

**ENDFEDZ EF-20**  
**20M END FED DIPOLE**  
**\*Patent Pending\***

**PARTS LIST**

PART NO.	QTY	DESCRIPTION
SUB14001	1	20 METER EF MATCHBOX
1401	1	20M RADIATOR 33' 0"
1402	1	20M TUNING STUB
1403	1	END INSULATOR
14417	1	#10 SPLIT RING LOCKWASHER
2814	1	#10 STAINLESS HEX NUT
2815	2	#10 STAINLESS FLATWASHER
32767	1	SHIPPING BOX
1405	1	EF-20 MANUAL

ENDFEDZ ARE MONO BAND MATCHED ANTENNAS. THEY WILL NOT REQUIRE A TUNER— TAKE THE TIME TO ADJUST THE ANTENNA.

USE ON BANDS OTHER THAN THE DESIGN BAND WILL RESULT IN SIGNIFICANT COAX RADIATION AND MAY RUIN THE MATCHBOX

**FIG. 1**



## ASSEMBLY

1. This antenna is essentially a half wave dipole with one important difference– the feedline is at the end of the antenna. The antenna is suspended at its ends by the two included end insulators– one of which is integral to the matchbox.

2. In order to have the least possible influence on the antenna, insulated lines are recommended for attachment to the insulators. The antenna may be suspended horizontally, vertically or sloping. Portable operation is easily accomplished by suspending the far end from a tree limb and letting the matchbox hang just above the ground.

3. The antenna has been used from hotel rooms by hanging the matchbox end just outside the window and letting the far end hang, or preferably pulling it away from the building with a guy attached to the end insulator.

4. Tuning is best accomplished by using an antenna analyzer attached to the far end of the coaxial cable that will be used with the antenna. Once the initial resonant frequency is established, the antenna may be tuned just like a dipole. Shortening the far end by 1” will raise the resonant frequency approximately 50 KHz. If too much wire is removed, the included tuning stub may be attached to the 10-32 stud at the matchbox end and trimmed to establish resonance to the desired frequency (Fig.2). Fine tuning may be accomplished by changing the orientation of the stub with regard to the main radiator (I.e. rotating the stub and retightening the hardware. **Tighten the #10 hardware just enough to compress the lockwasher**

5. Once you are satisfied with the overall length of the radiator, Lace the radiator through all three holes as shown in Fig 1.

