

To operate the CBP 80 meter dipole configuration using two low band coils and the long whips with the TRSB set 4:1, I used borrowed MFJ antenna analyzer to find SWR 1:1 points for various arbitrary spot frequencies throughout the frequency range of interest to me. I started off by extending the whip sections to full length and adjusting the two low frequency coils to 5 turns SHORTED by the jumpers. (easier to count turns that way HI) This gave me the starting point of the lowest frequency desired. I then started reducing the length of the first collapsible section from the coil end of each of the two whips by an equal amount. I then tuned to analyzer to dip for minimum SWR and recorded the frequency for that whip section length. I charted results for all the whip length settings in EXCEL, and developed the above graph. The bottom figures on the chart are in CM and side figures are in MHz. Now I can tune to any frequency within the range of the chart without adjusting the taps on the two coils and no further need for an analyzer. I use a 16 foot paint pole mounted beside my house trailer slide out section when "camping" if you can call it that!? The CBP 80 meter dipole is about 8 feet above the trailer roof line. This works well for me. Your results may vary due to local conditions for your setup. The 80 meter dipole with two LF coils is highly reactive so I find setting the coils to a fixed point and adjusting frequency with the whip length very quick and easy. I get amazing results with this set up which seems to have excellent NVIS characteristics. The dipole configuration eliminates the need for a tuned counterpoise, which is a great advantage in a commercial campsite environment. Good luck de Dave VE7AHT