

Settings for HRD(v6) / DM780 / JTDX / WSJT / JTAAlert with FTDX101D

March 2020 by Eeltje Luxen, PA0LUX (updated march 18)

This document reflects the settings for Radio and software as I use them.

These settings work for me, but there are many roads to Rome.

Assumed is that you use USB for the connection between PC and radio and already have the correct drivers installed on your PC. If not, there are other documents to tell you how to. Also assumed that you have the logbook working.

Important: If transmitting data does not work, try this or update your firmware (This problem was solved in the Firmware version of 16-03-2020):

After switching on the radio and after HRD etc. is up and running, first select a non-data mode (CW, SSB) on any band. If you are using the band stack memories like I do, one for CW, one for SSB and one for DATA-U, You can just press **once** a band stack for SSB/CW and from then on you are clear to go (to DATA).

Some general remarks:

- I use Data-U on the radio for all data modes like RTTY/FT8/FT4/PSK etc.
- I use AMC to adjust the input audio, AMC settings for SSB and DATA are different (SSB = ~65, DATA = ~42)
- I use CW-U on the radio for CW through DM-780.
- I use the 3K roofing filter for Data-U and **width** set to 3K!
- Using the max shift of +1200 Hz for Data-U is not necessary any more, problem was solved in the Firmware version of 16-03-2020
- I use HRD version 6, the free version (v5) does not work correctly with the radio.
- Not all possible settings within radio or software are shown, mostly only those settings which are relevant for the subject or else to clarify things.
- If you are overdriving the audio input of the radio, you will see that as a second peak in the Filter graph of the radio (set frequency below 1000Hz).
- DM780 and JTDX/WSJT/JTAAlert can all run simultaneously. However running JTAAlert twice is causing PC problems for me (meaning simultaneously JTAAlert + JTDX **and** JTAAlert + WSJT).

My settings are shown by means of a lot of screenshots. First the radio settings, then the HRD settings and subsequently the settings for JTDX / WSJT and JTAAlert.

FTDX-101D Menu settings:

Menu : Extension Setting – nothing to set.

Menu : Display Setting – not relevant, set as needed.

Menu : Operation Setting - submenu General, see screenshot below (settings not shown are default-Yellow)

Operation Setting - submenu RX DSP, not relevant (or use defaults)

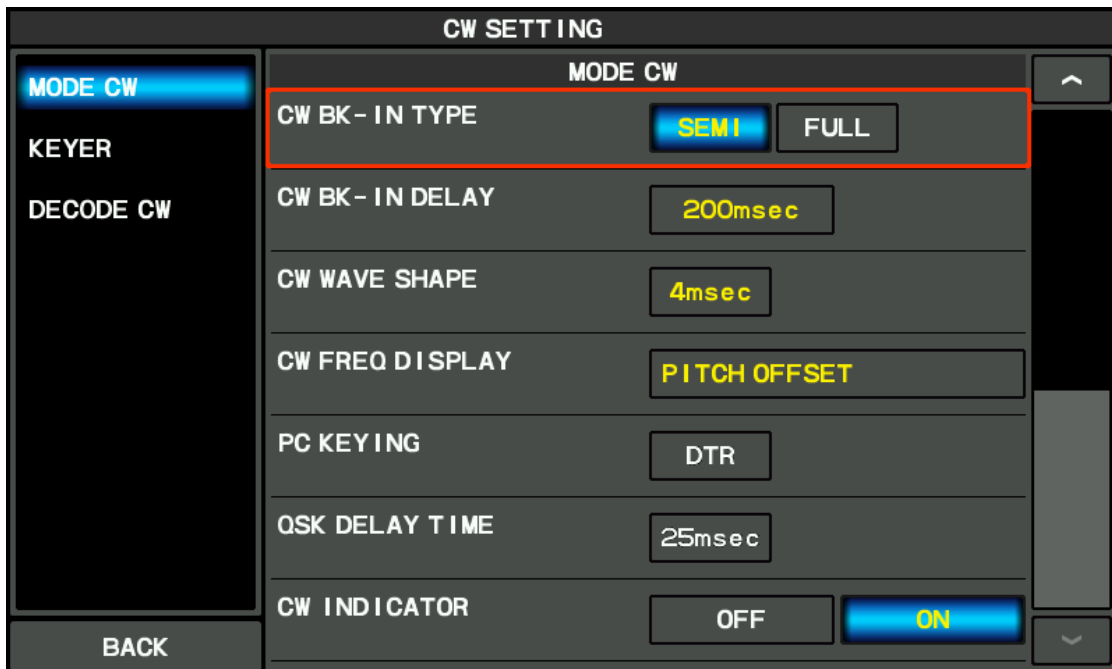
Operation Setting - submenu TX audio, not relevant (or use defaults)

Operation Setting - submenu TX General, not relevant (or use defaults)

Operation Setting - submenu Tuning, not relevant (or use defaults)



- Menu : **CW Setting** – submenu Mode CW, see screenshot below (settings not shown are default-Yellow)
- CW Setting – submenu Keyer, not relevant (or use defaults)
- CW Setting – Decode CW, not relevant (or use defaults)



Menu : Radio Setting – submenu Mode SSB, see screenshot below (settings not shown are default-Yellow)

Radio Setting – submenu Mode AM, not relevant (or use defaults)

Radio Setting – submenu Mode FM, not relevant (or use defaults)

Radio Setting – submenu Mode PSK/DATA, see 3 screenshots below

Radio Setting – submenu Mode RTTY, not relevant (or use defaults)

Radio Setting – submenu ENCDEC PSK, not relevant (or use defaults)

Radio Setting – submenu ENCDEC RTTY, not relevant (or use defaults)

RADIO SETTING	
MODE SSB	MODE PSK /DATA
MODE AM	AGC FAST DELAY 160msec
MODE FM	AGC MID DELAY 500msec
MODE PSK /DATA	AGC SLOW DELAY 1500msec
MODE RTTY	PSK TONE 1000Hz 1500Hz 2000Hz
ENCDEC PSK	DATA SHIFT (SSB) 0Hz
ENCDEC RTTY	LCUT FREQ 350Hz
BACK	LCUT SLOPE 6dB/oct 18dB/oct

For old firmware versions before 16-03-2020: As seen above, Data shift (SSB) is set to 0HZ. Therefore you must set the shift potmeter to the max. That way the frequency readout will be correct. I have one band stack memory per band assigned to DATA-U. The shift potmeter is remembered per band stack memory. So you only have to set the potmeter once per band stack. After that you can recall all settings with selection of the band stack memory.

