CRK-10 CW Transceiver Kit: One-Page Quick Guide Rev. C

Thank you for purchasing our kit. We are available for consultation by email at <u>rongxh@gmail.com</u> and at the Yahoo group <u>http://groups.yahoo.com/group/CHINA_QRP/</u>.

This quick guide is not a full manual; it only highlights the key points you need to take care during the building of this kit. A step-by-step manual with lots of photos and a complete part list is available for downloading at <u>http://crkits.com/crk10manual.pdf</u>.

Parts inventory: Most of the components of this kit are SMD parts and already pre-mounted by factory on PCB, so you will only need to solder about 20 through-hole parts including all the connectors and buttons. Please refer to the complete part list in the full manual for parts inventory.

Notes for building:

J1 and J2 jumpers are used to swap dot and dash wiring on the KEY jack. See below diagram for more information. Straight key only works in one setting.



Only solder two center pins of DC IN connector, don't solder the side pin, or it might be difficult to slide the board into the case.

Remember to stick a thermal pad insulator on the rear panel before fixing 2SC1162 by screw.

Alignment: Connect a power supply of 12~13.8V (short circuit protection preferred) to the CRK-10 to check the overall receive current. It should be about 15 mA. Disconnect the power supply, connect a headphone, a paddle and an antenna or a 50 ohm dummy load, then connect the power supply again, you should hear dot dash (morse code A). Touch the antenna connector center pin with tweezers, and you should hear some noise. It means the receiver works.

Now proceed to TX alignment. Check to see if the overall transmit current is about 500 mA. If it is, it means the transmitter works.

Use a commercial amateur radio to transmit a CW signal at the specified frequency, adjust the capacitor trimmer C24 to make the receiver frequency exactly on the specified frequency (the tone from the headphone is loud and clear, within 700~800 Hz range), then adjust the capacitor trimmer C23 to make the transmit frequency exactly at the specified frequency.