

Menu setup for the TS-590SG for use on 630m and 2200m digital modes

By [John Langridge](#) June 30, 2018 – Posted in: [630 Meter Instructional Topics](#), [630 Meters](#)

UPDATE December 29, 2019: Larry, W7IUUV, has recently published some details and updates that are applicable to this post.

I recently purchased a Kenwood TS-590SG to use at a dedicated 630 meter non-linear digital mode operating position. This transceiver has a number of very good features including direct USB connection to a PC for digital audio transfer and CAT control. Gone are the days of chasing down hum or RF on an analog audio lines and the CAT feature controls when the transceiver is keyed. While I don't like for the integrated DIN plugs for various peripheral connectivity (My main position uses an FT1000 which has individual plugs for each function), it was easy enough to integrate the transceiver into my existing station architecture.

While initial evaluations of the transceiver suggest that it will do a great job for me, freeing up the main operating position for HF and 630m CW, the differences in configuration for the connectivity where a significant departure from any other transceiver that I had configured before (I generally like to keep my ham radio fairly traditional and "low tech"). Fortunately Tom, WB4JWM, had recently helped Bob, K9KFR, with his 590 setup so the details were fresh in his mind. Tom thought it might be a good idea to share these settings with the community since others were likely going to encounter the same setup issues. I agree so I am reproducing a few comments and menu settings he recommended below:

Manually enter frequency in keypad (474.2 for WSJTx modes on 630 meters)

Push and hold "DRV" (second function of METER button) until "DRV" is displayed below signal meter.

Connect transceiver to low-level drive amplifier via the DRV output (RCA) on the back. Main SO-239 connectors are NOT used.

MENU SETTINGS

59 amplifier keying if you use the radio to key the amp.....set 55 to 3. The relay comes out of the DIN connector on the radio

67 Baud rate of the USB..leave at 115200 default, just letting you know where it is if we need to change. (I set mine to 9600 because that's what I already had it set to in software)

69 Data audio output connection...change to USB

70 set for rear for usb data and change back to front for microphone

71 USB audio input level leave at 4. Use the slider bar on WSJTX to lower the tx drive to the radio. When the DRV power out starts dropping the drive is set correctly.

72 USB output level...default is 4 and you may need to lower this down, so the WSJTX receive meter is in the green.

76 Data Vox....set to ON (Tom indicates that if you run into problems, turn this OFF. He added that this is not necessary if using CAT. I find no adverse impacts to my setup so far so I am going to leave it for now since it seems to work properly.)

When in USB data mode, run with the Proc off, AGC fast, rx and tx equalizer off

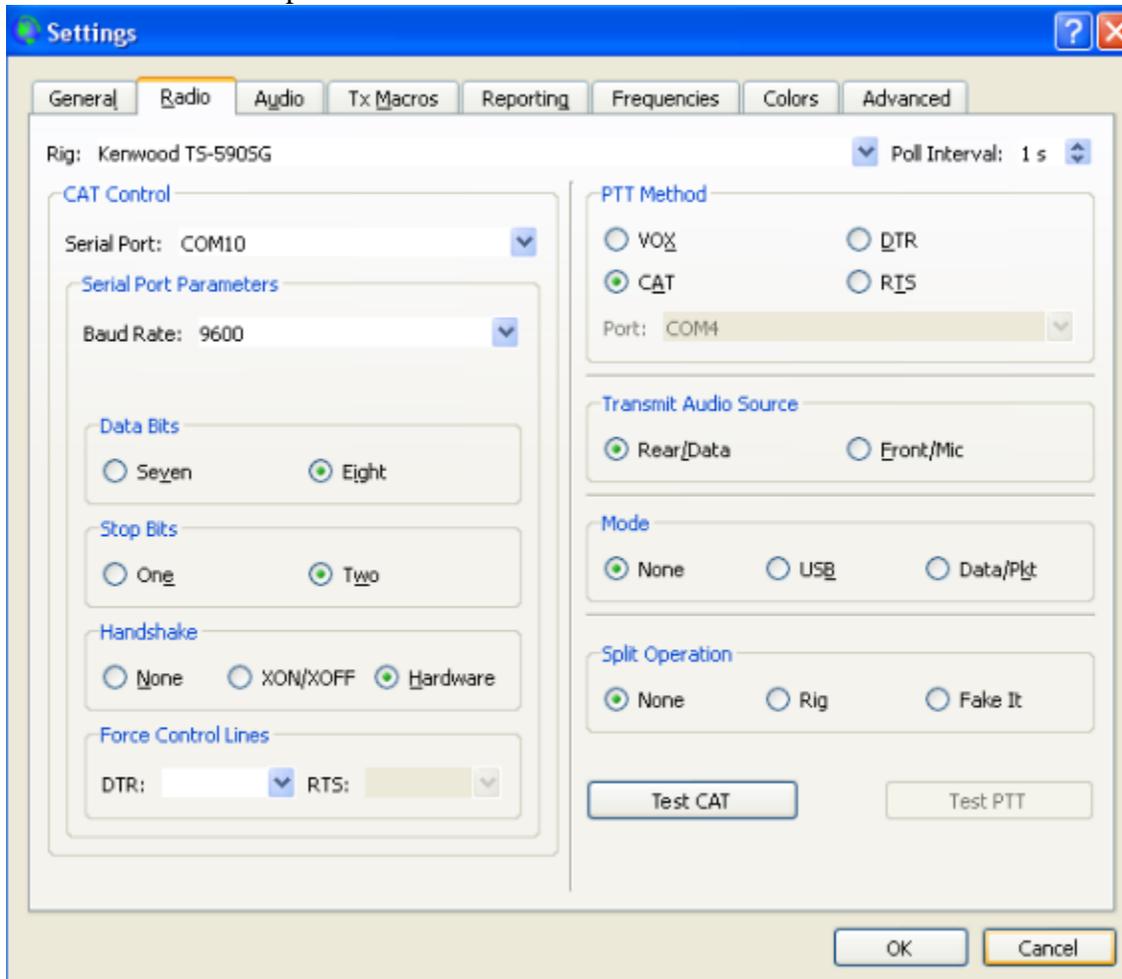
I also set 77, data VOX delay, to 100. (Tom indicate that this is not necessary because delay is set in the software. Even so, it doesn't seem to be hurting anything here so I will leave it alone. If you have problems, disable.)

