

Thank you for purchasing The Wolf River Silver Bullet 1000 Variable Tune Antenna Coil.

This variable tune antenna coil tunes 80 thru 6 meters depending on the length of the whip used, no tuner needed. This coil has been tested and use with antenna whips from 102 inches and as little as 36 inches. Your coil has been tested prior to shipping.

- Mount your coil using a heavy duty 3/8 24 antenna mount. If coil will be installed for home or for portable use, install using ground wire counter poise cut at the lowest operating frequency used. **NOTE: When tightening the coil down it is best to use the top coupling nut to tighten down, and when removing the coil, use the very bottom nut to remove the coil.**
- Mount antenna whip, a standard 102 inch CB antenna whip works well.
- Connect to your radio and turn radio to operating frequency.
- Slide tuning coupler up and down coil until maximum noise or signal is received. Fine tune for lowest SWR
- Use nylon bolt is only needed in very high vibration applications.

The coil is rated for 100 watts SSB, 50 watts CW and 20 watts in digital modes. Operating the coil over 100 watts SSB can cause damage to the coil.

I have been running mobile HF my entire amateur career, over 35 years of mobile HF operation. I have used Hustler, Opex, Ham Stix, Outbacker and for many years High Sierra Screwdriver. This coil and whip combination has preformed as well or out preformed each antenna I have used in the past. It is simple, straight forward and easy to maintain.

Use of the coil on 80 meters is very dependent on whip length, the longer the better. For 6 meter or 10 meters a shorter whip is required, 54" or less for 6 meters. As will most antennas car bodies and metal structures will have an affect with your performance.

We work hard on providing the best homemade antenna coil possible. If for any reason you have questions or suggestion concerning your tuning coil please contact us at www.wolfrivercoils.com or Email wrcoils@hotmail.com.

Ground Mounting

The following is my steps used to tune the antenna to specific bands. On the 80, 40 and 30 meter bands very little rotating the collar right or left is needed. Tuning the 20, 17, 15, and 12 meter bands some collar rotating is needed to fine tune the frequency. When I reference a click what I mean is moving the collar up one turn of wire, when the collar is moved up or down a click is heard.

Using a 102 inch whip

1 clicks from the top	18.100
6 clicks from the top	14.220
16 clicks from the top	10.100
30 clicks from the top	7.200
93 clicks from the top	3.972
97 clicks from the top	3.877
110 clicks from the top	3.598

To receive 12 and 10 meters use a shorter whip 90 inches or less.

This was with my setup that uses $\frac{3}{4}$ inch pipe 3 feet in the ground With 3 feet above ground with antenna on top. Three 35 to 40 foot radials on top of the ground. All of the above SWR readings were below 1.5 SWR.

