

Frequently Asked Questions 'End Fedz'

Q: Can the EndFedz be used on bands other than the design band?

A: In general, no. These antennas are monoband. Using them with a tuner for other bands will guarantee that the coaxial shield will become part of the radiating structure and may harm the matchbox.

Q: What is the radiation pattern of the EndFedz?

A: Characteristics are identical to a center fed dipole.

Q How can I extend the bandwidth of the EF-10/20/40 on 40M?

A: In designing the EF=10/20/40 we intended to make an antenna that would be portable and easily deployable. As a result, we use a choke to isolate the first 33' from the remainder of the antenna. The choke, then, acts like an inductor shortenig the 40M half wave from 66' to 40'. If space permits, a 66' wire may be attached to the matchbox; yielding wider 40M BW, and slightly more 40M gain. On 20M the antenna will appear as a full wavelength. A 1 wavelength antenna has a null at the horizon, and thus may not be suitable for DX work if the antenna is deployed as a vertical. Deployment as a sloper or horizontal overcomes this problem.

Q: Can I use the EF-10/20/40 matchbox on other bands?

A: Yes, remove the factory supplied radiator and substitute a radiator whose length is $\frac{1}{2}$ wavelength long on the desired band- from 60M up to 10M.

Q: Do the EndFedz require a ground?

A: The simple answer is no. With over 4000 antennas in the field, we know of one instance where RF was "in the shack." This occurred with the antenna directly over the operating position. Moving the antenna solved the problem. If you do ground the antenna at the matchbox, you will likely see no change in VSWR or resonant frequency. The only conditions where we were able to measure significant RF on the outer coaxial shield occurred when:

1. The coaxial length was an odd multiple of $\frac{1}{4}$ wavelength AND
2. The rig was grounded.

In this instance we measured current -7 dB down from the peak antenna current. Changing the coaxial feedline length OR removing the ground significantly reduced the currents.

Q: Do EndFedz require a tuner?

A: No tuner is required, nor should one be used. Take the short time required to tune the antenna.

Q: Can I add additional ½ wave wires to the OA-10/20/40 matchbox and work multibands?

A: No. Unlike a center (current) fed dipole in which a fan arrangement of wires allows for multiband operation, the wires on an endfed (voltage) must appear in series- either through a trap/choke arrangement or harmonically related frequencies (eg. 7/14/21/28 MHz).

Q: Can I combine coaxial cables from different EndFedz for a single download?

A. No. You will need a remote switchbox or separate feedlines.

Q. What is the best grounding arrangement for the EF-SWL?

A. Unfortunately, there is no one answer. That is why we have provided separate grounds on the matchbox. Lug 1 is the ground end of the antenna side of the transformer while #2 is ground for the coaxial shield. Depending on the source of noise, it may be advantageous to:

1. Leave the factory shorting strap in place and attach either lug to a suitable RF ground at the antenna.
2. Remove the strap and ground only lug 1 at the antenna site. Then, the receiver may be grounded or left ungrounded- whichever results in lower noise.