

## **Instructions**

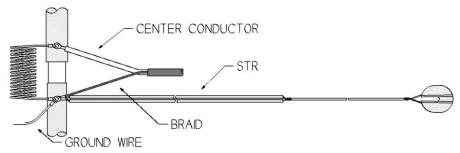
The stub-tuned radial kit may be used with all models of vertical antennas in above-ground installations. It is included as part of the **BUT-RMK-II Roof Mounting Kit** 

TO AVOID A POSSIBLE SHOCK HAZARD CONNECT ALL STATION EQUIPMENT TO A GOOD EARTH GROUND. FOR GREATER SAFETY, DISCONNECT ALL STATION EQUIPMENT FROM THE A.C. MAINS BEFORE PROCEEDING.



## **ASSEMBLY**

- 1. Install the antenna according to the manufacturer's instructions.
- 2. Connect the four STR's to the grounding screw on the mounting post or solder them to the extra wire coming from the impedance/matching coil (Q). For antennas from other manufacturers, connect the STRs to the same point as the braid of the coaxial feedline.
- 3. Fan out the four STR's and tie off the insulated ends. The STR's should not be pulled too tight, but neither should they be allowed to droop onto the roof or to touch other objects, especially metallic ones. Ideally, the STR's should be spaced with 90 degrees of separation between adjacent wires, but they will work well enough in other configurations if space is limited. If operation on 30 meters with the Butternut HF6V is intended, cut four 24-ft. radials from the 100 ft. roll of wire, attach end insulators, and run the 30 meter radials out between the STRs. Fewer than four 30 meter radials may be used if necessary, but two such radials running in opposite directions to each other should be considered the minimum number for effective performance.
- 4. Cut one or more 80/75 meter radials to the proper length for the desired band segment. The proper length, in feet, may be found by dividing 234 by the desired frequency in MHZ, e.g., 234/3.9 MHz=60 ft. Attach an insulator to one end of this wire and the other end to the ground (braid) connection of the antenna. Be sure that all radials as spaced as evenly as possible from each other along their length in order to avoid interaction that could cause detuning. If any radials must be bent because of limited space try to avoid bends sharper than 90 degrees.
- 5. Connect the ground side of the antenna to a good earth ground. Use as short a lead as possible.
- 6. Check for resonance or low-VSWR operation of the antenna according to the manufacturer's instructions. This diagram



shows but one method of connection. STR's and single-wire radials may be connected in other ways so long as they are connected close to the braid of the coaxial cable. All radials may slope downward from the antenna by as much as 45 degrees, but their far ends should not be less than several meters above the earth for best results. In windy areas light nylon

twine or monofilament line may be used to support the weight of the STR's along their length and to dampen vibration that can cause their relatively light conductors to break.

## **Parts List**

- 4 V00342 Resonant Radial
- 1 V00344 Wire Bundle
- 5 V00222 Insulator

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Butternut® - 1200 Southeast Ave. - Tallmadge, OH 44278 USA - Phone: 330-572-3200