BUXCOMM 3555-STV Sloping Terminated Vee Antenna by Buck4ABT



All Parts and Components, (see photo above) are available from BUXCOMM.com

- 1) Copper Clad Steel Ground-Rod with clamp.
- 2) Copper Clad Steel Ground-Rod with clamp.
- 3) 400 ohm, non-inductive, Balanced Termination
- 4) 400 ohm, non-inductive, Balanced Termination
- 5) Ground leads from BTR to left ground-rod.
- 6) Ground leads from BTR to right ground-rod.
- 7) 61 ft AWG 14 copper wire (left element).
- 8) 61 ft AWG 14 copper wire (right element).
- 9) 1:16 BALUN (50 to 800 ohm) with built-in center insulator and center support.
- 10) Installation accessories and this installation guide.

3555-STV Specifications:

- Input power rating: 400 watts SSB, 200 watts RMS, AM, FSK (RTTY) or PSK.
- Feed point impedance: 50 ohms nominal
- Feed point VSWR: Better (less) than 2:1 typical 3.5>35 MHz, 2.5:1 35>55 MHz.
- BALUN impedances 50 to 800 ohms, 1:16 radio
- 50 ohms in to SO239 connector. BALUN accepts PL259. Antenna feed point, 800 ohms, fed with BUXCOMM B15C161, 16:1 BALUN
- BTR X 2, are 400 ohms Termination Resistors
- Sloping Terminated Vee references at the end of this document.

An ideal antenna for restricted communities, small lots, MARS, commercial, military, and portable operation. With High Gain on all HF frequencies in excess of 5dB over a dipole. Use the illustrations on the following pages as an installation guide. Once the antenna is installed, there is no additional tuning or cutting. Connect your coax cable and enjoy.



Items needed to construct your own 3555-STV Sloping Terminated Vee Antenna

- 1) Copper Clad Steel Ground-Rod with clamp.
- 2) Copper Clad Steel Ground-Rod with clamp.
- 3) BTR 400 ohm, non-inductive, Balanced Termination
- 4) BTR 400 ohm, non-inductive, Balanced Termination
- 5) Ground leads from BTR to left ground-rod.
- 6) Ground leads from BTR to right ground-rod.
- 7) 61 ft AWG 14 copper wire (left element).
- 8) 61 ft AWG 14 copper wire (right element).
- 9) BUXCOMM B15KC161, 1:16 BALUN (50 to 800 ohm)

with built-in center insulator and center support.

Support Mast can be wood or fiberglass pole, 15 to 30 feet

Attaching the Ground Wire to the BUXCOMM Ground Rod(s):





Broadband Sloping Terminated Vee antenna related references:

See article that appeared in QST November 1995. It describes a slope terminated traveling wave V antenna, which has a constant current distribution along its length. It details a termination resistor at the far end of each element which absorbs (SWR) reflected wave along the antenna.

A final reference is described in one of Joe Carr, K4IPV (Silent Key) books, "Practical Antenna Handbook."

Page 223: "Non-resonant vee beams like the single-wire long wire antennas, the vee beam can be made non-resonant by terminating each wire in a resistance that is equal to the antenna's characteristic impedance. Although the regular vee is a traveling wave antenna, the terminated version is a gain type traveling wave antenna and is thus unidirectional. Traveling wave antennas are unidirectional because the terminating resistor absorbs the incident wave after it has propagated to the end of the wire. In a standing-wave antenna, that energy is reflected backwards toward the source, so it can radiate oppositely from the incident wave." This antenna is a high-signal to low noise, antenna which makes it immune to terrestrial noise.

We hope you enjoy this antenna as much as we have, and may you have many DX contacts;

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Visit: http://www.buxcomm.com/catalog