

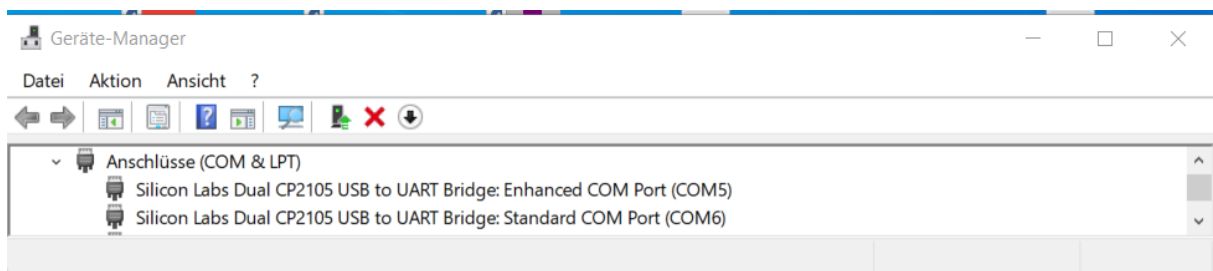
Setup of YAESU FT-991(A) for Soundcard Modems

The YAESU FT-991 with its built-in soundcard allows easy operation of soundcard based digital modes like FT8, VARA, VARA FM, Packet 1200, WINMOR, ARDOP. Just a standard USB cable is needed between a PC and the FT-991. Rig control (CAT), PTT control and Audio In/Out pass on this single USB cable.

There is one draw-back with the FT-991: The soundcard cannot be used for Packet Radio 9600 or for VARA FM in wideband ('9600') mode. In fact, when setting 'Packet Mode' in the FT-991 to 9600, the soundcard does not modulate the FM signal. Direct FM Modulation can only be done via the RTTY/DATA connector.

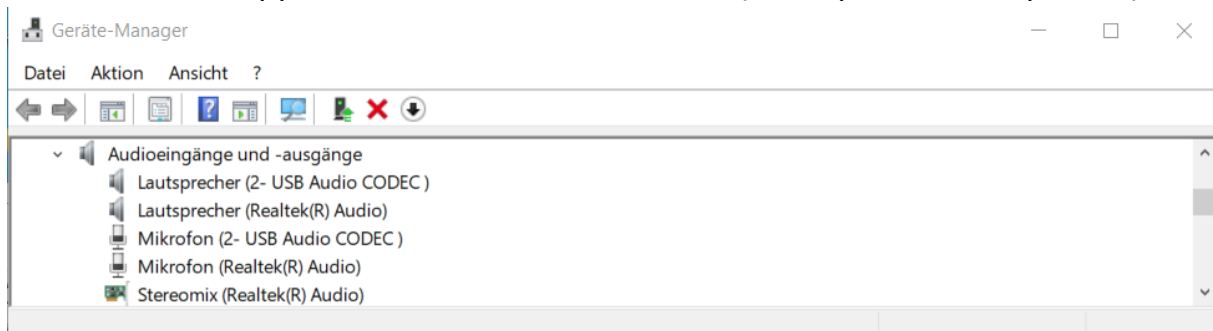
To setup the FT-991(A) for WINLINK Express and VARA or WINMOR, the USB Driver for the FT-991 has to be installed on the PC first. This happens automatically as soon as you connect the FT-991(A) with the USB cable to your PC when it is online.

You can check if the 2 COM ports and the soundcard are correctly found and installed by checking with the device manager. You will find an 'Enhanced COM Port' and a 'Standard COM Port':

