

VERSATEE™ VERTICAL SETTINGS

VersaTee Vertical Settings

Let's compare notes using the VersaTee as a vertical with a sloping and elevated radial. The radial is kept off the ground with an electric fence post, or any other ground stake that is non-conductive. You can use shrubbery very easily. Keep the radial off the ground by about two feet.

VERSATEE VERTICAL SETTINGS		
<i>Bands</i>	<i>Tap</i>	<i>Counterpoise</i>
40 METERS	3 <i>turns in from VTEE side</i>	31'
30 METERS	18	28'
20 METERS	13	13'2"
17 METERS	8	10.6"
15 METERS	5	10'
12 METERS	3	7.5'
10 METERS	1 <i>turns in from the whip end</i>	7.5'

Here are the conditions:

VersaTee at chest height. 25 feet of coax (using the supplied commercial Buddipole coax). There is one dipole arm threaded into the top of the Tee. On top of that, a RED Buddipole coil. A standard Buddipole stainless steel whip is on top of the coil and all the sections are pulled out fully. Elevated feed, elevated single radial.

VersaTee Vertical Settings with TRSB

Same measurements: 25 feet of coax. Same setup as without the Triple Ratio Switching Balun.

VERSATEE VERTICAL SETTINGS		
<i>Bands</i>	<i>Tap</i>	<i>Counterpoise</i>
40 METERS	Full coil	24' to 28' <i>from hi to lo end of band</i>
30 METERS	19	24'
20 METERS	12	13'
17 METERS	8	11'
15 METERS	5	9'
12 METERS	4	7.5'
10 METERS	1 <i>turns in from the whip end</i>	7.5'

Note:

The TRSB provides a great deal of isolation from currents running on the outside of the coax. No 'touchiness' means the coax is not trying to become a part of the antenna.

THE VERSATEE™ VERTICAL GUIDELINE

The VersaTee™ Vertical Guideline

Thread a dipole arm vertically on the VersaTee. Put a coil on top of that arm then add another dipole arm on top. Put the whip on top of the top arm. Pull all the whip sections out.

Plug the coax section provided with the Buddipole into the Tee. Use either side of the VersaTee as a ground — meaning you would plug into either the red post or the black post. The hot wire from the coax (the RED plug) would go to the vertical element which has a blue knob on the post. That post is in the center at the top of the VersaTee.

Use a single radial. The wire can be any size. We use #20AWG Teflon coated wire for ease of handling. Black or white, depending on how secret you want your setup to be. The white wire is good for safety reasons because it's easier to see. Use a kite line-winder to hold the wire. Try 31' of wire for 40 Meters, about 23' of wire on 30 Meters, 15' on 20m, and 10' on 17m. The key here is to wind the wire on the kite-winder or reel. The antenna will "see" only the wire that comes to the coiled or folded wire on the wire-holder. That makes it a perfect choice for tuning the radial.

A 3/8" ring connector is attached to the wire radial. A half-inch long 3/8" by 24 threaded bolt is used to hold the wire to either side of the Versatee (available on our website under "accessories"). Pull the radial away from the VersaTee. Keep it off the ground on shrubbery or a wooden fence or a non-conducting electric fencepost. Set the mast/tripod so that the coil is at about eye level so that you can adjust the taps on the coil.

Connect the coax to your receiver. Listen for background noise on the frequency you would like to tune up on. The VersaTee on the mast can be set up so that you can stand nearby and touch the coil as you listen to the noise on the radio. Take the mini banana plug that is attached to the bottom of the coil and sweep it across the coil with an up and down motion.

Listen carefully, and you will hear an increase in background noise or signal strength of any stations on frequency. Keep your eye on the coil turn where the strength of the noise or the signal is optimum. This is the place to put the coil clip.

Next, carefully check the SWR on your rig or with an analyzer to see if it's under 2:1. A coil tap up or down or even on the same turn around the coil at one of the other tapping points should give you the right 'sweet spot' so that your radio will put out the full amount of power it is capable of, whether it's five watts or a hundred watts.

Remember, you can always adjust that radial by winding a few turns more or by lengthening the wire just a tad. It can make a big difference in tuning.

Raise the antenna and check the resonant frequency again. That frequency will probably be a bit higher than when the feedpoint was at eye level, so compensate for that when you are tuning it initially. A nice feature to the long radial is that it does give you a broader bandwidth than a very short dipole.

With the radial in place, you can change coil taps to change frequencies quite easily. You can often use the same radial and a different tap on the coil for quick changes from 30 Meters to 40 Meters, for example. Same with the higher bands. If you use several radials of different lengths, you will be able to hop bands quite easily by just changing coil tap positions, but it will take you longer to set the antenna up initially.