WSJT-X Operations on IC-7610

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WSJT-X on IC-7610/NARC1

The current installed version as of 2019-10-20 is v2.1.0.

On the PC

1. Open WSJT-X (Icon is on desktop.)

WSTJ-X opens to the same operating frequency as the rig is on when you start.

2. Confirm Settings

It's not essential to confirm the settings each time you start up, but doing so will make sure that you are able to operate without difficulty.

a. Open the Configurations menu and select a configurations set. `Standard Ops` is a good place to start.

b. Open Settings from the File menu

General tab:

Set my Call to your personal callsign unless you have permission to use the club callsign (W3YA). Set any Display or Behavior settings per your personal preferences.

Radio tab:

Change these at your own risk.

Rig: Icom IC-7610 CAT Control: COM3 Baud Rate: 19200 Data Bits: 8 bits Stop Bits: none Handshake: none Force Control Lines: unset

PTT method: CAT (port should be COM3) Mode: Data/pkt Split operation: Rig or Fake It

You may want to check/confirm that rig control is working by pushing the Test CAT button in this panel. If the button turns green, then the rig and computer are communicating.

You may also want to check that PTT is working by pressing the Test PTT button. Make sure you have adjusted the rig's power output to a low level (1-5 W) before testing. On the IC-7610, press the MULTI button, touch the RF Power panel on the touch screen, and turn the MULTI button to set desired output power.

Audio tab:

Input: USB Audio Codec Output: USB Audio Codec

Reporting tab

You may want to set the Op Call to your own callsign.

Advanced tab:

Check or uncheck Special Operating Activity per situation, for example ARRL Field Day or the NA VHF Contest.

You may now close the Settings window by pressing the OK button.

Switch to the desired mode (e.g., FT8) from the Mode menu. Select the desired operating band and default frequency from the dropdown menu on the lower left side of the main WSJT-X application panel.

3. Check computer clock accuracy

Open a browser; visit https://time.is

If your time synch is within .5s of the correct time, you may proceed.

If you have a cellular hotspot, you may wish to connect it to the hub. Power the hub, wait for the computers to establish an internet connection, and allow the Meinberg time server application to update the time.

If you are decoding signals, then all is well.

On the IC-7610

1. Confirm rig is in USB Data 2 (USB-D2) mode.

To change the mode, press the mode indicator on the touch screen to open a window to toggle the mode (USB/LSB) to USB. Unless you are sure that your digital mode uses LSB, select USB. Press and hold the DATA button to switch between D1, D2, and D3 data mode connectors. D2 is configured for use via USB.

2. Set your bandwidth to filter 1 (wide) by pressing the FILTER button located on the right side of the front panel.

You may adjust the filter settings by pressing and holding the filter button on the right side of the rig control panel. Press the arrow/return button on the display/touch screen to save and apply the filter settings.

3. Set other settings

The following settings can be changed via buttons on the left side of the touch/display screen.

- Preamp (P.AMP) off

Press the P.AMP button to cycle through the settings (OFF, P.AMP 1, P.AMP 2)

- ATT off

Press the ATT button to cycle through the attenuator settings (OFF, 6 dB, 12 dB, 18 dB)

- IP+ off

Press the IP+ button to select ON or OFF

- Turn AGC off

Press and hold the AGC button on the display/touch screen. This opens a panel. Under the SSB column, select the SLOW setting. Adjust the AGC level downward until the indicator says OFF. Press the arrow/return button on the display/touch screen to enter the setting.

- VOX off

- Noise reduction (NR) off

Press the NR button on the left side of the front panel to turn off the illuminator.

- Noise blanker (NB) off

Press the NB button on the left side of the front panel to turn off the illuminator.

4. Set desired RF power output using MULTI knob.

Press and hold the MULTI button to open a window on the touch/display screen. Press the RF POWER panel and rotate the MULTI button to set RF power.

Remember, WSJT-X is a weak signal mode. Less than 50 W is plenty.

On KPA1500

1. For < 100W output, set amplifier to STBY mode (yellow light) by pressing the MODE button to toggle between STBY (yellow light) and OPER (green).

For higher power output, follow separate instructions for tuning the KPA1500 amplifier.

2. Confirm ANT1 is output (press ANTENNA to toggle).

3. Confirm ATU is IN (not BYP) by pressing and holding ATU TUNE button.

Have fun!

Operating hints

1. Make sure that your audio in level is not too high.

There are several ways to adjust this: - Adjust the RF/SQL button on the rig