



ELECRAFT AX1 MULTI-BAND WHIP ANTENNA

- High-Q loading coil resonant on 20 meters, with a second setting for 17/15 meters; instant band selection via slide switch on base
- **New!** AXE1 Extender adds 40 and 30 meters (ATU required)
- Works with your rig's ATU to eliminate whip length adjustments
- Disassembles into two pieces to fit into small "grab & go" bags, such as the Elecraft ES series
- Includes 13' (3.3 m) radial wire (required for transmit use)

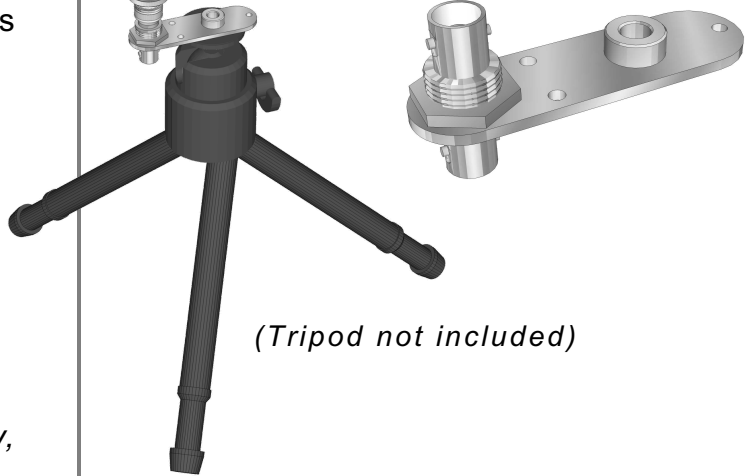
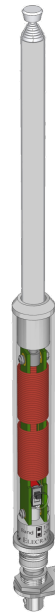
You've just crested the hill...the view is amazing. Time to stop, take a drink, and check out the bands. Your radio deploys quickly, but what about your antenna?

This is where our AX1 whip really shines: getting you on the air in seconds, from anywhere. Use it HT-style with a hand-held, like the KX2; on a picnic table with an AXB1 whip bipod; or with a camera tripod and an AXT1 tripod adapter. *(AX1 accessories shown at right.)*

Using the AX1 with an ATU eliminates tedious length adjustments. Just select 20 or 17/15 meters at the antenna, tap the rig's antenna tune switch, and go for it. The ATU compensates for changes in terrain, radial length, antenna height, and other factors.

Whether you use the AX1 as a 'stealth' field antenna, for pedestrian mobile, or as a versatile backup, it'll be ready when you are.

(Additional details on back)



AXT1 TRIPOD ADAPTER

- Allows any antenna with a BNC connector to be mounted on a standard camera tripod
- Includes permanently installed 1/4-20 fastener
- Three spare holes for guy wires or other hardware

(Tripod not included)

AXB1 WHIP BIPOD

- Prevents tipping of whip due to light wind or vibration; legs conform to irregular surfaces
- Use with a right-angle adapter such as an Elecraft #BNC-RA
- Fold-up legs include holes for use with tie-downs, if needed in heavier winds



Elecraft AX1 Specifications

Resonant Frequencies	AX1: ~14 MHz (20 m), ~19 MHz (17/15 m). AXE1: ~7.2 MHz. <i>Resonant frequencies may vary +/- 400 kHz or more; see below.</i>
Supplied Radial Wire	AX1: 13 feet (3.3 m) long. AXE1: 33 feet (10 m). Wire has pre-installed lug for attachment to the transceiver's ground screw.
Max. Power	30 Watts. <i>If RFI symptoms are observed, reduce power or move antenna farther from the transceiver.</i>
Construction	Corrosion-resistant whip and hardware; Lexan outer tube; high-Q inductors wound with 20 AWG, high-temp enamel wire.
Dimensions	Whip: 6" (15 cm) collapsed, 45" (115 cm) extended. Base and AXE1: 6" (15 cm) long x 0.75" (19 mm) diameter.
Weight	AX1: 3.2 oz. (90 g). AXE1: 2.0 oz (55 g).

Matching With an ATU

Short whip resonance is affected by body capacitance, terrain, height above ground, and attached cables. An ATU can eliminate tedious length adjustments, quickly matching the AX1 across the full 20, 17, and 15 m bands. **ATU required with AXE1.**

Note: The Elecraft KX2, KX3, K3, K3S and K2 transceivers all have wide-range ATUs compatible with the AX1. External ATUs can also be used, such as the Elecraft T1.

To match using an ATU: Set the AX1's slide switch to the desired band, then tap the ATU tuning switch on the radio or tuner. Use the 17 m position for 15 m. (If you're using a K3/K3S/KX3/KX2, tapping ATU TUNE a second time may result in a better match.)

Matching Without an ATU

Non-ATU operation is possible on 20 meters, where the AX1 is at or near resonance.

To match the AX1 to your transceiver without an ATU: If SWR is higher at the *low* end of the band, lengthen the radial. If SWR is higher at the *high* end of the band, reduce the length of the telescoping whip or shorten the radial.

In cases where it is difficult to achieve a low SWR, transmitting may still be possible at reduced power. (The KX2 and KX3 can both be safely operated into high SWR.)

Operating Tips

- **The AX1 is not intended for vehicle use or for permanent outdoor installations.**
- **To avoid damage to the telescoping whip, keep it collapsed when not in use.**
- **Always use at least one radial.** This improves transmit efficiency by 10 to 20 dB, reduces RFI, and minimizes the effects of body capacitance, changing terrain, etc.
- **QRP operation with a short whip can be both rewarding and challenging.** For times when conditions are poor, we recommend also carrying a lightweight wire antenna made from two 25' (7.5 m) lengths of #26 "Silky" (thewireman.com). Toss one wire into a tree and lay the other on the ground, or into a second tree. Attach the wires to the rig via a BNC-to-binding post adapter, such as our model BNC-BP. Elecraft ATUs will usually match this efficient antenna on 40 through 10 m.
- Elevating the AX1 above ground (by standing or using a tripod) may improve signal strength. When indoors, extend the whip outside a window.
- Tune slowly. Answer strong stations who are calling CQ or just completing a QSO.
- Try operating during contests, when there's lots of activity (most weekends).
- At QRP power levels, CW and data modes will have an advantage over SSB.
- All BNC plugs have some "play." It's normal for the whip to tilt slightly.