

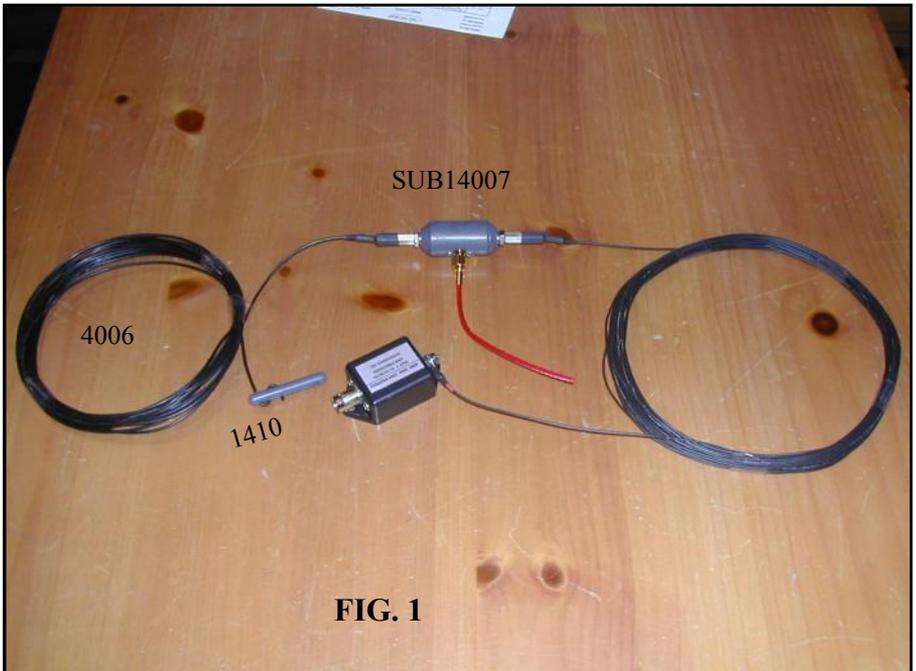
ENDFEDZ EF-MTR

40M/30M/20M END FED DIPOLE

FOR THE LNR MOUNTAIN TOPPER

PARTS LIST

PART NO.	QTY	DESCRIPTION
SUB14008	1	40/30/20 METER EF MATCHBOX
SUB3006	1	30M RADIATOR 42' 8"
4006	1	40M/20M TIP 22' 2"
1410	1	END INSULATOR
14418	1	#4 SPLIT RING LOCKWASHER
2815	1	#4STAINLESS HEX NUT
2816	2	#4 STAINLESS FLATWASHER
32767	1	SHIPPING BOX
1412	1	EF-MTR MANUAL
SUB14007	1	SWITCHING INSULATOR W/ HARDWARE
4007	1	MALE SMA PLUG- SHORTED



ASSEMBLY

1. This antenna is essentially a half wave dipole (full wave on 20M) 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.

TAKE THE TIME TO PROPERLY TUNE THE ANTENNA

4. This EndFedz is a little different than OUR previous designs in that it requires the user to remove an SMA connector at the end of the 30M resonator to enable just 30M, or keep the SMA installed for 40 and 20M.

Because of the broad bandwidth of the antenna, it is unlikely that it will require tuning in the vast majority of deployments. This is particularly true of 30M where the band is very narrow.

Once 30M acceptable VSWR is observed (typically below 1.5:1 **with the SMA connector unscrewed/ removed as in Fig. 3**), move on to checking 40 and 20M.

5. Install the SMA connector (FIG. 2). With the antenna deployed in the clear check 40M and 20M best VSWR. If it is below the band, remove 1” of wire and recheck. 40M and 20M will both move up in the band together.

6. Repeat trimming in 1” until you are satisfied with 40m and 20M VSWR.

7. Once you are satisfied with the overall length of the radiator, lace the end of the wire through the end insulator as shown in Fig. 4.

8. **Take the time to tune the antenna– no tuner is required nor should one be used. Maximum efficiency and absolute minimum feedline radiation will occur when the antenna is tuned as in the steps above.**

NOTE: If one or both ends use a tree for support, make sure to strain relieve the antenna with a pulley+ weight or a bungee if this is temporary installation. **No antenna can hold up to thousands of pounds of force exerted by a moving tree.**

9. Fig. 3 illustrates some mounting ideas.

10. If the antenna is repeatedly deployed, take the time to neatly coil the radiator wire each time the antenna is taken down– avoiding kinks.

