- Let's set up the FT991 first
  - 1. Click the Menu/Setup button and set the following menu items to these values (courtesy of G4WJS):
    - i. 029 = 38400bps
    - ii. 030 = 10msec
    - iii. 031 = 38400
    - iv. 062 = OTHERS
    - v. 064 = 1500Hz
    - vi. 065 = 1500Hz
    - vii. 066 = OFF
    - viii. 068 = OFF
    - ix. 070 = REAR
    - x. 071 = DAKY
    - xi. 072 = USB
  - 2. Exit the Menu/Setup and press the F (M-List) key, then set up the following buttons:
    - i. NAR/WIDE to WIDE
    - ii. NB doesn't matter
    - iii. AGC = AUTO
    - iv. RF POWER = set to max drive power for your amplifier (if you use one). Mine gets to full output at 25w
  - 3. DT GAIN = you'll have to fuss with this, as it affects the ALC. I set it so I get to max drive with the WSJT-X power slider all the way up





- 4. NOTCH, CONT, DNR and DNF = off
  - i. SHIFT = OHz
  - ii. WIDTH = 3000

You are going to have to set the shift and width with every band you go to with wsjt-x, but only the first time around. The ft991 has 3 band stack registers on each band, and I reserve one of these on each band for digital modes. For example, to change the current band stack register for 144, you just press band, then 144. Pressing 144 again will move you to the next register, and perhaps on this one you have been operating SSB with different shift and width settings, on a different frequency, etc.

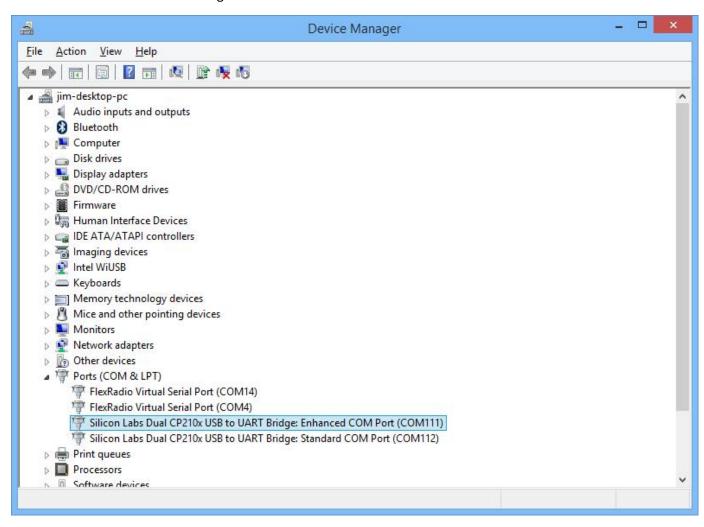
My reason for mentioning this is because you will eventually want to go back to SSB or some other nondigital mode, and you may have different settings in these modes for shift and width and other things remembered by the register. To save you the trouble of re-setting all of this for these non-digital modes, and then back again for digital, when you intend to operate digital modes, do the following:

- Go to the band stack register you set up for digital modes on each band you intend to use
- Set menu item 070 to REAR
- Start wsjt-x and operate

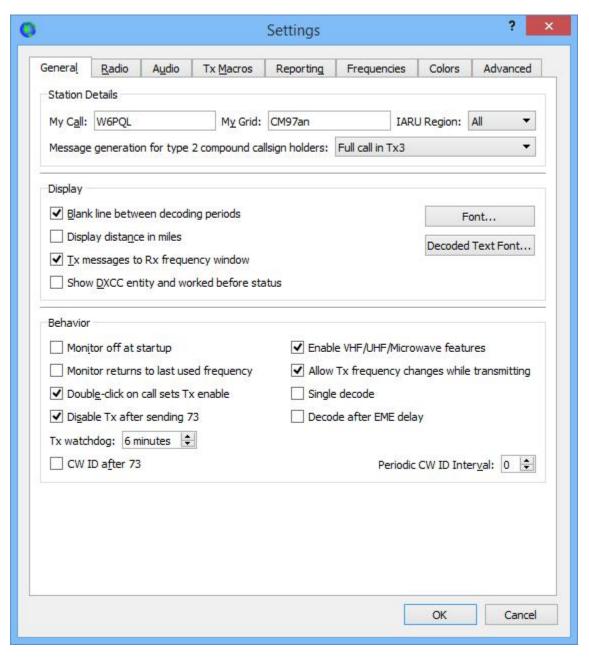
Conversely, when you want to change out of digital modes and operate the radio on other modes normally:

- Close wsjt-x
- Set menu item 070 to MIC
- Go to the band stack register for each band you will be operating on and select the register with your settings for the mode you will be using (BAND then 144 for 2m SSB or whatever, for example).