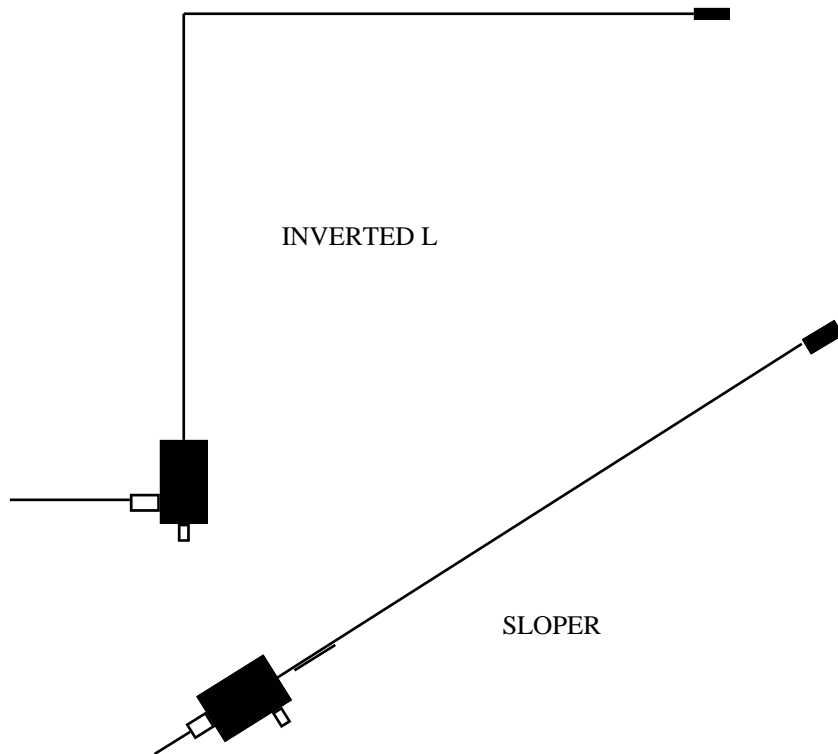
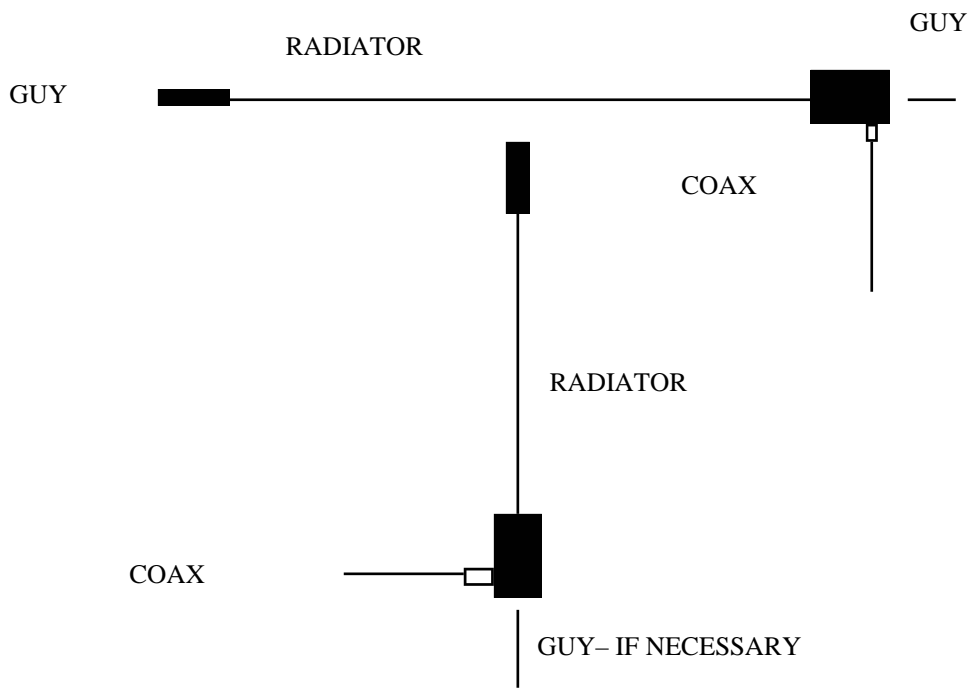
6. Fig. 3 illustrates some mounting ideas.



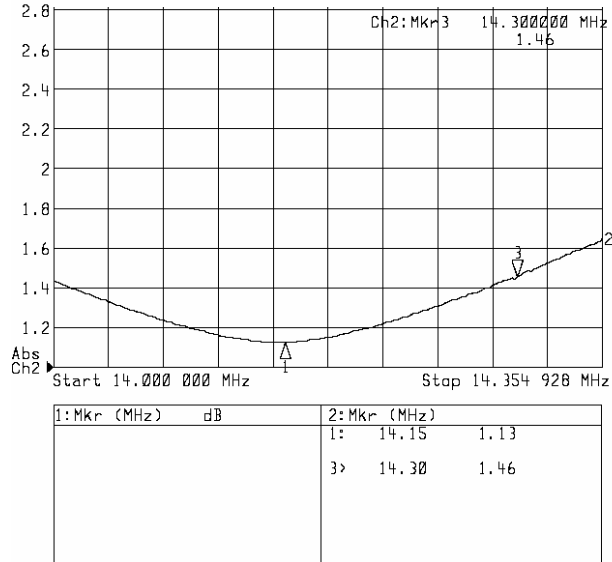
Fig. 1



Fig. 2



**VSWR PLOT OF TYPICAL ANTENNA  
BAND CENTERED**



**SPECIFICATIONS**

Polarity:	Depends on mounting configuration
Design Z:	50 Ohms
V.S.W.R. Bandwidth:	300KHz 1.5:1
Power Handling:	100W
Weight:	0.5 lbs
Size:	33' 0"
Hardware:	Stainless Steel
Connector:	Silver/Teflon SO-239
Radiator:	##18 Poly Stealth

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