

Re: [Elecraft] K1 160 meter modification

Don Wilhelm, Sat, 14 Apr 2007 07:22:51 -0700, Chuck,

Here are my original instructions:

- > Not quite a full "Elecraft" 160m & 80m board, but you can do it this way - > order a 2 band board for 80m and any other band, PLUS, order the following
 - > components (Elecraft has them all except the crystal) - here are the
 - > instructions for how I did it: --
 - > maybe you can make a deal with someone at Elecraft to ship a "1 band board
 - > and the other needed parts"
 - >
 - > I ordered the following from Elecraft:
 - >
 - > Capacitors:
 - > 2 - E530002 1500 pf capacitor
 - > 3 - E530003 2700 pf capacitor
 - > 2 - E530005 1200 pf capacitor
 - > 2 - E530035 1800 pf capacitor
 - > 2 - E530052 560 pf capacitor
 - > 2 - E530053 680 pf capacitor
 - > 1 - E530058 12 pf capacitor
 - >
 - > Inductors:
 - > 1 - E690007 33 uh inductor
 - > 2 - E690001 4.7 uh variable inductor (wide tuning slot)
 - >
 - > Toroid cores:
 - > 2 - E680001 T44-1 or T50-1 toroid cores (blue color)
 - >
 - > I also ordered a 9.800 mHz crystal (HC-49 case 20 pf load capacitance) from
 - > International Crystal Manufacturing www.icmfg.com.
 - >
 - > If you are planning to use the K1 ATU with this board, you should also order
 - > the P1 (3 pin) and P2 (10 pin - 5 x 2) headers from Elecraft.
 - >
 - > The parts from Elecraft (without the headers) were less than \$15 and the
 - > crystal was priced at \$17.95 - not an unreasonable price IMHO.
 - >
 - > I assembled the 2 band board with the 80 meter components in the band 2
 - > locations as indicated in the instructions - except for L5 and L6 were left
 - > empty at this time.
 - >
 - > Next, the low- pass toroids were wound with 21 turns (20 inches of wire) on
 - > the T50-1 (blue) cores, and soldered into the L9 and L10 positions.
 - >
 - > The 4.7 uH variable inductors were soldered in the positions for L5 and L6. > On the bottom of the board, 1200 pf capacitors were
 - > soldered across L5 and
 - > L6 (the outer pins on the side of the can with 3 pins).
 - >
 - > The 33 uH inductor goes into the position marked for C13. Form the leads
 - > under the inductor body so that the leads fit into the holes - my inductor
 - > is parallel with the board and tucked between the bandpass filter cans.
 - >
 - > Mount the 9.8 mHz crystal at the X1 position and solder the grounding wire
 - > to the side of the can (or top if you prefer).
 - >
 - > The remaining capacitors are fitted into the following positions:
 - > C1 & C5 - 680 pf
 - > C2 & C4 - 2700 pf
 - > C3 - 12 pf
 - >
 - > C11 & C15 - 1800 pf
 - > C12 & C14 - 560 pf
 - > C21 & C23 - 1500 pf
 - > C22 - 2700 pf
 - >
 - > You should now have all the holes filled, and can proceed to align the 2
 - > band board following the instructions in the K1 manual. Mine came up with
 - > no trouble at all.
- 73, Don W3FPR