

# Quick Setup: BULLET-4006 (40-6 m)

*Palomar Engineers - End-Fed Off-Center-Fed Antenna*

## At-a-Glance Specs

- Coverage: 40, 30, 20, 17, 15, 12, 11, 10, 6 m
- Radiator: 55 ft wire; coax braid is the other OCF leg
- Choke placement: SOFLC at ~12 ft from matching unit
- Feed line: 25 ft or more of 50-ohm coax
- Layouts: Sloper, Inverted-L, or Horizontal between supports
- Grounding: Output is DC grounded (static bleed), not RF grounded

## Pre-Flight Checklist

- BULLET matching unit (4006) and 55 ft radiator wire
- Mast/tree supports and light rope/cord
- SOFLC feed-line choke (3 turns for LMR-400/RG213/RG8 as needed)
- 25+ ft of 50-ohm coax (RG-8X, RG-58, LMR-240/400, etc.)
- Optional: Coax noise filter near radio
- Analyzer or rig SWR meter; small tuner recommended

## 5-Step Field Setup

- Mount the BULLET matching unit on a mast/tree or solid tie-off.
- Route the 55 ft radiator as a Sloper or Inverted-L; keep clear of metal/wet foliage.
- Install a SOFLC choke ~12 ft from the matching unit on the feed line.
- Run 25+ ft of 50-ohm coax to the radio; keep the first run away from the wire path.
- Check SWR across bands; use the rig's tuner for touch-up as needed.

## Tuning & Tips

- Most bands are within easy range of the internal tuner.
- Height, soil, and nearby objects affect SWR; small layout changes help.
- Horizontal zig-zag or 90-degree bends are acceptable when space is tight.
- If RFI appears (hot mic, RF in shack), verify choke placement or add a second SOFLC.

## Duty Cycle & Power

Ratings are for SSB PEP. For CW/digital (e.g., FT8), plan ~50% duty cycle. If the matching unit becomes warm during extended transmit, reduce power and/or duty cycle.