



UHF-BASE FIBERGLASS ANTENNA

P.N. UHF-BASE

THIS ANTENNA MUST BE TUNED PRIOR TO USE

The UHF-BASE antenna is designed to work well on any frequency between 400-470 MHz by cut-tuning. For best performance, it must be cut-tuned to your specific frequency. See chart below.

CUT TUNING

The three radiating elements (**L1, L2, L3**) must each be cut-tuned to your specific frequency. To remove the radiating elements, remove the set screw located above (**B**). Refer to the chart below for cut-tuning lengths.

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.

CUT TUNING CHART

FREQ	L1 INCH/CM	L2 INCH/CM	L3 INCH/CM
400	17.5 / 44.5	13.38 / 34	19.09 / 48.5
405	17.5 / 44.5	13.38 / 34	19.09 / 48.5
410	17.5 / 44.5	13.38 / 34	17.9 / 45.5
415	17.5 / 44.5	13.38 / 34	17.9 / 45.5
420	17.5 / 44.5	13.38 / 34	16.3 / 41.5
425	17.5 / 44.5	13.38 / 34	16.3 / 41.5
430	17.5 / 44.5	13.38 / 34	15.5 / 39.5
435	17.32 / 44	13.18 / 33.5	15.35 / 39
440	17.32 / 44	13.18 / 33.5	15.35 / 39
442	16.9 / 43	13.18 / 33.5	15.35 / 39
444	15.35 / 39	13.18 / 33.5	15.35 / 39
448	14.9 / 38	12.79 / 32.5	15.15 / 38.5
452	14.5 / 37	12.79 / 32.5	15.15 / 38.5
457	14.17 / 36	12.59 / 32	15.15 / 38.5
461	13.97 / 35.5	12.4 / 31.5	14.9 / 38
466	13.58 / 34.5	12.2 / 31	14.9 / 38
470	13.18 / 33.5	12.2 / 31	14.9 / 38

GAIN	6.5 dBd
VSWR	Less than 1.5:1
FREQUENCY RANGE	400-470 MHz (UHF)
POLARIZATION	Vertical
IMPEDANCE	50Ω
POWER CAPACITY	200 Watts
CONNECTOR	SO-239
OMNIDIRECTIONAL	5/8 Wave Design
LENGTH	1.75 Meter
WEIGHT	About 1 Kg
MAX. WIND	130 MPH (55m/sec)

