

## 80 METER INVERTED-L INSTALLATION - ATTACHMENT

# INTERNATIONAL ANTENNA COMPANY

888-268-4214

You are the proud owner of the new **DOUBLE BAZOOKA INVERTED-L ANTENNA**. The first thing to do is to consider how you want to mount the antenna. The Inverted-L can be installed along the side of a tower or metal pole. Also, the Inverted-L can be installed along the side of a tree or wooden support. The antenna will have both horizontal and vertical radiation components. The horizontal radiation pattern is generally broadside of the horizontal wire section of the antenna. The vertical component of the antenna tends to be omni directional. The feed point of the antenna should be mounted approximately ground level in reference to the vertical support (tower or tree).

When installing along side a metal tower or metal pole the Inverted-L antennas vertical portion of the antenna should be no closer than 24 inches. It is recommended that an insulated support be secured to the base of the tower or pole.

**NOTE: If mounting to a tree or wooden pole the vertical section of the Inverted-L antenna can be close to the vertical support but not touching with no effect to performance.**

At a point between 30-40 feet above the "T" mold feed point connection install an insulated support that will keep the antenna 24 inches away from the metal tower or pole.

Install the vertical portion of the antenna first to the bottom insulated support point then to the top support point. This part of the antenna should be parallel and equally 24 inches from the support tower or pole.

**NOTE: If mounting to a tree or wooden pole the vertical section of the Inverted-L antenna can be close to the vertical support but not touching with no effect to performance.**

Next, extend the horizontal section of the antenna outward and parallel to the ground as much as possible for optimum results. The end may be fastened with cord to a support pole or tree, using proper safety rules in safeguarding that persons, pets, and other objects cannot come in contact with any of the elements as shock hazards or RF burns could result. **NOTE: Whenever connecting the end of the antenna to an object it is recommended that tension relief "springs" be installed to compensate for any movement of the antenna or connecting object such as a tree.**

Next, install several quarter wavelength ground radials to "T" mold ground connector. Also, install an approved electrical code ground rod and secure to the ground connector.

After completing antenna mounting, connect a 50 ohm feed line such as RG-58, RG-8 or RG-213 coax to the antenna feed point and your transmitter. Carefully load the transmitter into a dummy load (not provided). Then with a very low amount of output power applied to the antenna at your desired frequency, measure the SWR. The antenna should exhibit an SWR of less than 2:1 across the entire 80-meter band.

**If the SWR is higher than 2:1 be sure the antenna is well grounded to the ground radials and ground rod. It is recommended that at least 4 ground radials be installed at the base of the antenna.**

To lower the SWR, fold the 300-ohm twin lead back on itself 12 inches at a time ensuring it is flat on itself with no gaps equally on each side and secure with tywraps. The fold of 12, 24, 36 or 48 inches must be done in a single fold over. The loop you have created is the tie off point. This procedure will raise the operating frequency of the CW portion of the band. If you measure a higher SWR, make sure that the antenna is not near or touching any metal objects such as rain gutters, aluminum siding, etc.

**DUE TO CERTAIN SOIL CONDITIONS A TUNER MAY BE REQUIRED TO LOWER THE SWR.**

**APPROXIMATE FOLDOVER FOR EACH SIDE OF THE 300-OHM ANTENNA END SECTIONS FOR CERTAIN FREQUENCIES: 3.5 MHz = (.5 feet), 3.6 MHz = (1.5 feet), 3.7 MHz = (3.0 feet), 3.8 = (4.5 feet), 3.9 MHz = (6.0 feet), 4 MHz (7.0 feet). Additional adjustment may be required.**

After making sure the SWR is within spec and everything is clear of the antenna. You are ready to operate and enjoy all of the great signals and DX contacts that this antenna offers. We at IAC wish you the greatest DX'ing and are sure you will be pleased with your purchase.

**IAC ACCEPTS NO LIABILITY FOR DAMAGE OR INJURY RESULTING FROM THE INSTALLATION AND USE OF THIS ANTENNA**

## Double Bazooka Inverted-L Configuration