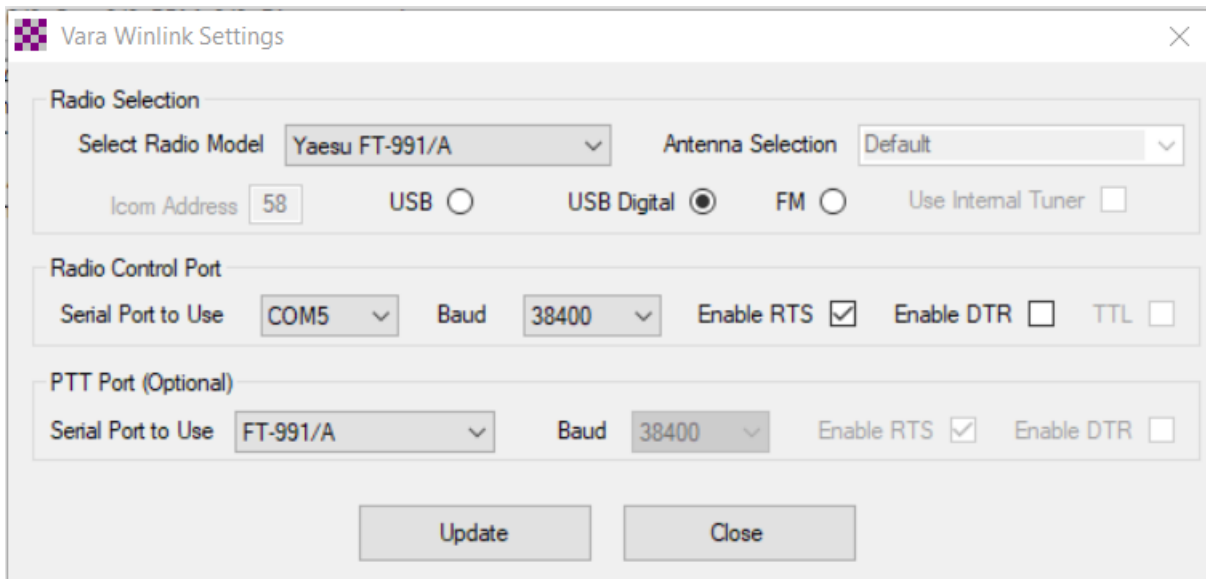


If the driver is not installed properly, right click on 'Enhanced COM Port', select 'Update driver' and have the OS search for it automatically in the Internet.

The soundcard appears as a 'USB Audio CODEC' (Microphone and Speaker) :



Now open a VARA, WINMOR or ARDOP session in WL Express and select Radio settings. Configure as shown (use the Enhanced COM Port as Radio Control Port – in this case COM5):



In the menu of the FT-991 change the default settings of the following items:

Menu #	Menu Function	Value
031	CAT RATE	38400
062	DATA MODE	OTHERS
064	OTHER DISP (SSB)	1500 Hz
065	OTHER SHIFT (SSB)	1500 Hz
066	DATA LCUT FREQ	100 Hz or OFF
068	DATA HCUT FREQ	3500 Hz or OFF
072	DATA PORT SELECT	USB

In 'TNC Setup...' of the WL Express session, do select 'USB Audio CODEC' in the settings for the audio in/out devices.

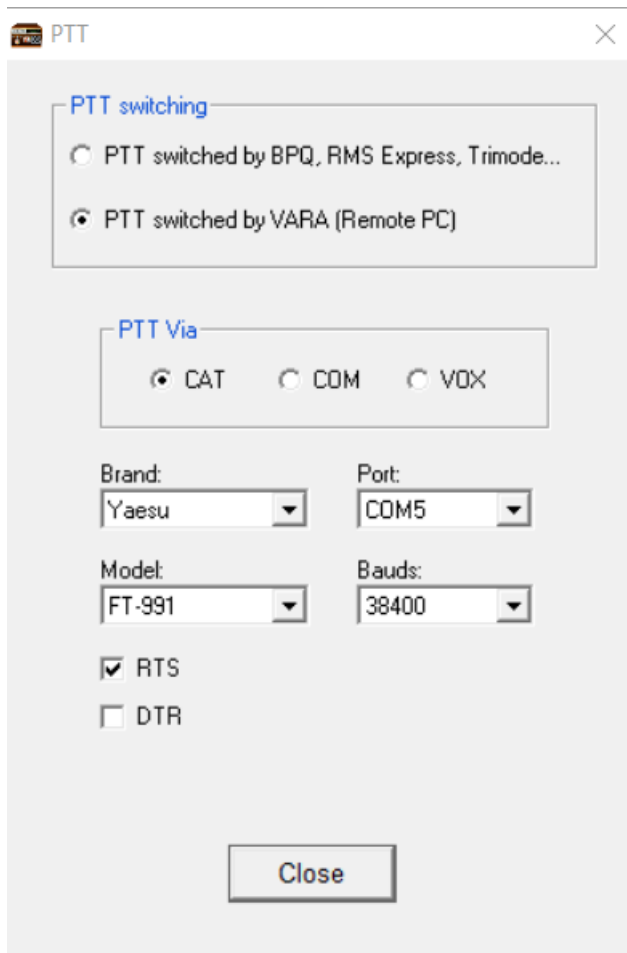
IF you want to use your FT-991(A) for VARA FM ('1200') or packet radio, two more items in the menu of the FT-991 have to be changed:

Menu #	Menu Function	Value
076	FM PKT PTT SELECT	RTS or DTR*)
077	FM PKT PORT SELECT	USB

*) This setting is used with UZ7HO soundmodem. It is not relevant for VARA FM, which must be configured to use CAT.

To use the built-in soundcard for UHF/VHF, you must manually set the FT-991 to Mode 'FM DATA'.

For VARA FM, the PTT setting is using CAT:



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