If you need to control your amplifier's PTT or you are like me and have a number of contactors in the system that have to change state before RF is applied, use the REMOTE DIN connector on the back, pins 4 and 2 (relay and common, respectively). Refer to the top of page 74 of the manual for a pictorial and additional details.

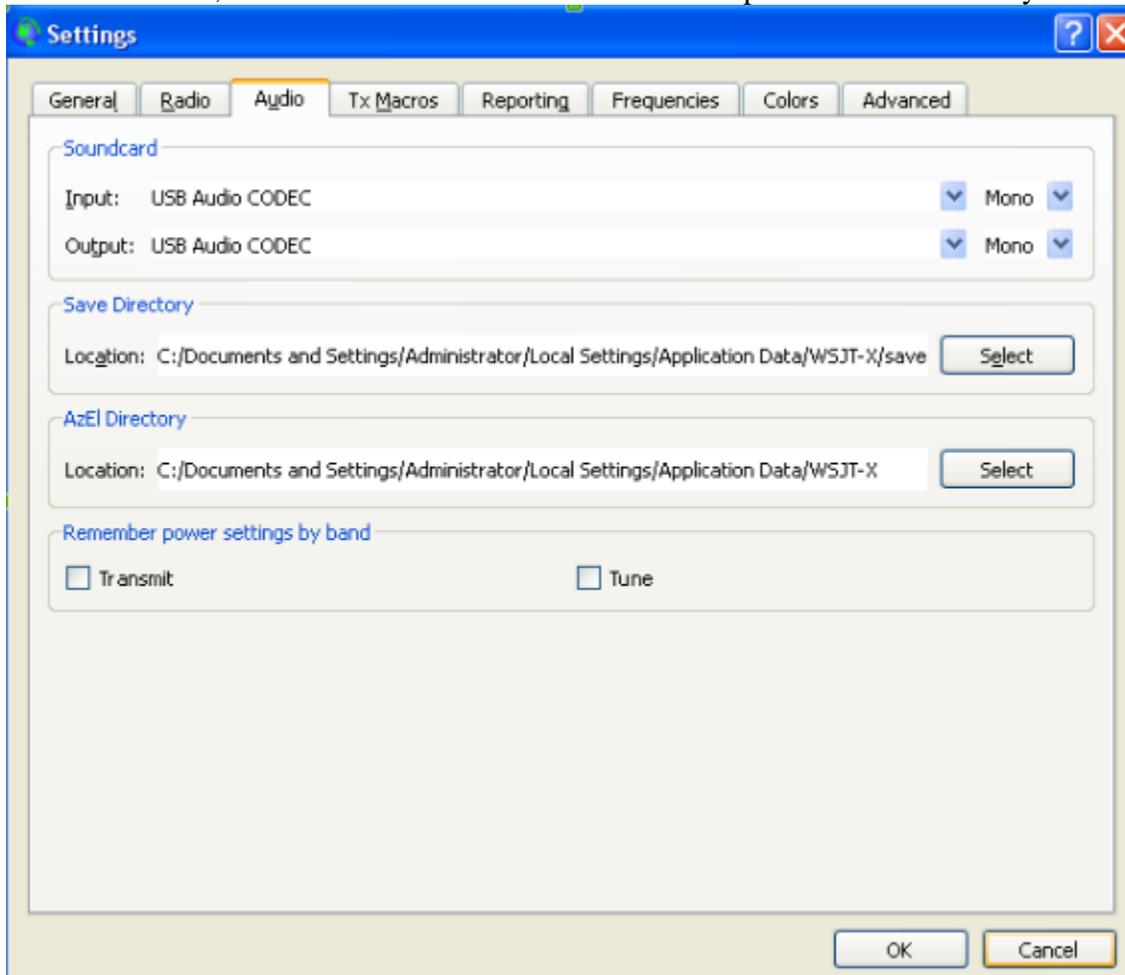
To connect to the 590 via a virtual com port and use the digital audio functionality, there is a driver which can be downloaded here: http://www.kenwood.com/i/products/info/amateur/vcp_e.html

If you need a legacy driver like I did for XP, there is a link at the bottom of that page that allows you to select pre-Windows 7 drivers. I also use Linux here and suspect it would "just work".

Your software setup will vary but on my system, the WSJTx radio tab is setup like any other CAT connection with a couple of variations.



In the Audio tab, select the USB Audio CODEC that was part of the driver that you installed.



Thanks to Tom, WB4JWM, for his help and direction while getting my system setup.