

IC-7610 CW Skimmer Setup Notes using USB IF (Audio)

This CW Skimmer setup with the IC-7610 uses the audio (built-in 7610 sound card) obtain from the USB 2.0 connector (meaningot the blue USB 3.0 connector). You will need to change the 7610's USB AF/IF outout to be IF. When you wish to use other software that uses the 7610's built-in sound card, you will need to set it back to AF. This setup is based on IC-7610 radio firmware v1.20, and CW Skimmer software version 2.1.

7610 Radio Menu Setup:

1. Menu->SET->Connectors->USB AF/IF Output->Output Select = IF
2. Menu->SET->Connectors->USB AF/IF Output->IF Output Level->0%

Yes, above I mean to set the IF output level to zero!. It is not a typing mistake!

CW Skimmer setup:

Radio Tab: Hardware Type: (0) SoftRock-IF
Sampling Rate: (o) 48 kHz
CW Pitch, Hz: (I set it to 600, your choice here)
Audio IF, Hz: -12000 + <your CW Pitch setting>

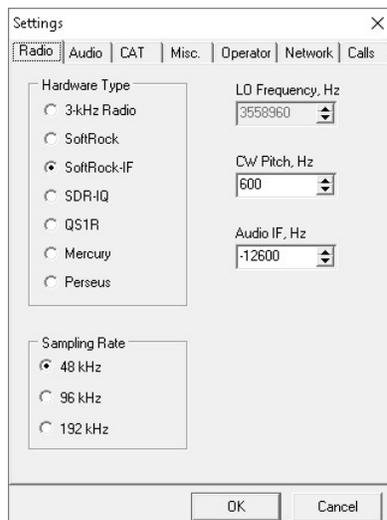
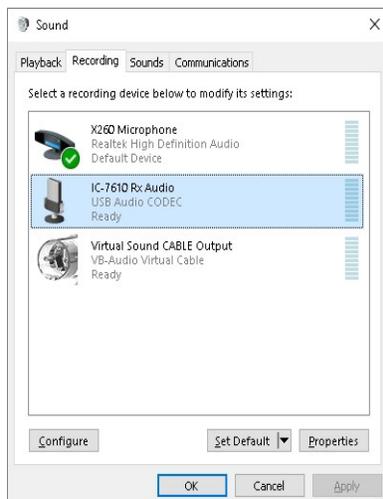
Example Audio IF, Hz setting I used:

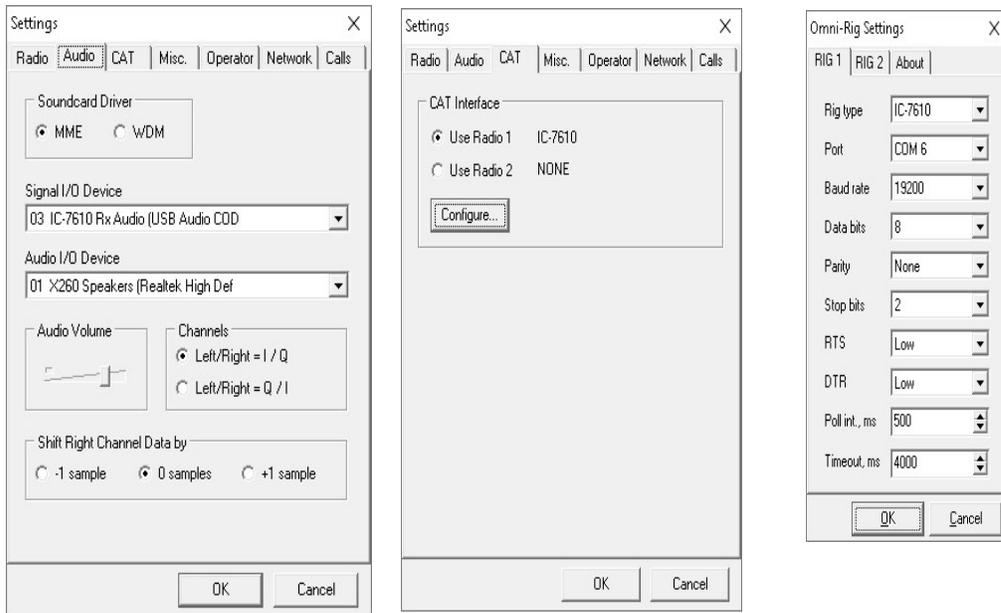
CW Pitch = 600 and Audio IF set to -12600

Basically you add -12000 to the CW Pitch setting you use.

Audio Tab: Soundcard Driver: MME
Signal I/O Device: IC-7610 USB Audio Codec (see notes below)
Audio I/O Device: Your computer's speaker out audio codec
Audio Volume: Your choice
Channels: (0) Left/Right = I / Q
Shift right Channel Data by: (0) 0 samples

To find the "audio codec" that the IC-7610 provides over the USB port, you will need to look in the Windows Sound properties for Recording devices. In my system it is shown (below) as "IC-7610 Rx Audio USB Audio CODEC". A tip is to rename the windows sound audio codecs to better match what they really are. I have done this on my PC so that it is easier to locate and find the IC-760's audio codecs (built-in sound cards). Just double click on a windows sounds device, you can then enter a new name for the built-in sound card.





CAT Tab:
Omni-Rig Settings: RIG1

CAT Interface:	(o) Use Radio 1 IC-7610
Rig Type:	IC-7610
Port:	COM6 (may vary on your PC)
Baud rate:	19200
Data Bits:	8
Parity:	None
Stop bits:	2
RTS:	Low
DTR:	Low
Poll int., ms:	500
Timeout, ms:	4000

NOTE: My CAT setting is using an actual CI-V USB serial cable plugged into the CI-V remote port on the back of the 7610. It is NOT the virtual COM ports that are created by the 7610 when you plug in the USB cable (not the USB 3.0 cable). The 2 virtual serial ports that are created by the USB cable, I use for N1MM+ logger. It also controls the CW and RTTY keying via the virtual serial port's DTR/RTS handshake lines.

This setup appears to work well, and does not require the use of the HSDR program that uses the 7610 I/Q signals that come from the blue USB 3.0 serial port.

Just remember to set the USB AF/IF Output back to "AF" when you wish to use other sound card software with your 7610!

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