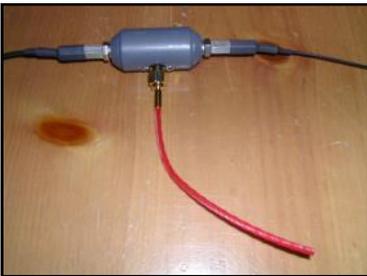


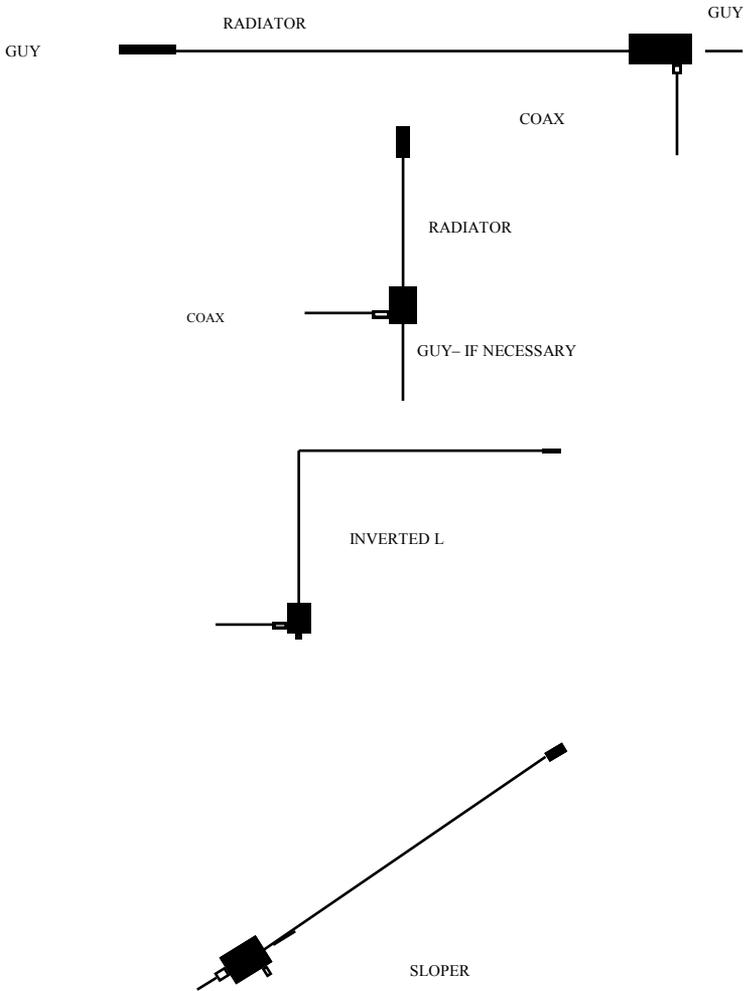
FIG. 2 SMA INSTALLED
FOR 40M & 20M OPERATION

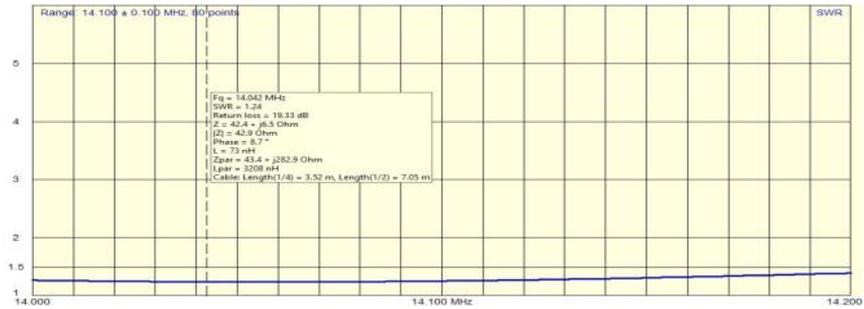
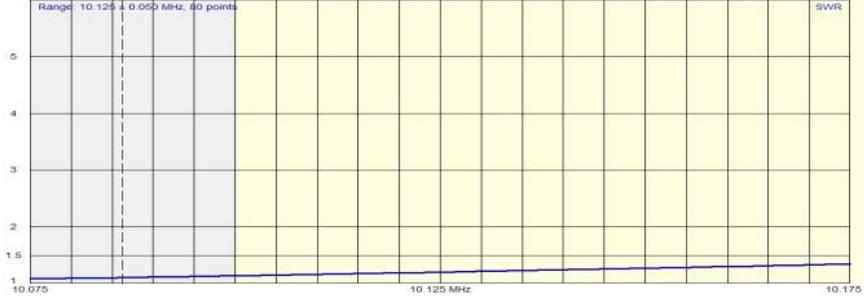
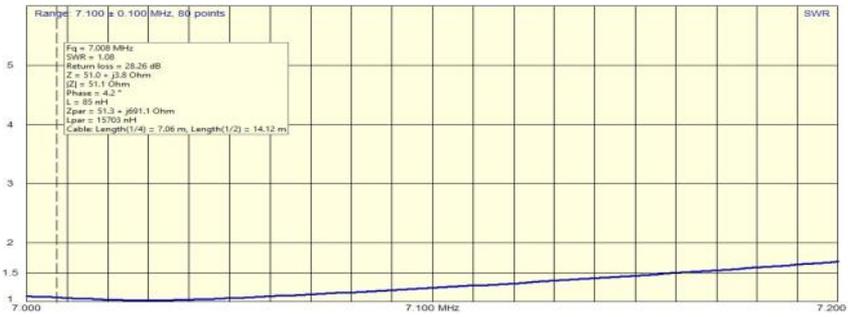


FIG. 3 SMA REMOVED
FOR 30M OPERATION



Fig. 4





SPECIFICATIONS

Polarity:	Depends on mounting configuration
Design Z:	50 Ohms
V.S.W.R. Bandwidth 40M:	300KHz 1.5:1
V.S.W.R. Bandwidth 30M:	350KHz 1.5:1
V.S.W.R. Bandwidth 20M:	300KHz 1.5:1
Power Handling:	25W CW/SSB
Weight:	4 Oz.
Length:	65"
Hardware:	Stainless Steel
Connector:	Silver/Teflon BNC

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