## BUXCOMM Cat# 1TRA RHOMBIC ANTENNA Kit of parts.

## The 1TRA *KIT* of parts contains:

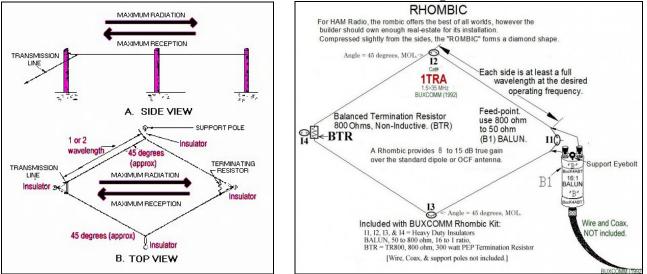
- 4, INSUL4WAY Heavy Duty Insulators
- 1, BTR800, 800 ohm, 300 watt Rhombic termination
- 1, 16:1 BALUN (800 to 50 ohms)

## Wire and Coaxial cable NOT included.

There are several Rhombic antenna articles on the web that provide sufficient instructions to construct a working Rhombic. This Kit of parts for a Rhombic antenna should be assembled by an experienced HAM, or technician. This Kit of parts is not intended for novice antenna builders. The best of the wire type antennas is the RHOMBIC ANTENNA Each side (4) of the Rhombic antenna must be 1 or two wavelengths long.

To determine the length for each of the four (4) sides of the Rhombic, use the formula 936/f= feet. "f" = frequency in MHz, divided into the constant 936. The result is the length of one side, or one wavelength in feet. To build a Rhombic for 80 meters, divide 3.7 MHz into 936. The result is 253 feet. 253 feet is the length of one of the four sides of the Rhombic. To determine the length of wire required to build your 80 meter Rhombic, is 253 X4 or 1012 feet.

The rhombic antenna is widely used for extra long distance communications, both transmitting and receiving, 3.5 to 35 MHz. The BUXCOMM **1TRA** BALUN and BTR. **are** PoweRated @ 300 watts SSB.



It is one of the best fixed-station wire antennas because it is very useful in point-to-point, Long DX communications.

Advantages The Rhombic antenna (BUXCOMM cat# 1TRA) is much easier to construct and maintain than other antennas of comparable gain and directivity. Only four supporting poles or points of common heights from 20 to 40 feet are required for the antenna. The rhombic antenna also has the advantage of being non-critical as far as operation and adjustment are concerned. This is because of the broad frequency characteristics of the antenna.

An even greater advantage is, the gain of the Rhombic is 12 to 16 dB greater than that of the common dipole, or OCF antenna. That's a lot of gain! *The Rhombic provides the best signal in the directions of arrows shown in the illustrations*.

Use caution when installing antennas. <u>Do not work alone</u>, Be aware of and stay clear of : Power lines, poison Ivy, Poison Oak, Poisonous Snakes, broken glass, deep holes, old or shaky ladders, briers, wasps, and hornet nests... etc!

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