

This is an RIT that Paul Kollar developed for the CX7. It is based on a W9RE design and it initially appeared in the Signal/One Newsletters. Since few, if any, people used a CX7 on RTTY, Paul installed the RIT control in place of the RTTY Shift control. Paul had engraved plates made to cover the RTTY legend. The installation is quick and easy, and can be removed at any time.

Step	Procedure
1.	On FSK pot, unsolder all leads and insulate with heat shrink tubing the end of wire #390 (white) and wire #10 which are not used.
2.	Replace FSK pot with new pot/switch. Place terminals at top. Do not tighten the nut excessively. No washer is used if the engraved plate is used. The new pot is 10k ohms, linear taper, with push-pull switch.
3.	Run new 13" green wire from one side of switch on the new pot, fol- lowing the cable run, and solder to the connector going to pin #491 on the AGC Board. (A green wire goes there now.) Take care not to run solder into the connector pin.
4.	Connect new **R1 resistor from the right side of the pot (looking from the front) to the black wire from the new circuit board. Make it a temporary connection.
5.	Mount the new circuit board, using a longer screw, at the front screw of the counter board cage. Wires may be twisted for neat appearance.
6.	Connect the blue wire and blue wire #232 (that came from the FSK pot) to the left side terminal on the new pot.
7.	Connect the brown wire to the central terminal of the new pot.
8.	Connect the green wire to the other switch terminal of the new pot.
9.	Note that the only chassis ground point is at PTO A for this circuit to avoid hum pickup and ground loops, but on some radios, the circuit board must be grounded at the corner to get hum down.
10.	The loose wires and insulated wires, #10 & #390, may be secured to the cable with a small cable tie. Do not secure the other wires so the board may be moved later.
11.	On PTO A, unsolder jumper wire between terminals #1 and #2. Move, if required, the two blue wires and bypass capacitor all to ter- minal #2. (Figure 4-17 in book).
12.	Connect the shielded wire from the new circuit board to #1 terminal and shield to ground lug, PTO A.



Step	Procedure
13.	On PTO B, remove wire #10 from terminal #1 and insulate wire with heat shrink tubing.
14.	On PTO B, solder a jumper between terminals #1 and #2 like was on PTO A.
15.	Clean the front panel with alcohol and apply Dymo labels if the engraved plate is not used.
16.	Apply power and adjust RIT pot until the frequency counter does not shift with the switch in or out. Attach knob with pointer over Dymo label index mark. Insure that the knob has enough clearance to allow the switch to fully operate.
17.	**R1 is selected to give equal + & - range on control. Start at about 2700 ohms.



RIT Schematic

W8CXS