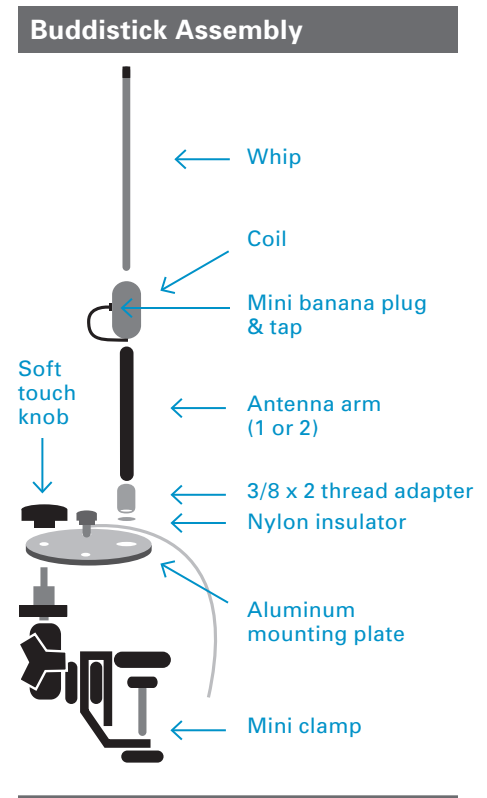


# THE BUDDISTICK™ OPERATING MANUAL

## Buddistick Tuning Guidelines

Tuning the Buddistick is easy! Thread the two aluminum arms together, and then thread them into the top of the adapter attached to the mounting plate. Thread the coil into the top arm and a telescopic whip into the top of the coil. Pull all the whip sections out fully. Use a good quality coax and connect that coax to the SO-239 which can be found on the bottom of the mounting plate. Use a single radial. The wire we use for the Buddistick is a very high quality Teflon coated silver-plated copper wire. It is wound on a kite linewinder. The linewinder makes it easy to control the wire, and it also becomes the method used for 'tuning' the radial. The wire that is coiled up on the linewinder is not "seen" by the antenna, so when you run out 31 feet of wire, that's what the radial length is.

Try 31' (feet) of wire for 40 Meters, and about 23' of wire on 30 Meters. Start with about 15' on 20 Meters and 10' on 17 Meters. There is a 1/4" ring connector on the wire held by the linewinder. Connect that wire to the 1/4" stud on the mounting plate as shown in the diagram. If you have an antenna analyzer, this is the perfect time to put it to use. If not, follow the instructions below to "tune by ear." *Remember*, you can always add components to the Buddistick to make it longer for more efficiency, and the tuning process is the same in every case.



## Tuning by "Ear"

Connect the coax to your receiver. Set the clamp or mini tripod you are using to hold the Buddistick so that you can reach the coil from your operating position. Turn your radio on, and turn the volume up so you can hear the background noise on the frequency you would like to use. 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.

When you find the turn with the strongest signal/noise, place a tap in that position. Then you can check the SWR 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. You may not need any taps on 40 Meters. Just adjust the radial for resonance. If you wish, you can use an antenna tuner to get the SWR down to where your transceiver will like the match. If you get under 2:1 SWR, the chances are pretty good that your rig will put out all the power you need to make contacts.

*Remember*, you can always adjust that radial by winding a few turns more or by taking a few turns off, thereby changing the length of the wire just a tad. It can make a big difference in tuning. The final tuning of this vertical antenna is a function of the antenna itself and your surroundings and the radial system you deploy. All these factors play a part in matching the antenna. By utilizing the "tune by ear" method you should be able to tune the antenna very quickly in any situation without having to carry an SWR analyzer with you.