

IC-7610 remote control options for WSJT-X

If you have not yet changed the settings on the IC-7610 for remote operation, go to the last section entitled “Settings on the IC-7610” and then resume here. If you have not yet set up or need to change the settings in the remote utility, go to the next section entitled “ICOM Remote Utility Settings on Remote Computer” and then resume here. Follow either method 1 or 2 depending on the type of connection you desire.

Method 1: Connecting Direct to Radio (without PC host)

1. Launch the ICOM remote utility.
2. On the radio list tab, connect the remote utility to IC-7610 (if not done already).
3. Make sure the MOD setting on the remote utility is set to virtual audio (VAUDIO)

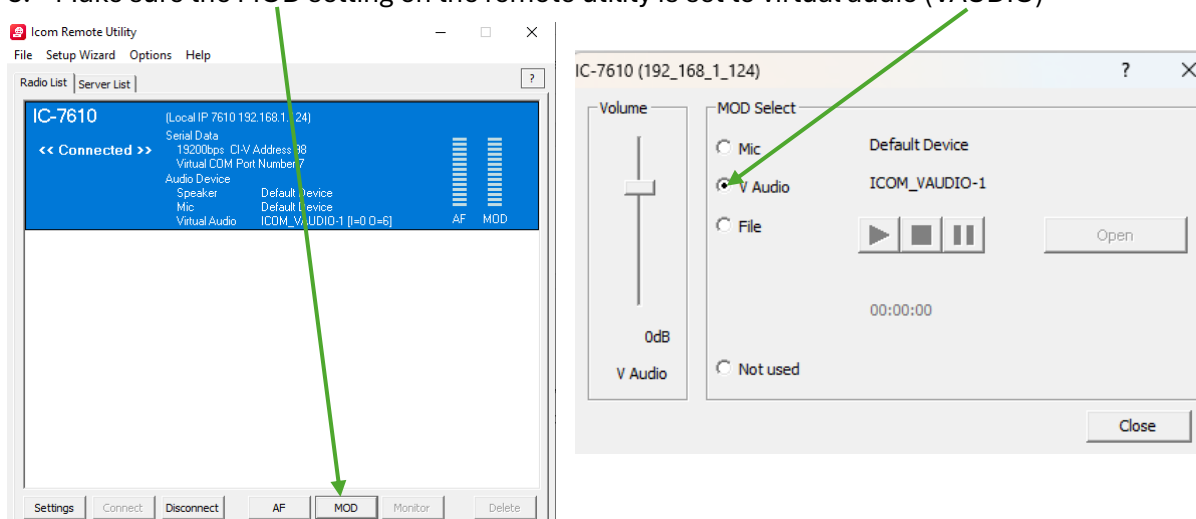


Figure 1. Check the MOD setting in the ICOM remote utility to make sure the audio path is correct on the IC-7610.

4. Launch RS-BA1 console.
5. Be sure “Software closing turns OFF the radio” in UNchecked in the Connect Set on RS-BA1.
6. Connect to the radio to bring it out of standby.
7. Open WSJT-X (MUST be done before step 8! Otherwise, the radio will go back into standby mode.)
8. WSJT-X Rig Control Error box will appear. Set the configuration for remote operation.
NOTE: Instead of changing the settings each time, I cloned multiple configurations in WSJT-X and then modified them individually depending on whether I use it locally via USB or over a LAN. I named them “7610 USB”, “7610 Remote”, and “SignalLink USB” for my other rig. So, at this point I would select the “7610 Remote” configuration. Figure 2 shows the correct settings for method 1.
NOTE: COM7 is the virtual COM port I assigned by ICOM remote utility (see figure 5). Create your own if you choose, but be sure to choose one that isn’t already in use (Windows Device Manager>Ports (COM & LPT)). Typically, higher numbers are less likely to conflict with other devices on your computer.)

