

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