

### **19-07-1998 (FT-990) FT-990 - 1.5 to 30 MHZ TX mod**

- Open FT990 like explained in your OPERATING MANUAL.
- Localise JP5002 on "CONTROL UNIT" and close it with solder.
- If no transmit between 4 to 6.5 MHZ and 8 to 10 MHZ, do the following:
  - Display 5.5 MHZ in CW mode, "meter selector" to ALC, push "MOX" button and adjust VR1003 on "RF UNIT" for normal ALC meter deflection.
  - Display 9 MHZ and do the same with VR1005.

### **21-03-1999 (FT-990) FT-990 - JPS antenna**

During transmitting and having selected the separate receiving antenna, >RF is fed back into the 990 which can lead so far, that the internal >power-supply>or the tuner oscillates and the supply voltage is breaking down, >which can be seen because the S-meter lamp becomes dark and darker.

If you look at the diagram on page 27 of the manual (in the side-bar titled "Receive-Only Antennas and Separate Receivers"), it seems to bear your observation out. The TX/RX switch is not where I would put it for connecting a receive antenna all the time. However, there is a really nice use for the FT-990 "receive antenna" connection if you are using a JPS noise canceller (I think MFJ makes one too, and CQ Magazine published the schematics for one recently -- I have no idea how that one gets phase reversal, but the author swears it works). If you were to connect the RX Antenna Out of the FT-990 to the Antenna connector of the JPS, and connect the RX Antenna In of the FT-990 to the Transceiver connector of the JPS, you get three things:

1. the TX/RX switch of the FT-990 is used instead of the TX/RX relay in the JPS (much better switch over transients).
2. RF power does not get into the JPS (I don't use a linear amp, but this should do the trick too),
3. you can enable and disable the noise processing by just switching the RX ANT switch on and off, respectively. 73Kok Chen, AA6TY This modification is read 1333 times. top of page 21-03-1999 (FT-990) QSK with FT-990 and FT-1000 Steve Ellington ( n4lq@iglou.com ) Fri, 26 Jul 1996 Here is the way I do QSK with my FT-1000MP which is basically the same set up as the 990 as far as qsk is concerned. I have an Ameritron AL-80b which has an output of up to 900 watts.

In 1974, I built an Electronic TR switch from plans in the ARRL handbook. It consists of nothing more than a 12AU7 tube, a coil, switch, variable capacitor and a simple dc power supply. There are 3 coax jacks on the back. To connect this, you run the transceiver's main antenna input into the amplifier's antenna input as you normally would. Run the amplifier's output into and back out of the TR switch. Inside the tr switch, we simply tap off the center conductor of the coax, run this through the tube then to the 3rd coax jack on the tr switch which goes to the receiver input of your transceiver. As you can see, there is NO switching of the RF involved here at all. No worries of hot switching or dot clipping. The TR switch provides another stage of RF for the receiver too. Keep all leads as short as possible. When the amplifier is turned off, simply hit the antenna switch on the transceiver to change the rx back to the main antenna input. In the past, TR switches were known to cause TVI but with cable tv, there is little to be concerned with. It's a great system. E-mail me if you have any questions. Steve Ellington