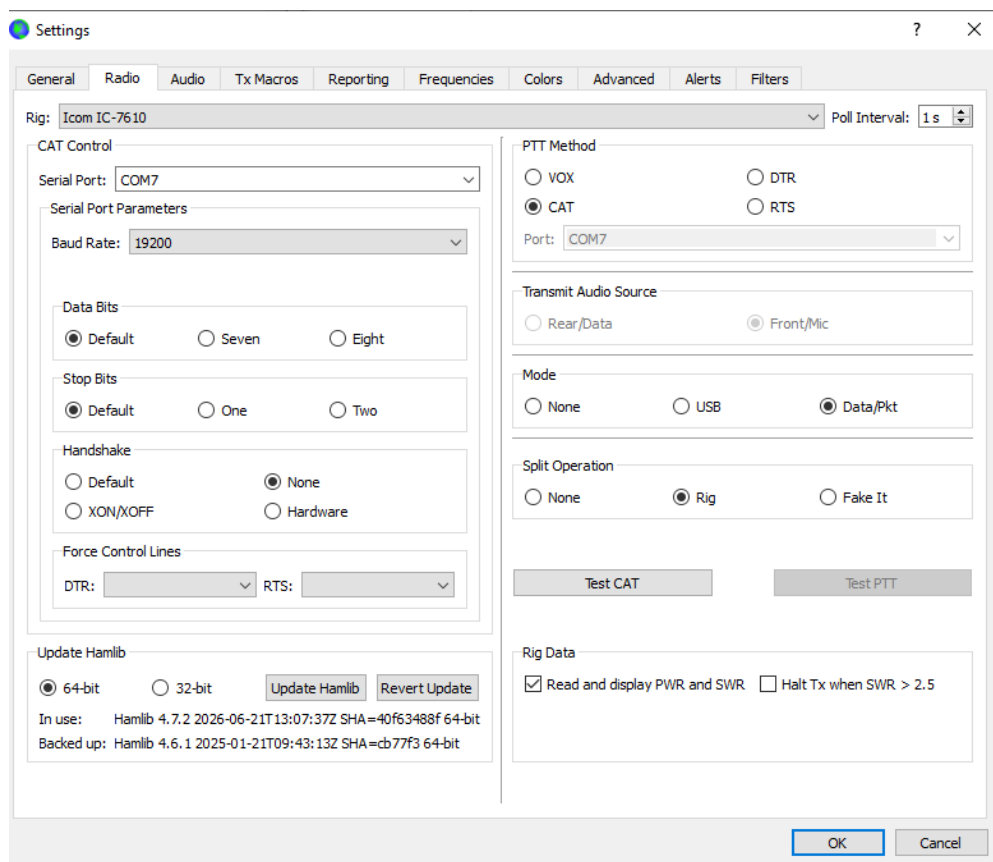


Figure 2. Settings for Step 8: WSJT-X settings for remote operation

9. On the “Audio” tab in the WSJT-X settings (shown in Figure 2), be sure ICOM Virtual audio drivers are selected in TX and RX.
10. Close the RS-BA1 console (to free up the COM port).
11. Press “Retry” on the WSJT-Rig Control error box.

NOTE: Radio will remain in standard USB mode until a transmission is made. That’s when WSJT-X sends the command to change to data mode (USB-D1). To change it before making your first attempt at a QSO, you can tap the “Tune” button on WSJT-X or test the PTT in the configuration. (Be sure to tap again to turn off the transmitter.)

NOTE: If you need to make changes on the radio (tuner, etc.), you must close WSJT-X to free up the COM port, open RS-BA1 to make the changes, and then reopen WSJT-X.)

12. Operate! May the good DX be yours!
13. Close WSJT-X.
14. Launch the RS-BA1 Console.
15. In Connect Set, CHECK the box that says, “Software closing turns OFF the radio”.
16. Exit RS-BA1 to put the radio back in standby mode.
17. Exit the ICOM Remote Utility.