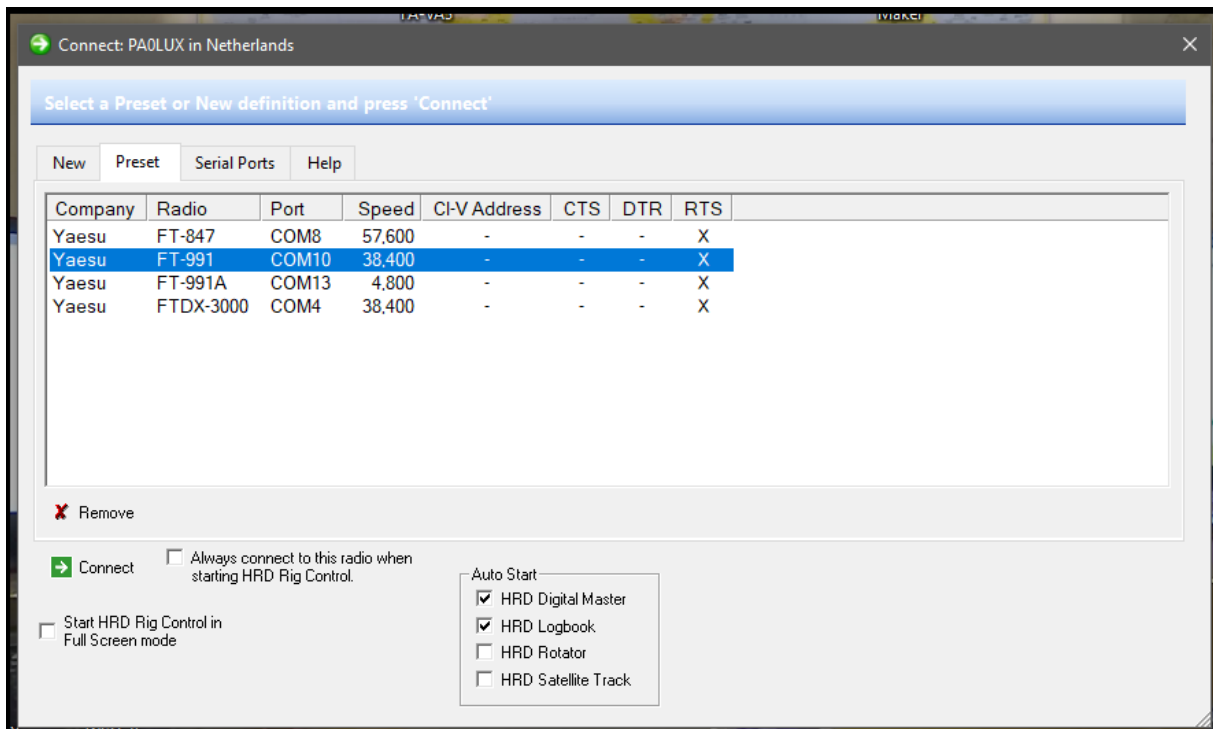
For Firmware as of 16-03-2020: Set Data Shift (SSB) to the default of 1500. Do not use the shift pot anymore (set to 0).

RADIO SETTING	
MODE SSB MODE AM MODE FM MODE PSK / DATA MODE RTTY ENCDEC PSK ENCDEC RTTY BACK	MODE PSK / DATA LCUT SLOPE 6dB/oct 18dB/oct
	HCUT FREQ 3000Hz
	HCUT SLOPE 6dB/oct 18dB/oct
	DATA OUT SELECT MAIN SUB
	DATA OUT LEVEL 50
	TX BPF SEL 50-3050Hz
	DATA MOD SOURCE MIC REAR
	BACK

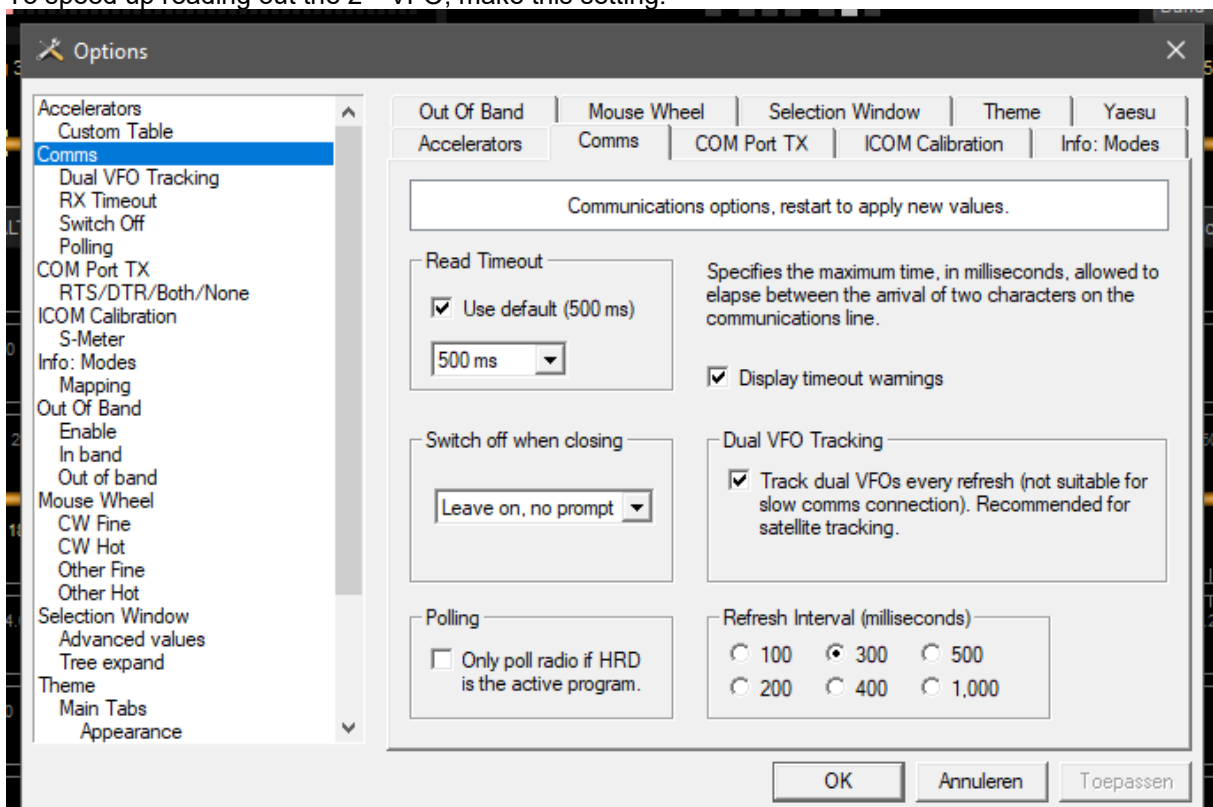
RADIO SETTING	
MODE SSB MODE AM MODE FM MODE PSK / DATA MODE RTTY ENCDEC PSK ENCDEC RTTY BACK	MODE PSK / DATA DATA OUT SELECT MAIN SUB
	DATA OUT LEVEL 50
	TX BPF SEL 50-3050Hz
	DATA MOD SOURCE MIC REAR
	REAR SELECT DATA USB
	RPORT GAIN 50
	RPTT SELECT DAKY RTS DTR
	BACK

