

VINNANT-ANTENA FOR LOW VHF 66-88MHZ  
OPERATIONS

TYPE FETRC66-88 N OR SO239 CONNECTOR



TO BE USED FOR:

## **LOW VHF BAND 66-88 MHZ**

ALL MODES OF OPERATION

ANTENNA IS TUNABLE BY SLIDING MAIN ELEMENT  
FINE TUNING BY REPOSITIONING COIL TAP

**TYPE :FETRC66-88**

**USABLE FROM 66-88MHZ**

ANTENNA is using N OR SO 239 CONNECTOR

Technical parameters:

Lenght 280cm antenna with holder

Width 150cm

Gain 2.9Dbd

Weight 2kg

pole diameter up to 55mm,MIN 25MM

connector N female OR SO239

swr 1.2:1 or better at CENTER FRQ

usable from 66-88 Mhz

**BANDWIDTH 2 MHZ OF SWR 1.5 OR BETTER**

Antenna impedance 50 Ohm

**POWER HANDLING 500W 100%DUTY**

**POWER HANDLING 1000W 50% DUTY**

radome material:NATURAL AL

INSULATOR MATERIAL:POM-C

## MANUAL FOR THE ANTENNA:

ANTENNA IS SENT IN A FEW PIECES AND NEEDS TO BE RECONSTRUCTED PRIOR TO THE USE.

IT IS DONE SOLELY FOR THE PURPOSE OF THE SHIPPING AND REDUCING SHIPPING COST GREATLY.

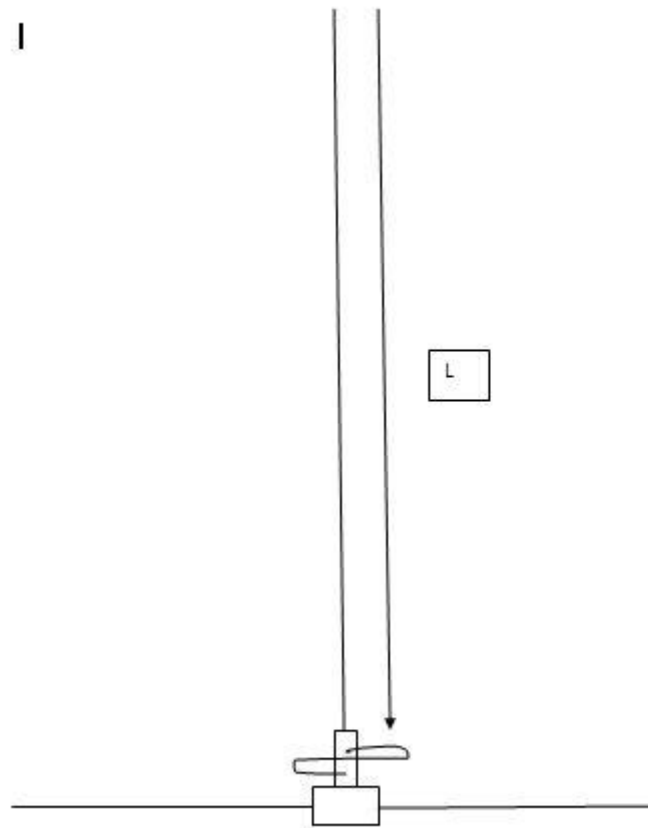
### **PLEASE UNPACK FROM FOIL AND LOCATE THE ANTENNA PARTS:**

- MAIN ANTENNA WITH HOLDER
- MIDDLE ELEMENT EQUIPED WITH HOSE CLAMP WITH TOP ELEMENT SLIDED INSIDE
- OR SEPARATE MIDDLE AND TOP ELEMENTS
- 4 RADIALS WITH LONG TREAD
- 4 M8 SPRING WASHERS IN A SMALL BAG
- TUNING ALLEN KEY SIZE 2,5

### **STEP 1:**

RECONSTRUCT THE ANTENNA RADIATOR.SLIDE TOP THINNEST ELEMENT INTO THE MIDDLE PART IF NOT ALREADY .

SLIDE THE RECONSTRUCTED MIDDLE AND TOP ELEMENT INTO THE ANTENNA ,THE ELEMENT WILL GO INSIDE ONLY 9CM ,TIGHT THE HOSE CLAMP ON THE MAIN BODY OF THE ANTENNA TIGHT AS TUNING WILL BE DONE BY TOP ELEMENT ONLY AND COIL TAP.KNOWING YOUR FREQUENCY,MEASURE THE APPROXIMATE LENGHT OF THE RADIATOR. IT IS BEST DONE ON LONG TABLE ,MEASURE FROM JUST BEHING THE COIL TO THE END OF THE RADIATOR,THE "L" LENGHT



APPROXIMATE LENGTH OF THE RADIATOR "L" FOR THE GIVEN FRQ:

66MHZ	260CM
69 MHZ	245CM
73MHZ	231CM
76MHZ	222CM
79MHZ	213CM
82MHZ	206CM
85MHZ	198CM
88MHZ	183 CM

### STEP 2:

INSTALL THE ANTENNA WITH RECONSTRUCTED RADIATOR ONTO THE MAST. YOU MIGHT USE THE SELF AMALGAMATING TAPE TO SECURE THE RADIATOR JOINTS BUT THAT IS NOT A PROBLEM IF YOU CHOOSE TO NOT TO. ANTENNA IS DESIGNED TO DRAIN WATER AWAY THROUGH THE HOLE IN INSULATOR.

INSTALL THE RADIALS WITH SPRING WASHER BETWEEN THE RADIAL COLUMN AND THREAD. MAKE SURE THAT NUT ON THE RADIAL IS NOT IN THE WAY OF SCREWING, BY GETTING THE NUT ON THE VERY END OF THE RADIAL THREAD. PLACE THE RADIAL ONTO THE COLUMN, HAND TIGHT ONLY, THEN COUNTER LOCK THE SCREW AGAINST COLUMN BY USING SPANNER NO.13, PLEASE DON'T FORGET THE SPRING WASHER WHICH PROTECTS THE RADIAL FROM UNSCREWING IN THE WIND.

**STEP3:**

CONNECT THE CONNECTOR TO THE ANTENNA. IN CASE OF N CONNECTOR THAT IS SELF SEALING YOU DONT NEED TO TAKE EXTRA STEPS TO ENSURE THE MOISTRURE TO STAY AWAY FROM JOINT. HOWEVER, IN CASE OF SO239 SEALING WITH SILICONE ONCE FIRMLY IN PLACE IS RECOMMENDED. THE SELG AMALAGAMATING TAPE MAY HELP TOO BUT USUALY THE GIVEN SPACE BETWEEN THE ANTENNA BODY AND CONNECTOR PREVENT IT FROM PROPER DEPLOYING. SIMPLY GET SILICONE ON THE FINGER, WIPE IT AROUND THE CONNECTOR JOINT REPEATIDLY UNTIL THE JOINT IS ALL SECURED.

**FINE TUNING OF THE COIL TAP:**

NORMALLY ANTENNA IS PREPARED. IF HOWEVER, TUNING HAS NOT REVEALED THE PERFECT SWR YOU MAY FINE TUNE THE COIL TAP. LOOKING AT THE ANTENNA COIL, THE MIDDLE OF IT, MEASURE ON THE RIGHT

FOR 88MHZ 8CM

FOR 77MHZ 12.5CM

FOR 66MHZ 16.5CM

USE ENCOSED ALLEN KEY FOR TUNING PURPOSES, FINE TUNE UNTIL THE SWR REACHED DESIRED VALUE.