ICOM Remote Utility Settings on Remote Computer

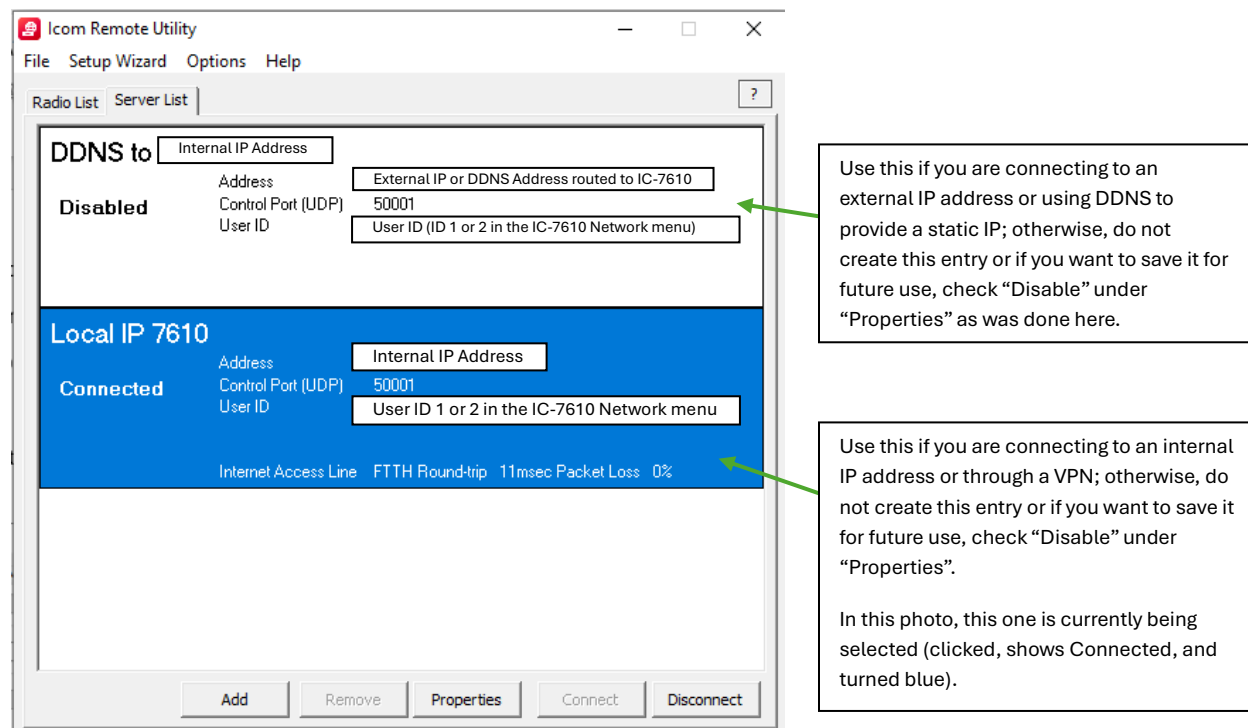


Figure 3. ICOM Remote Utility settings for server list tab

NOTE: Be sure to disable the server you're not using. One is for local LAN (bottom), while the top uses DDNS from an external IP to forward to the 7610 (top). Use the bottom one on the same WiFi/network, but use the top one outside your network. You must have **at least one** of these two options here. If you use the remote away from home (slower connection) AND on your home network (faster connection), you may want both options available so you can choose depending on your location. **If you want to keep it simple, just do the top configuration.** Only one of these options should show Connected (and in blue) at one time.