HRD(v6) Rig Control settings:

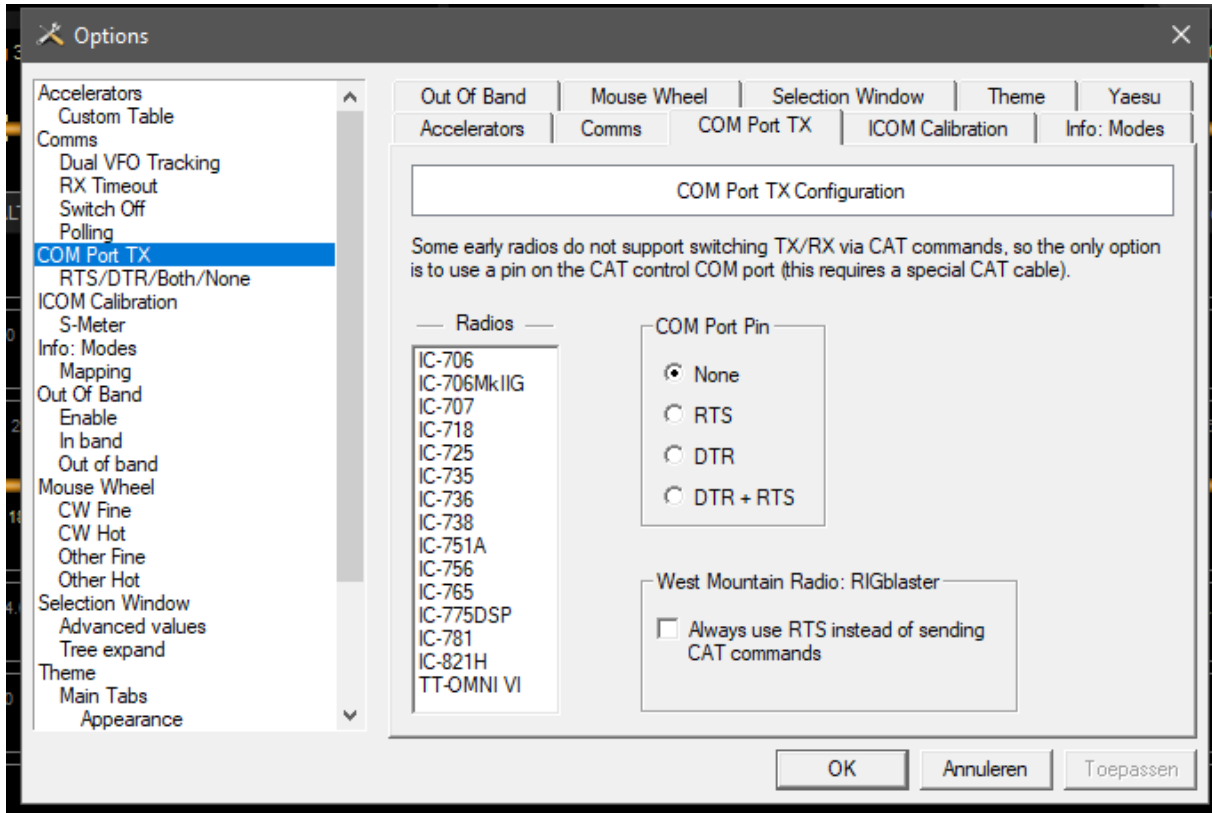
To connect HRD with the radio, use settings for FT-991 as below. The other settings are not for the FTdx-101D. In my case Com port 10 is the enhanced port for the FTdx-101. Check the port number in the PC Computer properties.



To speed up reading out the 2nd VFO, make this setting:



Make sure this is the same:



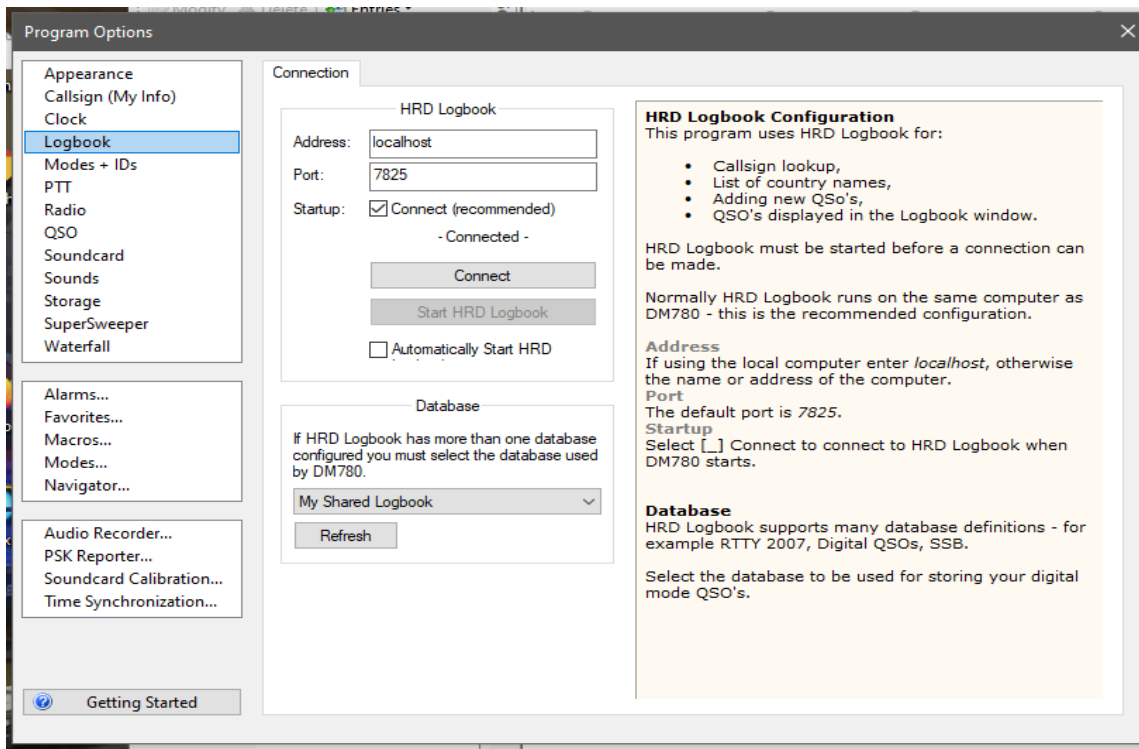
All other settings in the HRD Rig Control can be left at default, unless you want to change them.

