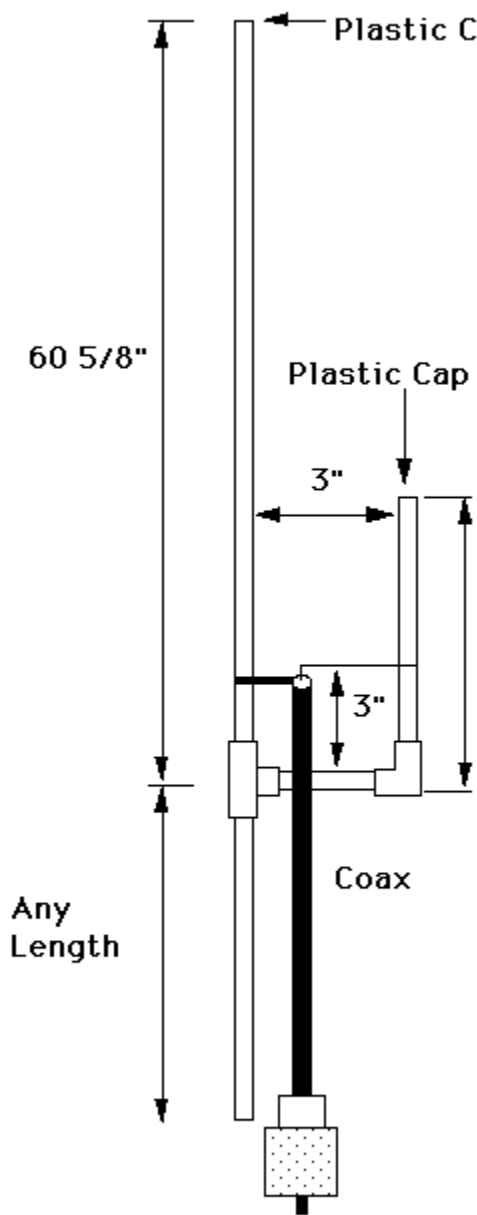
1. Cut a piece of standard 300 Ohm Twin Lead to about 60" long.
2. At one end strip off 1/2" of insulation from both conductors.
3. Twist the ends together and solder them. Insulate with tape.
- The following measurements are from the soldered end.
4. Cut a 1/4" notch in one conductor 16.875"=16 7/8".
Do Not remove the rest of the conductor.
5. At 1.5" from the shorted end , remove enough insulation from both conductors to connect the coaxial feed line.
6. Connect the coaxial line shield to the 16 7/8" side.
7. Connect the coaxial center conductor to the long side.
- 8 For support and protection, put a piece of heat shrink or plastic tape over each of the solder connections.
9. Punch a small 1/8" hole in the insulation at the open end to hang the J-Pole.
A small string or Tie-wrap works well to pin the J-Pole to a curtain.
10. Tuning: If you use the exact dimensions shown below the antenna will be resonant in the two meter band. Prune the open end a little if not exact with an SWR meter to determine minimum reflected power.



Roll-up J-Pole

Frequency {MHz}	147	223	440	28.4
Total Length {in.}	59.125	38.975	19.753	306.034
To Notch {in.}	16.875	11.124	5.638	87.346
Stub {in.}	1.500	>0.989	0.501	7.764

2 Meter Copper J-Pole Antenna



Parts List

- ~85 " of 1/2" Copper Pipe
- 1 ea. 1/2" Copper T fitting
- 1 ea. 1/2" Copper Elbow
- 2 ea. 1/2" Plastic or
Copper Caps
- 50 Ohm Coax. and Connector
- Braid or copper strap.
- 2 ea. 1/2" hose Clamp

Tools:

- Hack Saw w/ Fine Tooth Blade
- Fine Sand Paper
- Solder
- Flux Paste
- Torch
- RTV

20 1/4"

Construction:

1. Cut Copper Pipe to Length allowing for the length of fittings.
2. Sand Paper Ends.
3. Solder With Torch and FLUX.
4. Solder Shield and Tape Coax to Larger piece.
5. Use copper Strap or Braid to connect center lead.
6. Adjust feed point for minimum VSWR and solder or clamp in place.
7. Seal Coax with RTV

Drawing Not to Scale

KC6JOV
Carl N6VNG

Copper J-Pole

Frequency {MHz}	146	223	440	28.2
Total Length {in.}	60.625	39.692	20.116	313.874
To Notch {in.}	20.250	13.258	6.719	104.840
Stub {in.}	3.000	1.964	0.995	15.532
Spacing {in.}	3.000	1.964	0.995	15.532