



Model 1450 UHF

## ALUMINUM OMNI BASE STATION ANTENNA

### Specifications:

GAIN  
VSWR

5 dBd

Less than 1.5:1 over a 10 MHz bandwidth  
at any frequency setting

FREQUENCY  
POLARIZATION  
IMPEDANCE  
CONFIGURATION  
POWER CAPACITY  
CONNECTOR

400 - 500 MHz

Vertical

50 Ohm

Grounded 5/8 over 5/8 wave length

200 Watts

UHF Female (SO-239)

### Assembly:

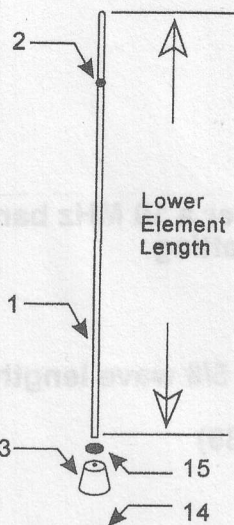
1. Refer to drawing (back side). Install spring washer (14) onto threads end of matching coil (6) and screw into lower radiator element (4). Tighten securely with wrench.
2. Install spring washer (14) onto threads at bottom of phasing coil/upper radiator element assembly (1 and 3 ) and screw into top of lower radiator element (4). Tighten securely with wrench.
3. Adjust length of elements for desired frequency band referring to adjustment instructions below and cutting chart (back side).
4. Screw the three radial elements (7) into threaded holes at the bottom of matching coil (6) and finger tighten. Securely by tightening lock nuts with wrench.
5. Secure support pipe (11) to mounting pole (not included) in desired location using mast brackets (13), v-bolts (12), locking screws (8), lock washers (9), and either self locking nuts or nuts (10) and lock washers (9) supplied. Tighten securely with wrench.
6. Install PL-259 connector (not included) onto coaxial cable from radio and run it up through support pipe (11) and screw PL-259 tightly onto SO-239 connector at base of matching coil (6). Lower assembled antenna into support pipe with open threaded hole turned so that it will align with hole in support pipe for locking screw. Thread locking screw (8) with lock washer (9) installed into hole and tighten securely with wrench.

### Adjustment:

Loosen the screw of clamp (2 and 5 ) on each element (upper radiator and lower radiator) and slide the radiator to length frequency shown in the adjusting chart (back side). Tighten the clamp securely.

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# TRAM® Model 1450 UHF



## PARTS LIST

REF#	DESCRIPTION	QTY
1	Upper radiator element	1
2	Upper section clamp	1
3	Phasing coil	1
4	Lower radiator element	1
5	Lower section clamp	1
6	Matching Coil	1
7	Radial element w/ lock nut	3
8	Locking screw	3
9	Lock washer	7
10	Nut	4
11	Support pipe	1
12	V-bolt	2
13	Bracket	2
14	3/8" spring washer	2
15	5/16" spring washer	1

## ADJUSTING CHART

FREQUENCY MHz	UPPER ELEMENT LENGTH		LOWER ELEMENT LENGTH	
	INCH	MM	INCH	MM
400	17 11/16	450	17 5/16	440
410	16 3/4	425	17 5/16	440
420	15 3/16	385	15 3/16	385
430	15 3/16	385	15 3/16	385
440	14 15/16	380	13 3/4	350
450	14 15/16	380	13 3/4	350
460	13 9/16	345	12 13/16	325
470	13 9/16	345	12 3/8	315
480	13 3/16	335	12	305
490	13 3/16	335	11 13/16	300
500	12 5/8	320	11 5/8	295