HRD(v6) DM780 settings:

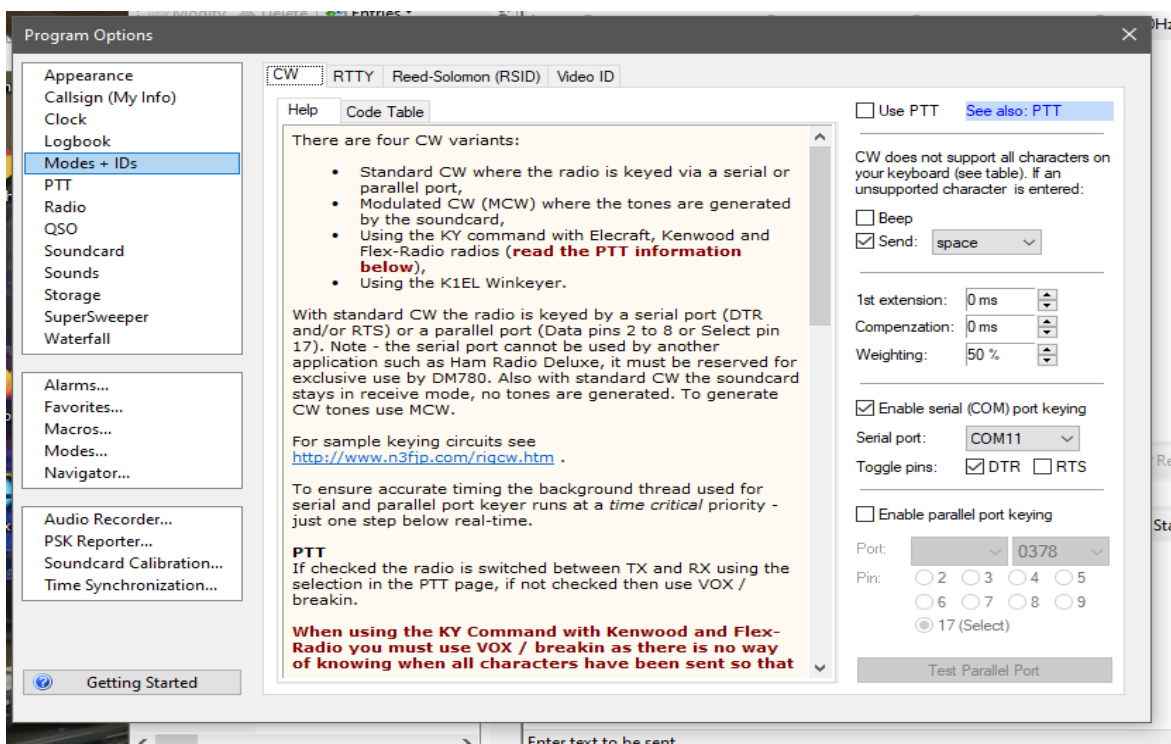
First (and only button-) create a TX button in DM780 or you can never transmit !!!

Settings not shown are default. Leave as they are or change at wish.

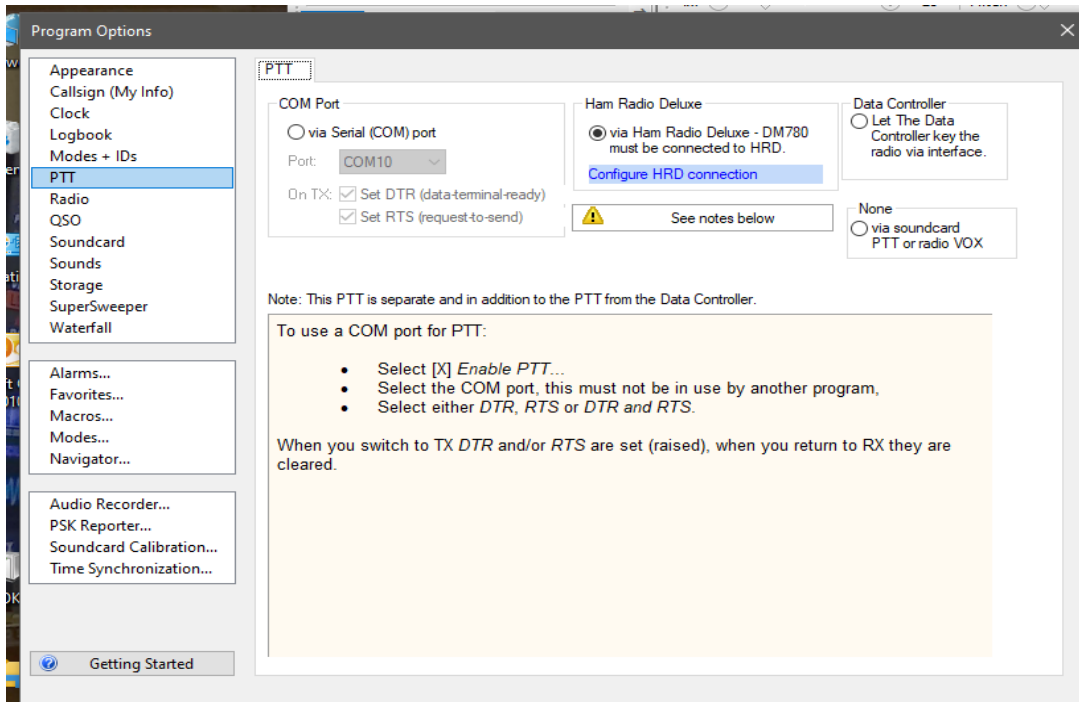
Settings for connection with the log (my log is called: My Shared Logbook, default is My Logbook):



Settings for CW. Where COM11 is selected, you should fill in one of the 2 com ports created for the FTdx-101D. This is the Standard port. Try both if it does not work at first hand:

