# Quick Setup: BULLET-8006RC (80-6 m)

Palomar Engineers - OCF with 80 m Resonance Compensator

# **At-a-Glance Specs**

- Coverage: 80, 40, 30, 20, 17, 15, 12, 11, 10, 6 m
- Long-wire section: about 93 ft radiator; coax braid is the other OCF leg
- 80 m assist: Integrated Resonance Compensator improves 80 m SWR range
- Choke placement: SOFLC at ~38-40 ft from matching unit
- Feed line: 50 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-8006RC matching unit and ~93 ft radiator wire (some kits ~95 ft to trim)
- Mast/tree supports and light rope/cord
- SOFLC feed-line choke(s): first at ~38-40 ft; add a second if needed
- 50+ ft of 50-ohm coax (RG-8X, RG-58, LMR-240/400, etc.)
- Optional: Coax noise filter near radio
- Analyzer or rig SWR meter; tuner recommended

#### 5-Step Field Setup

- Mount the BULLET matching unit securely on a mast/tree.
- Route the long-wire (~93 ft) as a Sloper or Inverted-L; keep clear of metal/wet foliage.
- Install a SOFLC choke ~38-40 ft from the matching unit on the feed line.
- Run 50+ ft of 50-ohm coax to the radio; keep the first run away from the wire path.
- Check SWR across 80-6 m; use your tuner for final match, especially on 80 m.

# **Tuning & Tips**

- The Resonance Compensator helps bring 80 m SWR into an easy tuning range.
- Height, soil, and nearby objects affect SWR; adjust wire angle/height for best results.
- If common-mode RF appears, confirm choke placement and consider a second SOFLC.
- Longer horizontal runs at the far end of an Inverted-L can improve DX takeoff angles.

# **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.