

The Cubex Bumblebee

INSTRUCTIONS

Congratulations on the purchase of a CUBEX BUMBLEBEE antenna. I think you will find this antenna to be incredibly easy to assemble and use. Please read though these instructions before you actually start assembly.

STEP # 1- Inspect contents of package for the following parts.

- 1- Yellow boom. ✓
- 1- Aluminum boom/mast coupler plate. ✓
- 2- 1 ¼" U-Bolts. ✓
- 2- 2" U-Bolts. ✓
- 2- Black spreaders with white tape. ✓
- 2- Black spreaders with red tape. ✓
- 1- White terminal block with 3 stainless steel bolts, 4 nuts and 2 lock washers. (Morse) ✓
- 2- Copper driven element adjusting lugs. (on the white block)
- 1- wire element with white tape.
- 1- wire element with red tape.
- 2- Ring terminals.
- 3- Small wire ties. ✓ fascette piccole
- 2- Large wire ties. ✓ " grande

STEP # 2- Install the aluminum boom/mast coupler plate in the middle of the yellow boom using the 1-¼" U-Bolts. **CAUTION:** Do not over tighten. non stringere troppo

NOTE: The tape on the black spreaders arms is NOT in the middle of the arm. It is off center so that it serves to locate the spreader arms in the center of the boom. braccio

Make sure that you insert each spreader arm into the boom LONG END FIRST.

STEP # 3- Install the two black spreader arms with the white tape into the holes near the white tape on the boom. (for)

STEP # 4- Insert the two black spreader arms with the red tape in the holes next to the red tape.

TIP ASSEMBLY WILL BE SIMPLIFIED IF THE BOOM IS SUPPORTED ON A TEMPORARY MAST OR STEP LADDER.

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STEP # 5- Making sure that the spreader arms are centered in the boom and the pre-drilled wire holes are perpendicular to the boom. Place a few drops of instant glue (not furnished) at the boom/spreader joint and allow to dry. This will make your antenna a solid structure. **DO NOT ATTEMPT TO CLEAN THE HOLES IN THE BOOM. THE FIBROUS NATURE OF THE MATERIAL HELPS TO INSURE A BOND WITH THE SPREADER ARMS.**

WARNING: Instant glue is just that. It will glue your skin or anything else it comes in contact with.

STEP # 6- Find the wire element with the white tape and install it by threading the wire through the holes in the spreaders with the white tape. When the wire has been threaded through all 4 of the spreaders join the wire using the wire crimp already installed on one end of the wire. This connection should be soldered, however it will work without soldering. This element should be bent slightly at the point where it passes through the spreader arm so that the wire forms a square.

STEP # 7- The driven element is the wire with the red tape and will be the next element to install. Begin by slipping the white terminal block with the 3 bolts and the copper lugs over one of the spreaders with the red tape. Next thread the wire through the pre-drilled holes in the remaining 3 ends of the wire square.

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STEP # 8- Loosen the nuts on the small stainless steel bolts on the terminal block and remove the wire ring terminals. Next strip the end of a piece of 52 Ohm coax (see figure # 1) crimp and solder the terminals to the coax, one on the center connector and one on the braid. Now connect one coax ring terminal to one bolt (with the copper lug) and replace the star washer and nut, next do the same thing with the other coax ring terminal and replace that star washer and nut. (DO NOT TIGHTEN AT THIS TIME) *NON STRINGS*

STEP # 9- Now you are ready to attach the ends of the driven element to the white feed block. First loosen the set screws in the copper lugs, slide one end of the wire through the copper lug to the kink at one end of the wire and tighten the set screw. Next do the same thing with the other end of the wire and tighten the set screw. Now slide the white block away from the boom to tighten the element making sure to form the wires into a square at the points where the wire passes through the spreaders. When the wires are taught (not too tight) tighten the Phillips head bolt just tight enough to hold the white block in place. Now you can tighten the nuts on the copper lugs and coax terminals.

STEP #10- Route the coax cable from the white terminal block along the spreader arm to the boom, across to the mast/coupler plate and down the mast. Using the small plastic ties secure the coax cable to the spreader arm. The boom and mast require the large plastic ties.

STEP #11- The final step is to check your work, this antenna assembled as is will be resonant at approximately 50.4 Mhz. Depending on conditions at the site where you are setting up the antenna. If adjustment is needed simply loosen the set screws in the copper adjusting lugs and shorten or lengthen the driven element to achieve resonant frequency that you need.