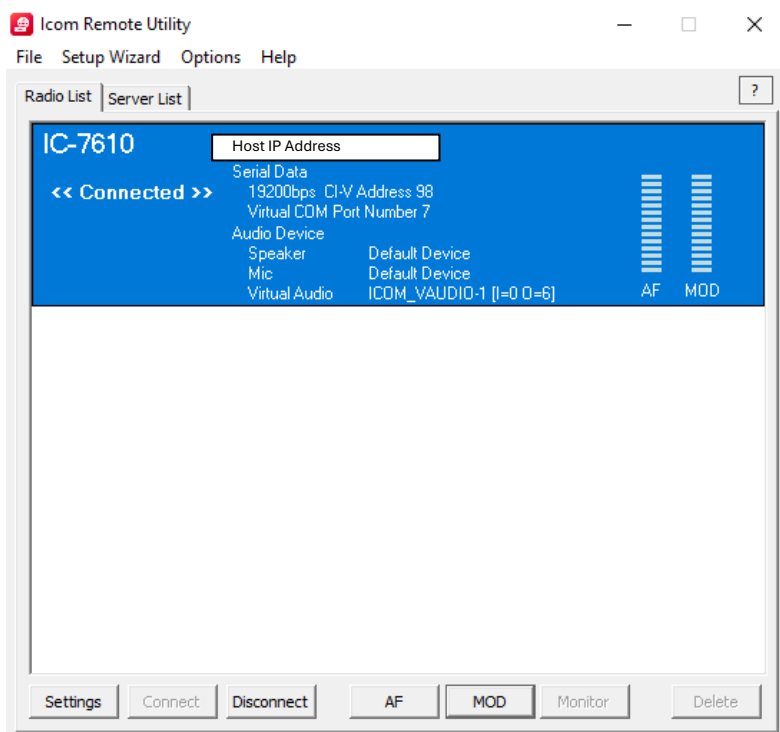


Figure 4. Settings for the ICOM Remote Utility radio tab

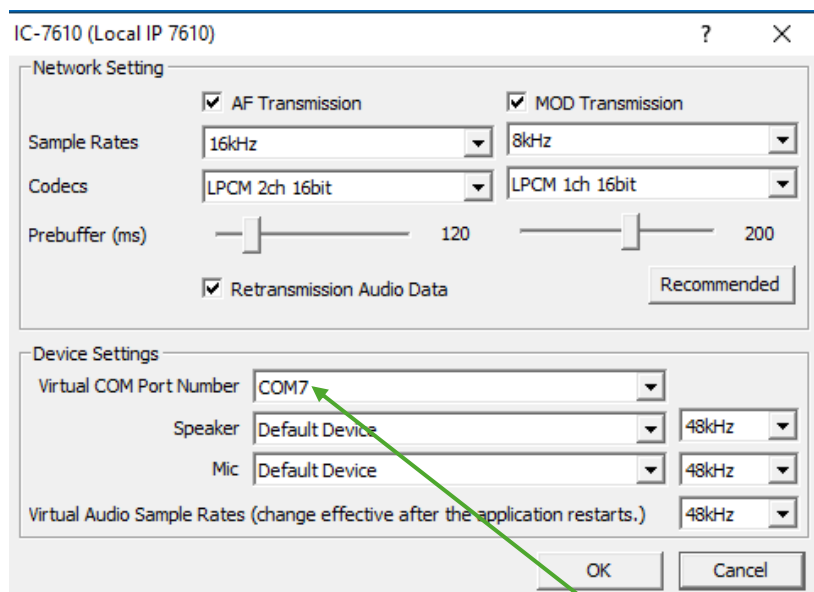


Figure 4. The settings inside the "settings" button in Figure 4

Select a Virtual COM port number here. I chose COM7. Whatever this COM port is listed here must be the COM port selected **throughout if you use method 1.**

Connect Setting

×

Model

IC-7610 (Ver1.40 -) (DUAL)

Connection

LAN

Remote Utility

IC-7610

Search

CI-V

COM Port

7

Baud rate(bps)

115200

CI-V address (Radio)

98

CI-V address (RS-BA1)

E0

Audio Device (Voice Memory)

ICOM_VAUDIO-1 (Icom Virtual Aud)

☐ IC-PW1 or IC-PW2 is connected.
 ☐ Controlled by older commands.
 ☐ The radio is automatically set to TX side.
 ☐ Software closing turns OFF the Radio.

OK

Figure 5. "Connect Set" options in the RS-BA1 console

Method 2: Remote to Computer with Team Viewer

1. Connect to the shack (host) computer using Team Viewer on the remote computer.
2. Launch RS-BA1 on host computer WITHOUT the ICOM Remote Utility running. (connection is by USB cable between the IC-7610 and the computer)
3. Connect to the radio using the RS-BA1 console to bring the IC-7610 out of standby mode. (This may happen automatically when you run RS-BA1 without the utility.)
4. Be sure “Software closing turns OFF the radio” in UNchecked in the Connect Set on RS-BA1.
5. Open WSJT-X on the host computer. (MUST be done before step 8! Otherwise, the radio will go back into standby mode.)
6. WSJT-X Rig Control Error box will appear. Set the configuration for remote operation.

NOTE: Instead of changing the settings each time, I cloned multiple configurations in WSJT-X and then modified them individually depending on whether I use it locally via USB or over a LAN. I named them “7610 USB”, “7610 Remote”, and “SignalLink USB” for my other rigs. So, at this point I would select the “7610 USB” configuration. Figure 6 shows the correct settings for method 2.

NOTE: COM4 is the COM port used for my USB cable connection. See Windows Device Manager>Ports (COM & LPT) to find the COM port number for your connection.

NOTE: The IC-7610 will remain in standard USB mode until a transmission is made. That’s when WSJT-X sends the command to change to data mode (USB-D1). To change it before making your first attempt at a QSO, you can tap the “Tune” button on WSJT-X or test the PTT in the configuration. (Be sure to tap again to turn off the transmitter.)

