



## **MAGNUM 620/340N & 620D/340N**

### **6 Element 20 Meter and Interlaced 3 “N” element 40 Meter Yagi Antenna**

FREQUENCY RANGE: 7.000-7.300 (tunable); 14.000 – 14.350 MHz

**Force 12, Inc.**

P.O. Box 1293 Bridgeport, TX 76426

Sales Support 1.940.683-8371 Fax 1.940.683-8387 Email: force12.sales@me.com

The MAGNUM 620/340N and 620D/340N (100 mph) antenna is two monoband antennas on a single boom. The first is a 6 element 20 mtr Yagi with direct 50 ohm feed. The 20 mtr elements occupy 44' of boom. The second antenna is a 3 element 40 mtr Yagi utilizing the newest technology in shortened element development, the Force 12 “N” series. These elements are approximately 85% of full size and are only about 0.1dB down from full size, which provides a tremendous saving in weight and windload. The 40 mtr “N” elements coexist with the 20 mtr elements and are not resonant on 20 mtrs. The 3 element 40 mtr Yagi occupies about 36' of boom. There are separate driver elements for each antenna, with the 40 mtr driver directly adjacent to the mast/tower.

The assembly instructions are provided as though the two antennas were being built separately. This hopefully will reduce any potential confusion. It is best to build the 20 mtr antenna first and then follow the instructions for the 3 element 40, omitting the comments about building the boom, as it has already been assembled as part of the 20. The mounting hardware is the same as detailed in the 20 mtr manual.

The installation can be made somewhat easier if the 40 mtr driver element is installed after the antenna is mounted to the mast. It resides on the mast, so it is easily within reach. In some installations, customers request the 40 driver to be on the boom, due to mast height. In this situation, mounting the 40 driver after the rest of the antenna is secured to the mast will probably make installation easier.

There are variances in the boom for this large antenna. The following drawings show typical booms and their relative tubing sizes.

→ **Remember to check the tips on the 40 meter reflector and to trim the element tips on the 40 meter driver and director !**

*Be careful and have fun!*