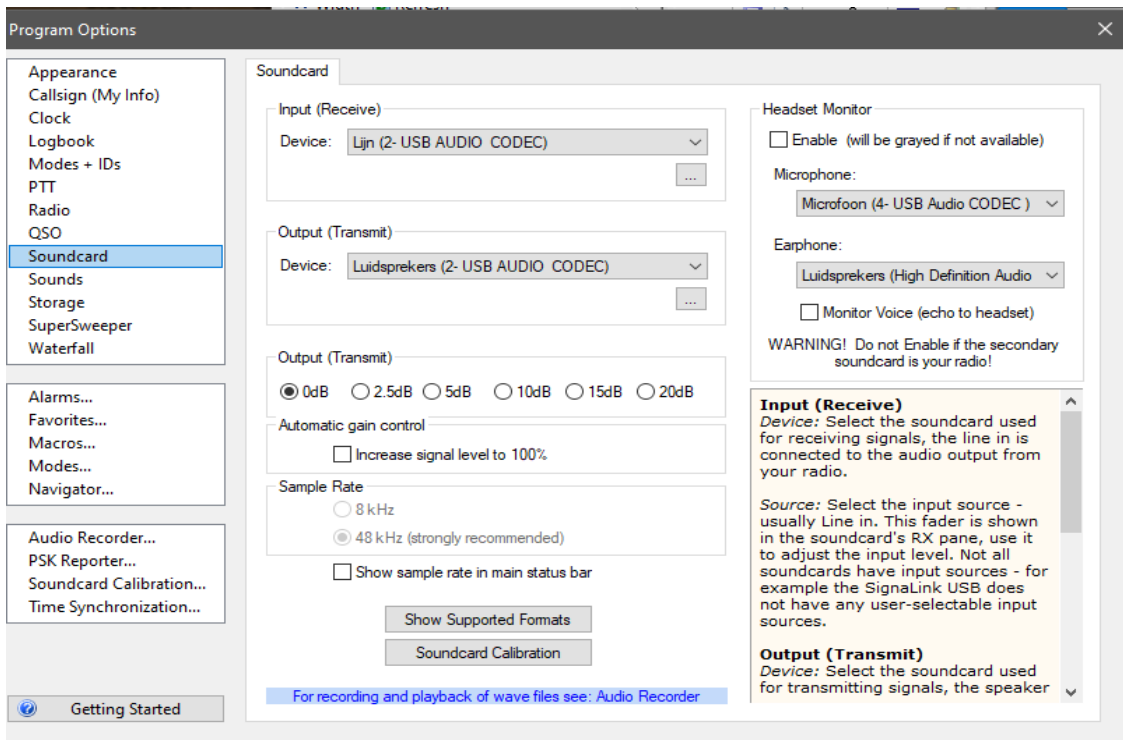


Settings for PTT via HRD:



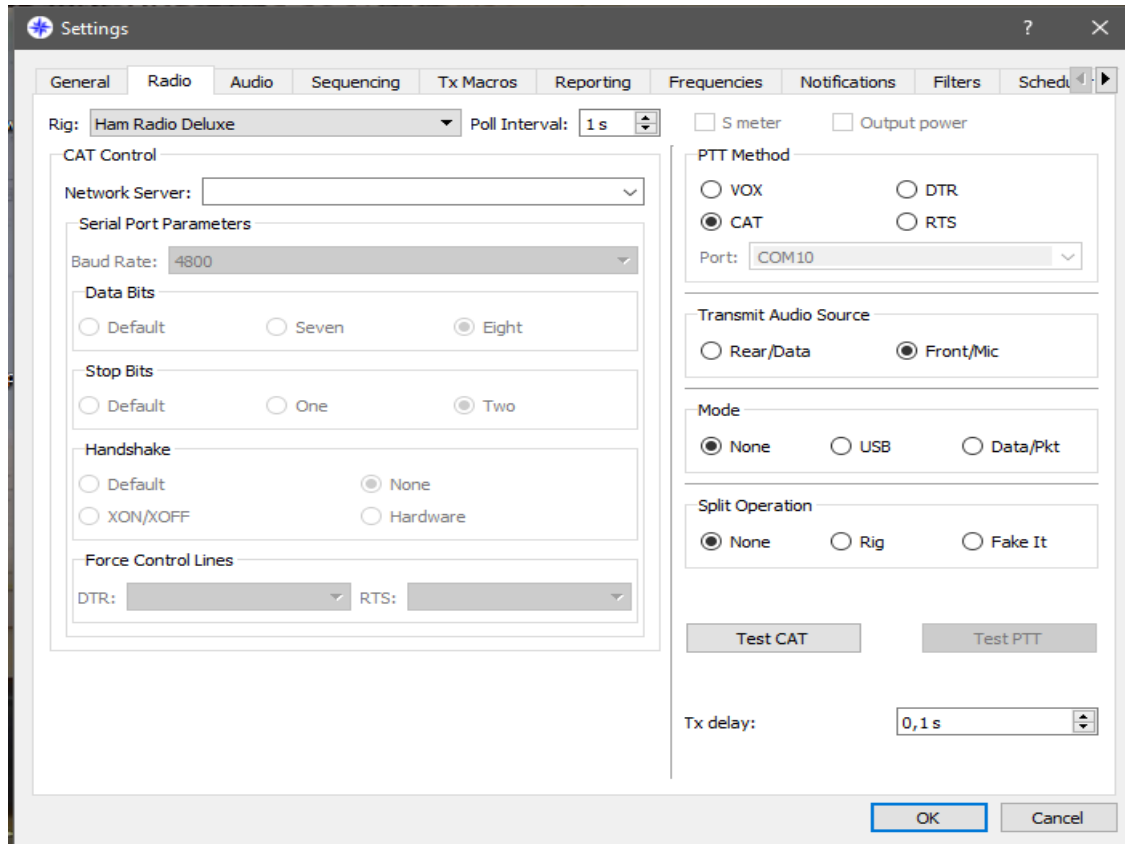
Select the soundcard of the FTdx-101D, which is shown only in your PC when the radio is powered up and connected.

