Are You Sending VarAC Voice Announcements Over the Air?

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The intent of this paper is to address a common configuration issue experienced by VarAC users running modern Windows computers. It is not a comprehensive guide to setting up VarAC. Users are referred to the manual which can be found under the Resources menu in VarAC.

Has someone just told you you're sending VarAC voice announcements on the Calling Slot and they can hear the voice saying *Connected to station <your QSO partner's call>*, *Incoming connection request*, or another VarAC announcement?

Well, you're not the first and you won't be the last!

Fortunately, the solution is simple.

The problem stems from the Default Speaker in Windows being your radio and not your speakers so any speech from VarAC goes to the radio and out onto the air. To say this in a more technically correct manner, your radio's audio codec is set as the Default Speaker in Windows rather than the computer's speakers.

1. Type Windows-R and then type mmsys.cpl in the Open: prompt and click OK. This will launch the legacy Windows sound control panel.

2. Under the Playback tab, ensure that Speakers has a green checkmark indicating it is the Default Device as shown below. If the Speakers are not the Default Device, right click and select Set as Default Device.

Vaesu FTDX-10 Output USB AUDIO CODEC	Yaesu FTDX-10 Output USB AUDIO CODEC	
Ready Speakers USB Audio and HID Ready	Speakers USB Audio and HID Ready	
Speakers USB2.0 Device Default Device	Speakers USB2.0 Device Default Device	

3. With your rig's audio codec selected, click the Properties button.

4. Under the General tab, you can change the name to your radio or something else descriptive. You can also change the icon to a headset if you like just to remind you of the function of this codec. Select the Enhancements tab, Check the *Disable all enhancements* box, and OK. We want the audio that we transmit to be unprocessed. Open the Spatial sound tab and make sure the *Spatial sound format* is Off. Press OK to accept and close this window.

€ Yaesu FTDX-10 Output Properties ×	Yaesu FTDX-10 Output Properties X	₽ Yaesu FTDX-10 Output Properties
General Lyvels Enhancements Advanced Spatial sound	General Levels Enhancements Advanced Spatial sound	General Levels Enhancements Advance Spatial sound
Change Icon	Select the enhancements to apply for your current speaker configuration. Changes may not take effect until the next time you start playbad.	Spatial sound format Select the Spatial sound format you want to apply.
Controller Information USB AUDIO CODEC Properties (Generic USB Audio)	Visuale and in a Residences Bass Boost Vitual Surround Room Correction Loudness Equalization	
Jack Information	Enhancement Properties Description:	
	Provider: Status: Settings	
Device usage: Use this device (enable) \lor	Restore Defaults	Restore Defaults
OK Cancel Apply	OK Cancel Apply	OK Cancel Apply

5. In the Communications tab, check *Do nothing* to prevent Windows from tinkering with your volume controls if it 'detects communications activity.'



6. If you changed the name of the audio codec, be sure to select the new name in $VARA \rightarrow Settings \rightarrow Soundcard$.

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SoundCard	×
Device Input	
Line (USB AUDIO CODEC)	-
Device Output	
Yaesu FTDX-10 Output (USB AUDIO	-
Channel CL CR CL+R	
Tune Drive level:	-12 dB
Press Tune and set the Drive Level for ALC=1/3	
	RF PWR

Other Considerations

There are instances where your Default Speaker may magically change to your radio's audio codec and you begin to transmit VarAC audio announcements. This is Bill Gates' fault.

Sometimes, if the USB cable to your radio or digital audio interface has been moved to a different port on your PC or USB hub, Windows will assign a different COM port(s) and assume that the audio codec from the radio or digital audio interface is now your default PC microphone and speakers.

It's also possible that software updates might change the Default Speaker.

Additionally, be sure to use the USB/Digital mode on your radio, instead of just plain USB. That should turn off any compression or Tx/Rx equalization that you may have set up for SSB audio modes on your radio. If you don't have a Digital mode setting, make sure to turn off all compression or other audio enhancements on your radio.

It's good practice to check periodically to make certain that the Default Speaker is set correctly and that the radio is set correctly particularly when making changes that could potentially modify a COM port. In particular, WSJT-X and SignalLink can sometimes change the Default Speaker under certain conditions.

You may be inclined to just say "well, I'll just make sure all the Narrator boxes are unchecked in VarAC and not bother with this." You can do that, but any sound made by the computer has the potential of being transmitted. For instance, if you are listening to music or have a YouTube or X video running, that audio will go out as well. This will not make you popular.