VHF-BASE FIBERGLASS ANTENNA (134-184MHz) USER MANUAL

## ADJUSTMENT

The VHF-BASE antenna is designed to work well on any frequency between $134-184 \mathrm{MHz}$. For best performance, it must be cut-tuned to your specific frequency.

## CUT TUNING

The radiating element (A), can be tuned to specific frequencies by cutting it according to the chart below. To remove the radiating element for cut-tuning, remove the retaining set screw located above (B).

Refer to the chart below for cut-tuning lengths (L).
Note: It is always best to test with an SWR meter to ensure optimum tuning

## ASSEMBLY

1. Put the nut and locking washer onto the ground plane radials (1), then screw the three radials into the threaded holes on the metal antenna base (2) and hand-tighten. Secure radials by tightening locking nuts with wrench. Do not overtighten.
2. Secure the support tube (3) to mounting pole (not included) in desired location using brackets (4), U-bolts (5), locking washers, and locking nuts (locking washers and locking nuts are pre-affixed to U-bolts). Tighten them securely with a wrench. Adjust and secure brackets (4) to the support tube (3) with two of the supplied screws (6).
3. Route antenna cable from the radio through the support tube (3) and screw the antenna cable connector (Male, PL-259) to the bottom of the antenna base (3) after removing the plastic cap.

Note: Reattach plastic cap when the antenna is disassembled to protect from dirt and debris.
4. Install the antenna onto the support tube (3), align the threaded hole in the antenna base and the hole on the support tube (7) and secure with the largest of the supplied screws.

| GAIN | 4.5 dBd | CONNECTOR | SO-329 |
| :--- | :--- | :--- | :--- |
| VSWR | Less than $1.5: 1$ | OMNIDIRECTIONAL | $5 / 8 \lambda$ Design |
| FREQUENCY RANGE | $134-184 \mathrm{MHz}(\mathrm{VHF})$ | LENGTH | 1.75 Meter |
| POLARIZATION | Vertical | WEIGHT | About 1 Kg |
| IMPEDANCE | $50 \Omega$ | MAX. WIND | $130 \mathrm{MPH}(55 \mathrm{~m} / \mathrm{sec})$ |
| POWER CAPACITY | 200 Watts |  |  |

## CUT TUNING CHART

| FREQ. | IN. (L) | CM. (L) |
| :--- | :--- | :--- |
| 134 | $641 / 8$ | 163 |
| 136 | 63 | 160 |
| 141 | $601 / 4$ | 153 |
| 146 | $577 / 8$ | 147 |
| 151 | $551 / 2$ | 141 |
| 156 | $533 / 4$ | 156 |


| FREQ. | IN. (L) | CM. (L) |
| :--- | :--- | :--- |
| 160 | $5115 / 16$ | 132 |
| 165 | 50 | 127 |
| 170 | $487 / 16$ | 123 |
| 174 | $471 / 4$ | 120 |
| 179 | $455 / 8$ | 116 |
| 180 | $441 / 2$ | 113 |

ROD (A) IS INSIDE FIBERGLASS POLE.

REMOVE AND TRIM ROD (A) FROM TOP.

DO NOT TRIM FIBERGLASS POLE.