It can have a different number in your PC. DM-780 may sometimes not remember these settings. If you do not get an audio spectrum or when in TX, the sound is coming from your **speaker** >>> Check these settings below:

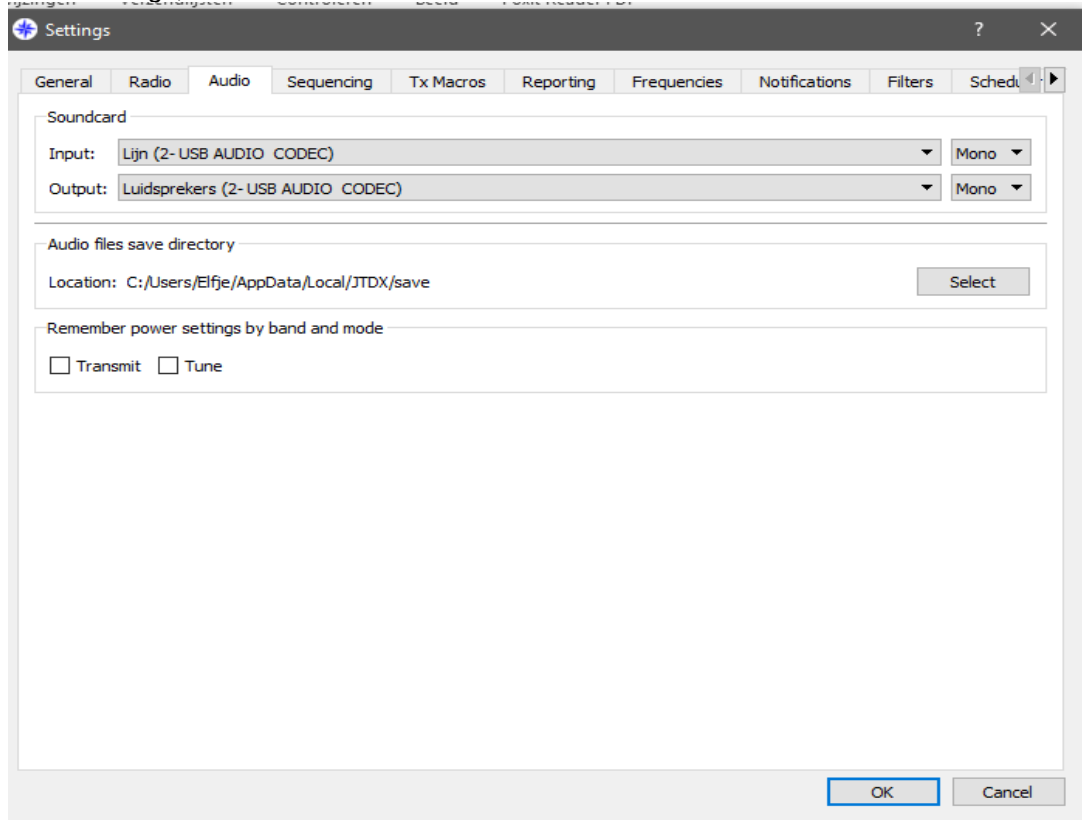


JTDX settings:

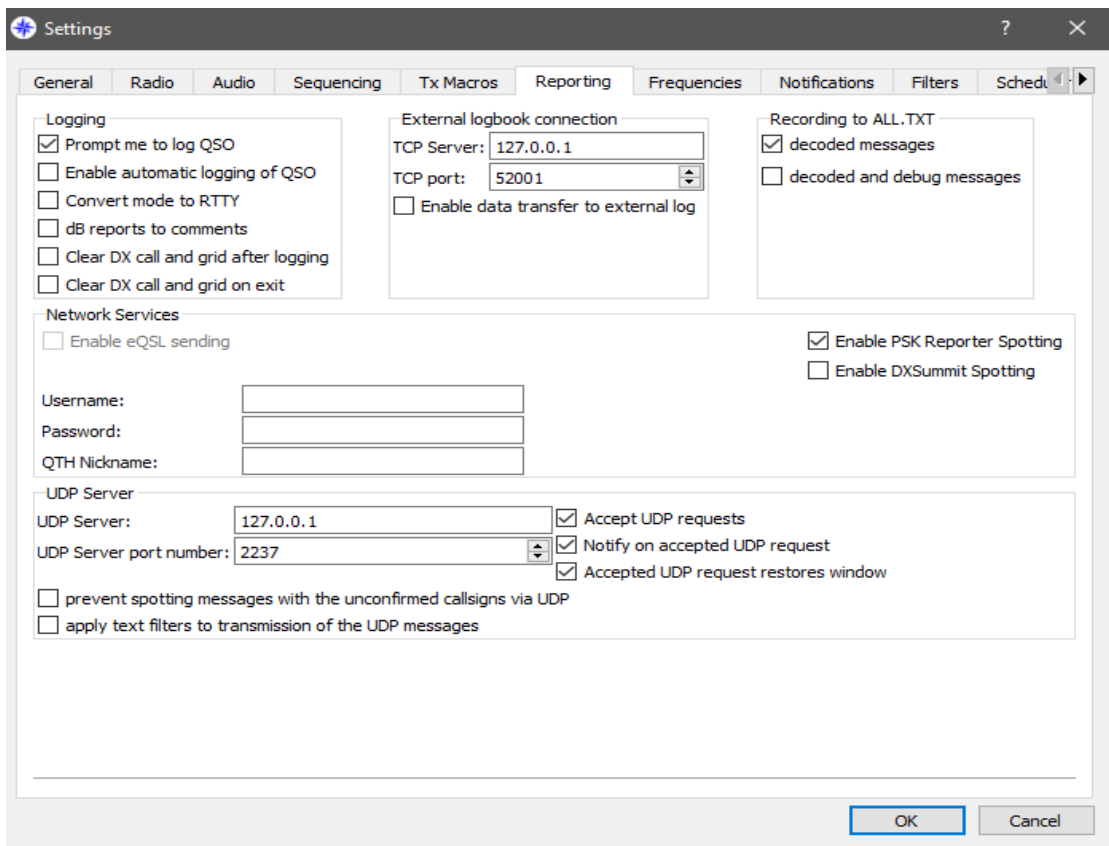
It is possible to have a shortcut (with their own settings – like soundcard) for JTDX for each radio you are using. To keep it simple, below only the FTdx-101D settings are shown. Radio Settings:



Audio settings, use the same soundcard as in DM-780:



Reporting, also for JTAAlert. Make sure that the 3 UDP server checkboxes are enabled:



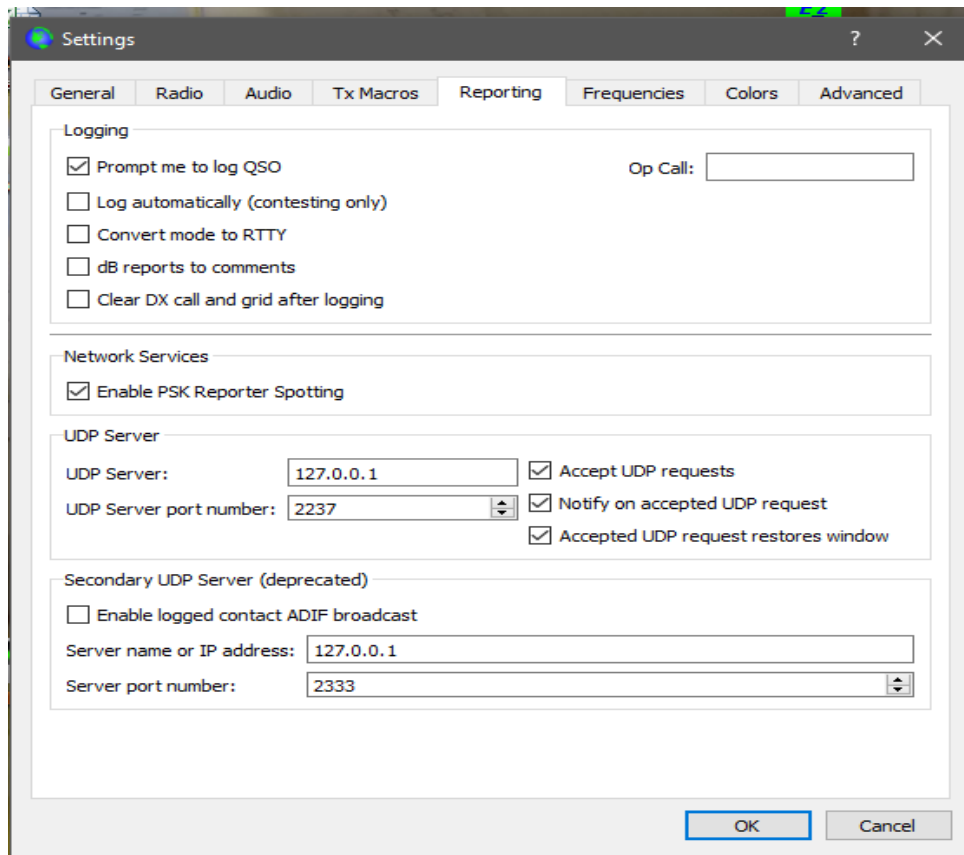
All other setting as you wish, or default.

WSJT settings:

Radio settings, same as for JTDX

Audio settings, same as for JTDX.

Reporting, see below:



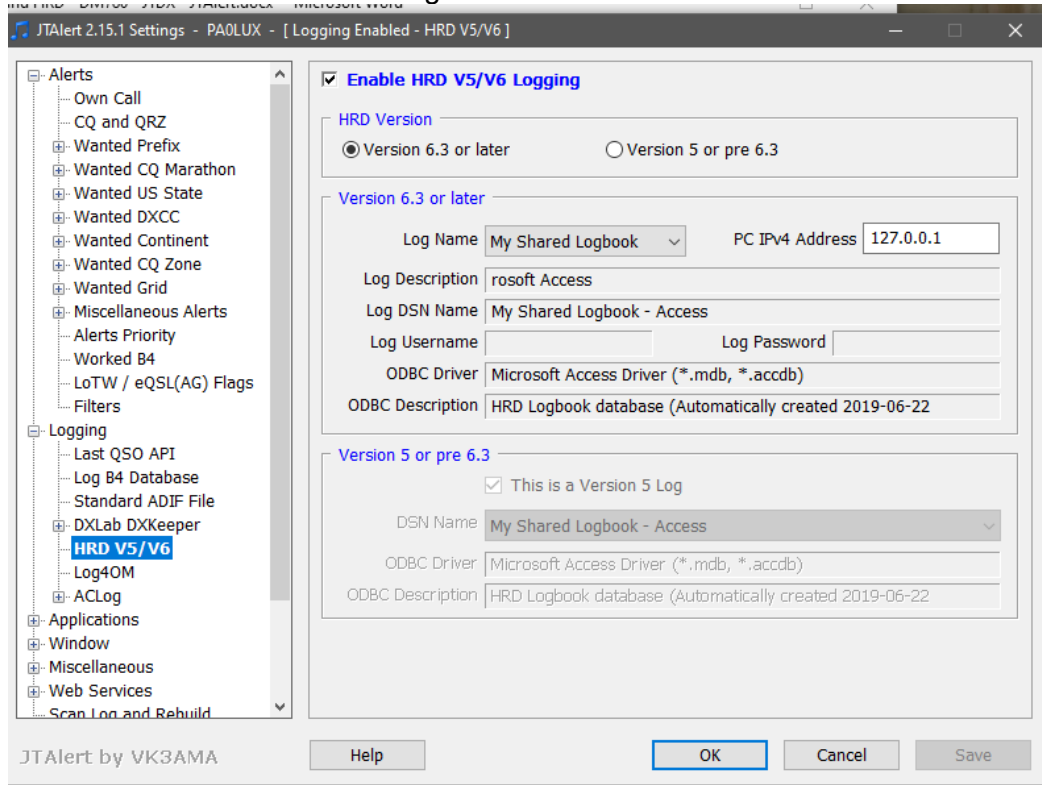
The screenshot shows the 'Settings' dialog box with the 'Reporting' tab selected. The 'Logging' section has the following options: 'Prompt me to log QSO' (checked), 'Log automatically (contesting only)' (unchecked), 'Convert mode to RTTY' (unchecked), 'dB reports to comments' (unchecked), and 'Clear DX call and grid after logging' (unchecked). The 'Op Call' field is empty. The 'Network Services' section has 'Enable PSK Reporter Spotting' checked. The 'UDP Server' section has 'UDP Server' set to '127.0.0.1', 'UDP Server port number' set to '2237', and three checked options: 'Accept UDP requests', 'Notify on accepted UDP request', and 'Accepted UDP request restores window'. The 'Secondary UDP Server (deprecated)' section has 'Enable logged contact ADIF broadcast' unchecked, 'Server name or IP address' set to '127.0.0.1', and 'Server port number' set to '2333'. The 'OK' button is highlighted.