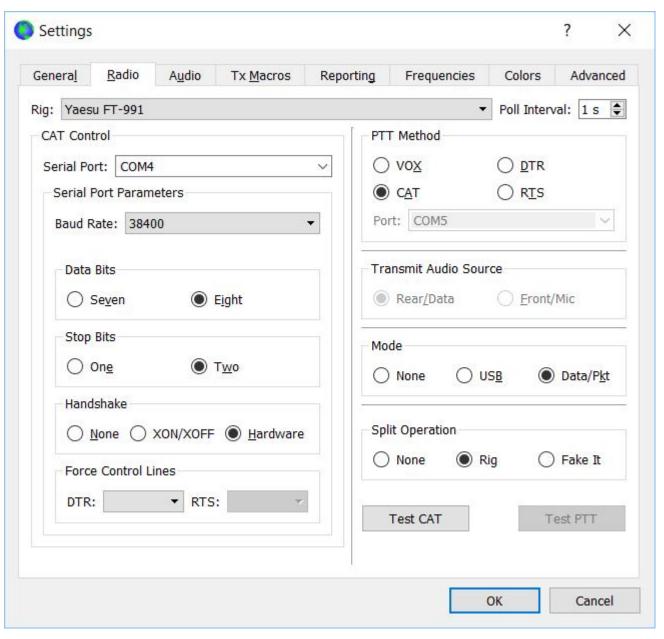
- i. MOX, VOX and MONI = off
- Turn off the FT991 and make certain the USB cable is not connected to your computer yet
- Install the USB drivers from the Yaesu web site onto your computer which will be running wsjt-x.
  - 1. Once the drivers are installed according to the instructions there, turn on the FT991 and plug the USB cable into your computer. You'll hear a few sounds as it sets up the drivers and recognized the FT991.
  - 2. After the computer is finished setting up the ft991 com ports (all those sounds you heard), open the device manager on your computer and find the two new Silicon Labs COM ports that were set up. Remember these two com port numbers...in my case, they were named com111 and com112 on my desktop PC. When I installed these drivers on my laptop, they were named com4 and com5. You'll also need to remember which one is the enhanced port.
  - 3. Close the device manager



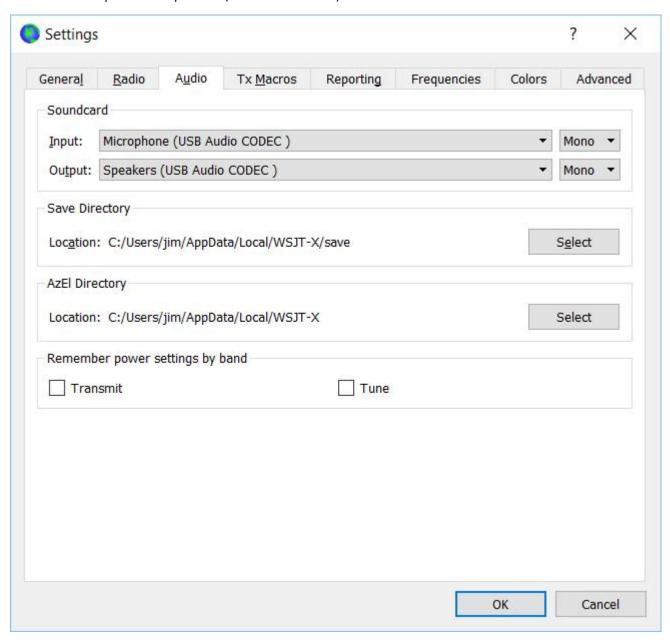
- Next, start up wsjt-x and go to file/settings.
  - Enable the VHF/UHF/Microwave features for operation above 30 MHz, otherwise uncheck it; enable any of the other features you may want to use. My own setup for VHF is shown below.



- 2. Now go to the radio tab and set the CAT control com port to the enhanced port number you remembered from the computer device manager (mine was com4 for this laptop). Set all the other parameters as shown below.
- 3. With your FT991 connected to a dummy load, click the Test CAT radio button; if all is set up properly, it should turn green in a second or two. When it turns green, test the PTT by clicking on the Test PTT radio button. The FT991 should go into transmit mode. Click the Test PTT again to return to receive.



4. Now go to the Audio tab. Set the input to the Microphone (USB Audio CODEC) and the Output to the Speakers (USB Audio CODEC). Click OK.



That's it