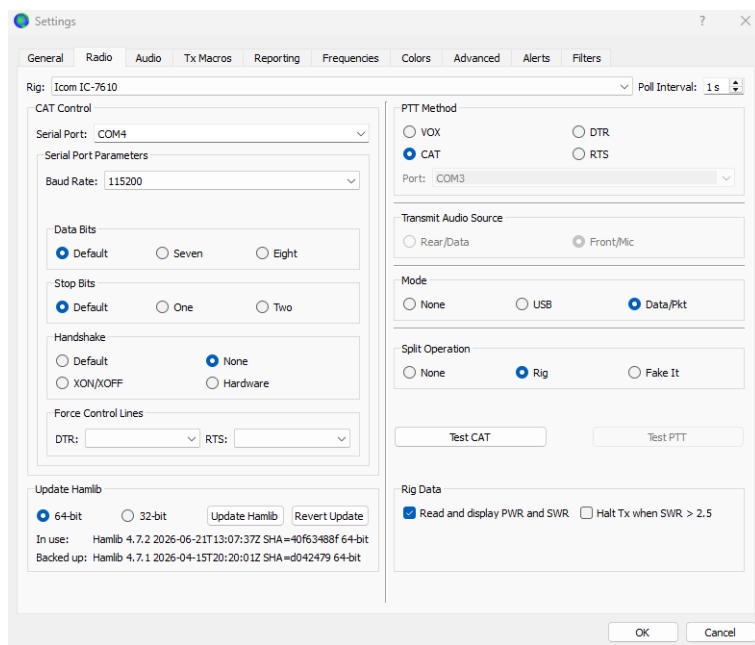


Figure 6. WSJT-X settings for a USB connection to the IC-7610

7. On the “Audio” tab in the WSJT-X settings (shown in Figure 6), be sure the ICOM Virtual audio drivers are selected in TX and RX.
8. Close the RS-BA1 console (to free up the COM port).
9. Press “Retry” on the WSJT-Rig Control error box.
10. Operate! May the good DX be yours!
11. If you want to hear the audio on TeamViewer, go to Extras > Options (or settings gear), select Remote Control, and check “Play computer sounds and music”.
12. Close WSJT-X.
13. Launch the RS-BA1 Console.
14. In Connect Set, CHECK the box that says, “Software closing turns OFF the radio”.
15. Exit RS-BA1 to put the radio back in standby mode.

Settings on the IC-7610

Set>Connectors>MOD input

MOD INPUT		1/2
ACC MOD Level	50%	▲
USB MOD Level	50%	
LAN MOD Level	50%	
DATA OFF MOD	MIC, ACC	▼
DATA1 MOD	LAN	↺
DATA2 MOD	USB	

MOD INPUT		2/2
DATA3 MOD	ACC	▲

WSJT-X currently only supports switching the TX audio to USB-D1 and not -D2 nor -D3. And, RS-BA1 does have currently have an option to choose data connections remotely.

This is the setup using **method 1**. If you use method 2, reverse D1 and D2 (make Data1 MOD USB and Data 2 MOD LAN - instead of what is shown here).

Set>Connectors>CI-V

CI-V		1/2
CI-V Baud Rate	19200	▲
CI-V Address	98h	
CI-V Transceive	ON	
CI-V USB/LAN→REMOTE Transceive Address	00h	▼
CI-V Output (for ANT)	OFF	↺
CI-V USB Port	Unlink from [REMOTE]	

CI-V		2/2
CI-V USB Baud Rate	115200	▲
CI-V USB Echo Back	ON	

Be sure this is set to UNLINK from remote

Set>Network

NETWORK		1/3
DHCP (Valid after Restart)	ON	▲
IP Address (Valid after Restart)	Internal IP Address	
Subnet Mask (Valid after Restart)	See router for subnet, but this is typical 255.255.255. 0 (24bit)	▼
Default Gateway (Valid after Restart)	See router for gateway 192.168. 1. 1	↺
Primary DNS Server (Valid after Restart)	See router for DNS 192.168. 1. 1	
2nd DNS Server (Valid after Restart)	See router for DNS 8. 8. 4. 4	

NETWORK		2/3
Network Name	Your Router Name	▲
Network Control (Valid after Restart)	ON	
Power OFF Setting (for Remote Control)	Standby/Shutdown	▼
Control Port (UDP) (Valid after Restart)	50001	↺
Serial Port (UDP) (Valid after Restart)	50002	
Audio Port (UDP) (Valid after Restart)	50003	

NETWORK		3/3
Internet Access Line (Valid after Restart)	FTTH	▲
Network User1		
Network User2		▼
Network Radio Name	IC-7610	
		↩

Be sure to set a username and password here. You will need to enter this into the ICOM remote utility software. If you also want a guest or second username and password, enter it in User2. You should give your personal username admin rights.