**O** Alpha Antenna

# HexTenna Yagi

## Portable VHF HF Antenna Maximum Power - 1.5KW PEP SSB

The HexTenna™ Yagi Beam by Alpha Antenna® is a 2 through 20 meters, legal limit, and full-size portable VHF/HF system. Environmental operating parameters: -15 to 130 degrees Fahrenheit and winds up to 50 Mph when \*appropriately guyed.

#### **INSTRUCTIONS FOR DEPLOYMENT**

- 1. Setup your mounting option, which may be a Tripod with a Mast or simply a Mast.
- 2. Adjust Driven Elements to the suggested length in the chart below starting by pulling on the tip of the telescopic whips.
- 3. Pull the tip of the Reflector whips out and add 4% more than the Driven Elements for the Reflector's lengths or retract by 4% to use these elements as a Director. Do so based upon the pattern you want and which provides the lowest SWR.
- 4. Install the Boom with the built-in Mount onto your Mast.
- 5. Screw the 4 adjusted elements into their respective Hubs.
- 6. You may wish to guy your system based upon conditions, then attach your feedline.
- 7. Adjust the elements for the lowest SWR if necessary.

DRIVEN ELEMENT LENGTHS: Actual length is impacted by ground conditions & height.	
Band	While tuning for Lower SWR, add 4%-10% for Reflector on 2-17M or Detract 4%-10% if used as a Director on 2-20M
20 Meters	16 feet 11 1/2 inches
17 Meters	13 feet 3/4 inches
15 Meters	10 feet 11 1/2 inches
12 Meters	9 feet 6 inches
10 Meters	8 feet 3 1/2 inches
6 Meters	4 feet 8 inches
2 Meters	4 feet 7 1/2 inches

#### **PRO-TIPS**

- 1. When driven elements are longer, then the two elements that are not driven are directors.
- 2. A 1:1 balun, available option for this Yagi, installed at the antenna feed point manages common mode current will lower SWR.
- 3. It is not uncommon for reflector elements to need an 8-10% longer length than a driven element to achieve a lower SWR, especially when a BalUn isn't present.
- 4. Not getting 20M to tune would be a solution of 1 & 2.
- 5. Gain is opposite the reflector on 17-2M (20M if a BalUn is used) or in the direction of the director, 20M-2M with or without a BalUn.



### **DEPICTION OF DEPLOYMENT**