Section	Option	Value / Status
Logging	Prompt me to log QSO	<input checked="" type="checkbox"/>
	Log automatically (contesting only)	<input type="checkbox"/>
	Convert mode to RTTY	<input type="checkbox"/>
	dB reports to comments	<input type="checkbox"/>
	Clear DX call and grid after logging	<input type="checkbox"/>
Op Call		
Network Services	Enable PSK Reporter Spotting	<input checked="" type="checkbox"/>
UDP Server	UDP Server	127.0.0.1
	UDP Server port number	2237
	Accept UDP requests	<input checked="" type="checkbox"/>
	Notify on accepted UDP request	<input checked="" type="checkbox"/>
Secondary UDP Server (deprecated)	Enable logged contact ADIF broadcast	<input type="checkbox"/>
	Server name or IP address	127.0.0.1
	Server port number	2333

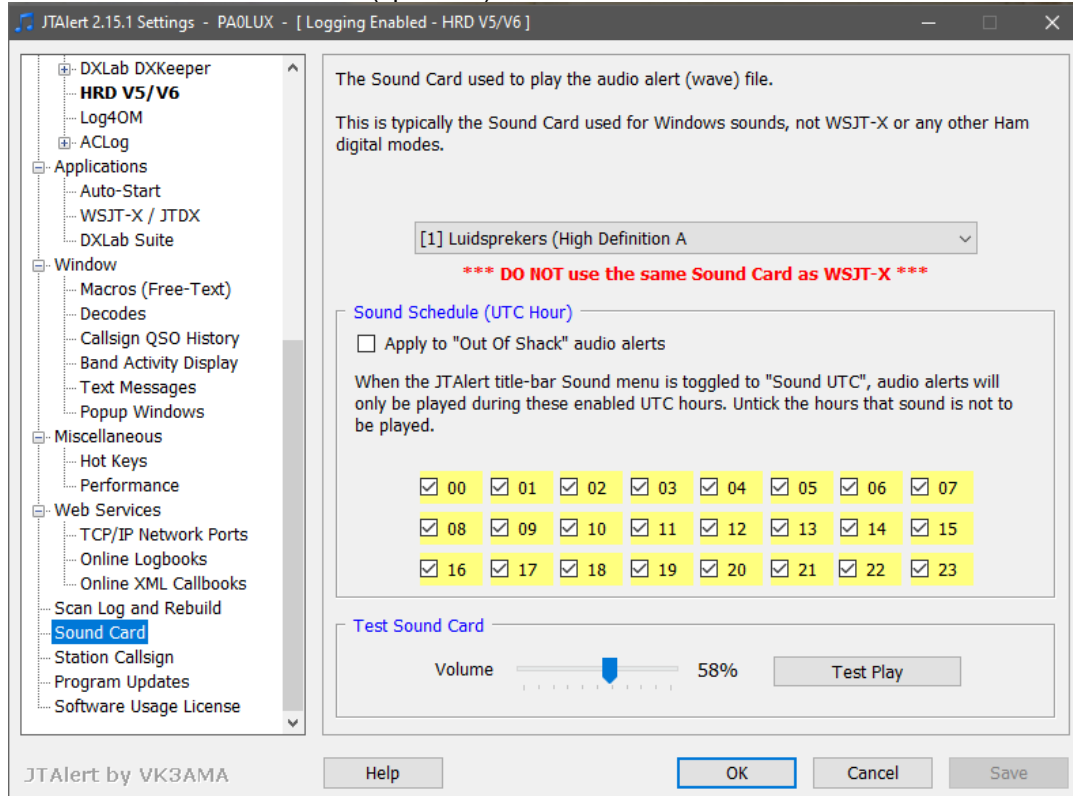
All other setting as you wish, or default.

JTAlert settings:

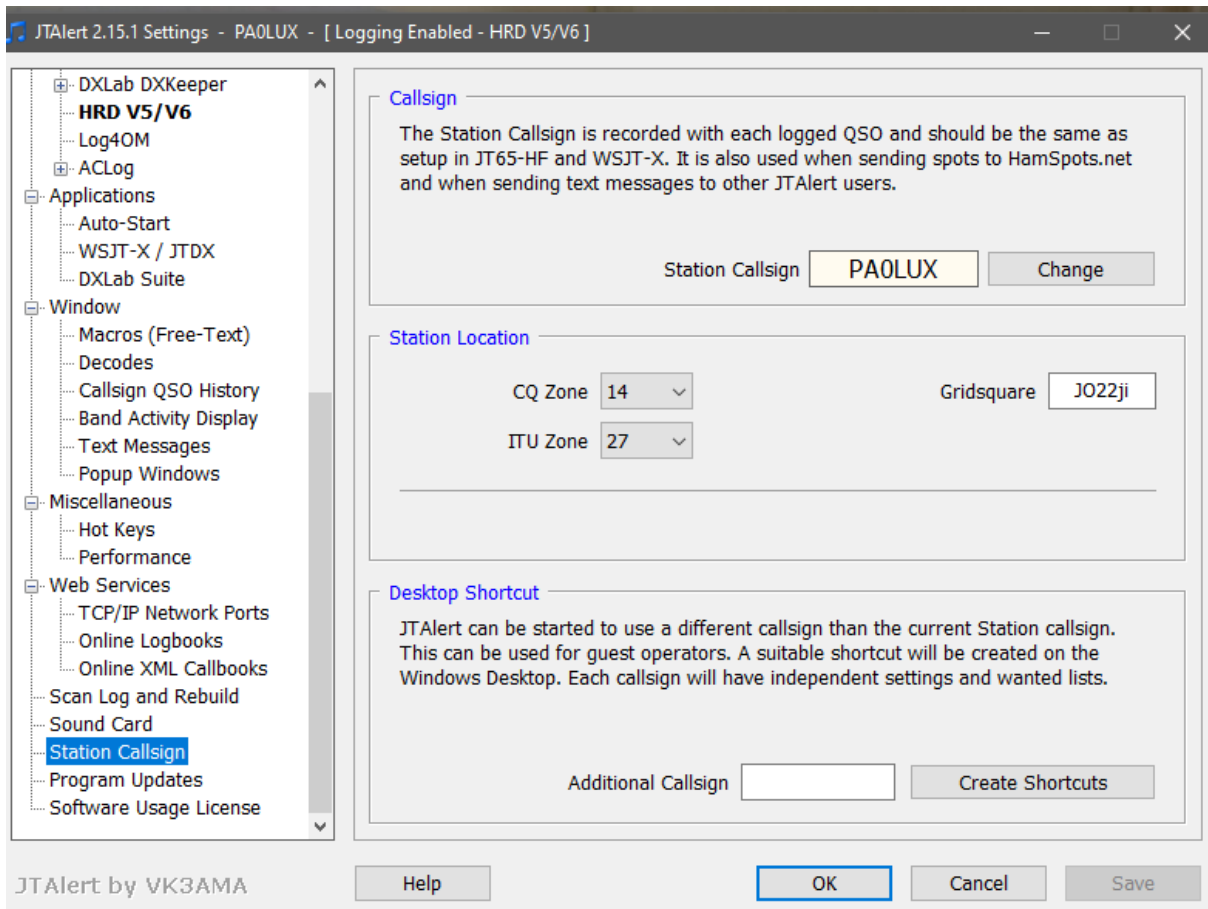
JTAlert connection with HRD Logbook:



Make sure this is the windows (speaker-) soundcard:



Do not forget to put in your own call sign and Station Location



All other setting as you wish, or default.