α ALPHA ANTENNA®

Model – HOA Buster

The Alpha Antenna HOA Buster is an end-fed, tuner-free antenna system designed for stealth operations that utilizes metal gutters and downspouts as the radiating element.

1. Product Overview & Specifications

- **Coverage:** 1.8MHz to 54MHz (160m - 6m), plus VHF/UHF/GMRS/CB.
- **Power Handling:** 250W PEP SSB, 125W CW, or 25W digital modes.
- **Components:**
    - Alpha Match (matching unit) with stainless steel riser.
    - Top of Mast Mount plus 10-inch Ground/Mounting Stake.
    - 8-foot Jumper Wire with clips.

2. Installation Steps

1. **Prepare the Mount/Stake/Match:** Slip stake fully into the mount and tighten the bolts/nuts. Screw the Alpha Match onto the top of the mount.
2. **Connect Jumper Wire to Gutter:** Attach one clip of the included jumper wire to the base of the downspout.
    - *Tip:* Scrape off paint at the attachment point to ensure good metal-to-metal contact.
3. **Connect to Match:** Attach the other clip of the jumper wire to the hex nut on the bottom of the Alpha Match.
4. **Secure Jumper Wire:** Pull the Match, Stake, and the connected Wire away from the downspout so that the jumper wire is tight enough not to touch the ground.
5. **Install the Stake:** Push the included 10-inch metal stake into the ground.
6. **Attach Coax:** Connect your coaxial cable (PL-259) to the SO-239 connector on the bottom of the Match, then Run the coax to your station.

4. Operational Tips

- **RF Grounding:** This system requires no additional RF ground than the included stake.
- **Coax Routing:** Ensure the coax feedline does not parallel the downspout/jumper wire.
- **Continuity:** Ensure all gutters are connected and provide a continuous electrical path.
- **Liability:** The installer assumes all liability for property and life safety.

5. Troubleshooting

- **High SWR:** Check for continuity between gutter segments. Ensure the jumper wire clip is connecting to metal, not paint. While the HOA Buster is designed to be low-SWR, an antenna tuner can be used for a perfect match across all bands.
- **RFI in shack:** Improve station ground, or add a choke (12-16 turns of coax, 8 inches in diameter) halfway between the antenna and equipment. If RFI still occurs, ensure your station is properly grounded, using a separate ground from the AC ground.

For further support, contact Alpha Antenna: alphaantenna@gmail.com.

FIGURE 1 - Assembled Depiction