

## 31 & 28 Foot Fiberglass Telescoping Mast

Thank you. You have purchased the most economical and versatile mast on the market. It will support a variety of light to medium weight wire antennas and on the lower sections of the mast, small VHF and UHF beams. Light, compact and easy to erect it's perfect for emergency operations, DXpeditions, camping or a day in the park.

### Erecting the Mast

Remove the top end cap (the smaller of the two). Tip over the mast slightly and allow the sections to come out. The top section of the mast is identified by an eyelet. Hold on to the top section and place the mast, top opening up, in a vertical position. Pull each section up one at a time. At each of the joints, grasp the sections above and below the joint. Give the sections a slight twist as you raise them. This will lock them into position. Repeat until all the sections are up and locked into position. Reverse this process to lower the mast.

### Supporting your Mast

- A lightweight fence stake driven into the ground. You can then place a 30" piece of 1 1/4" PVC pipe over the stake. The mast will fit over the pipe snugly.
- Drive in the same fence stake and use bungee cords, cable ties or even electric tape in a pinch. You can use most any vertical fixed object a support in this manner.
- Use a 24" piece of 1 1/4" sched. 40 PVC, a 24" piece of 1" threaded black pipe, a floor flange and a 1x3' piece of 3/4" plywood. Fix the flange on one end with wood screws. Thread the pipe into the flange and drop the PVC over the black pipe. Park your car on the other end of the board. Remove the end cap from the mast and place the mast over the PVC pipe.

### Getting the Antenna Up

Wire antennas like an inverted "V" or G5RV can be supported from the first or second joint. This is easily accomplished by using a cable tie to form a loose loop and slip it over the tip of the mast prior to erecting. If you are anchoring the mast using the ground stake or over the PVC pipe, attach the antenna first, raise the mast, place it over the anchor and then stretch out the antenna. If you are using a fixed anchor point like the fence post or railing, anchor the mast and then raise the antenna.

One of my favorite antennas uses a 33' piece of wire. Anchor the mast, attach the wire to the tip of the mast and as you raise the antenna wrap the wire in a lazy spiral around the mast. Stretch out a 20 to 30' radial wire or multiple short radial wires and you're in business. I feed the antenna with coax and use a common mode choke made of looped coax. Using a LDG Z-100 auto tuner I can operate on 10 – 40 meters.

### Other Options

You can support other verticals like dipoles and J Poles from the tip of the mast. You have the option of using a piece of lightweight cord like kite line to raise and lower antennas. There are two clips on the lower end of the mast to anchor the line after you raise the antenna. Be realistic. RG-174, RG-58 and Mini 8 coax make fine portable feed lines. RG-8 does not. **DO NOT ALLOW THE TIP TO BOW MORE THAN APPROXIMATELY 30° FROM VERTICAL.**

If you want to try using a beam I suggest nothing larger than a small 2 to 3 element 2m of 70cm Yagi or quad. Use a section of mast that is between 1 1/4 and 1 3/4 " in diameter. **DO NOT OVERTIGHTEN THE CLAMP OF THE ANTENNA ON THE MAST.**

### Problems

If your mast suddenly collapses it may be due to the antenna/feed-line being too heavy. More commonly, you have not given a firm enough twist as you raised the mast. Mast sections are replaceable. There is a small materials and shipping fee. Email me for support. [john@hamsource.com](mailto:john@hamsource.com)