Setting up a SignaLink soundcard interface

Soundcard interfaces come in a variety of forms. You can homebrew one if you wish or purchase one ready-made. These instructions are for a Tigertronics SignaLink USB, one of the most popular devices available today. Even if you have another type, you will likely get some information here that will help you get started. I am assuming that you have followed my installation instructions for Fldigi and/or are familiar with the Fldigi configuration menu.

These instructions are for a Windows 10 operating system on a Dell laptop computer, a SignaLink USB interface, and a Yaesu FT8800R dual band V/UHF radio. I only own Yaesu radios at this time, though the setup will be similar for other brands, at least in what settings in Windows and Fldigi that you need to watch.

A note on radios: You can set up a soundcard for virtually any radio if you have the correct cables. The best radios (besides rigs with built-in soundcards) are ones that are set up to do packet/RTTY – they have a data or accessory port.   On the Yaesu, there is a 6-pin mini-DIN connector for interfacing with a TNC or sound card. The advantage is that you can still use your rig for voice communications because the microphone is not displaced by the Signalink. On radios without a data port, you will have to connect your Signalink through the microphone port and speaker jack. In this case you are limited to a single use at any one time – to use voice, you must unplug your interface and plug your microphone back in to use it. If you want to dedicate a radio to digital use only, or don't mind swapping cable around a lot (gets old in a hurry, plus wears out the connectors) that isn't a problem. If you are buying a radio for digital use, I recommend getting a radio that has a separate port for your interface if possible.

When you order your SignaLink, you specify which rig you have so the correct cable(s) will be shipped with it. You can also order plug-and-play modules for the jumper settings for different radios, or just use the supplied jumper wires and set it up for your radio (jumper configurations are available in the manual and on the website). The modules, though expensive, are handy if you plan to use one SignaLink with several different radios and will be swapping them fairly often.

READ THE SIGNALINK MANUAL CAREFULLY and be sure you have it configured correctly for your radio, and your radio is set for the SignaLink! The instructions are pretty comprehensive, so I won't go over setting up the SignaLink itself.

Assuming you have the correct cables for your SignaLink to connect to your radio and the jumpers are installed correctly, we will proceed with the installation.

First thing to do is plug your SignaLink into a USB port on your computer. You will likely see a message something like "Windows has detected new hardware and is installing drivers for it", and then "Your device has been installed and is ready for use". If not, you may need to run Windows Update.

Launch Fldigi and click on the 'Configure' menu, then 'Config Dialog'. Click on the '+' next to 'Soundcard' and you should see:
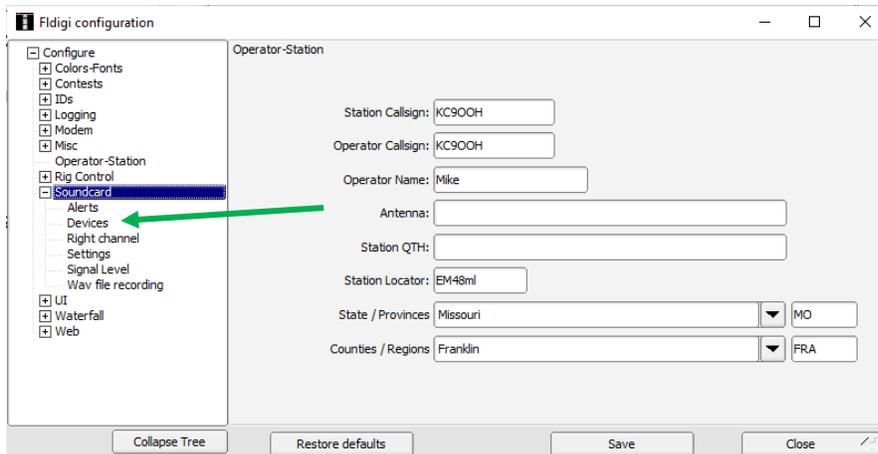
Click on 'Devices':
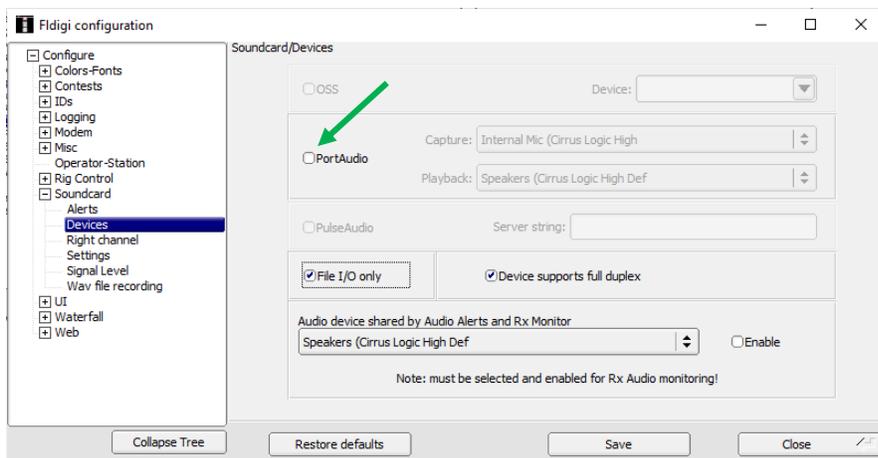
And click the box that says 'PortAudio':
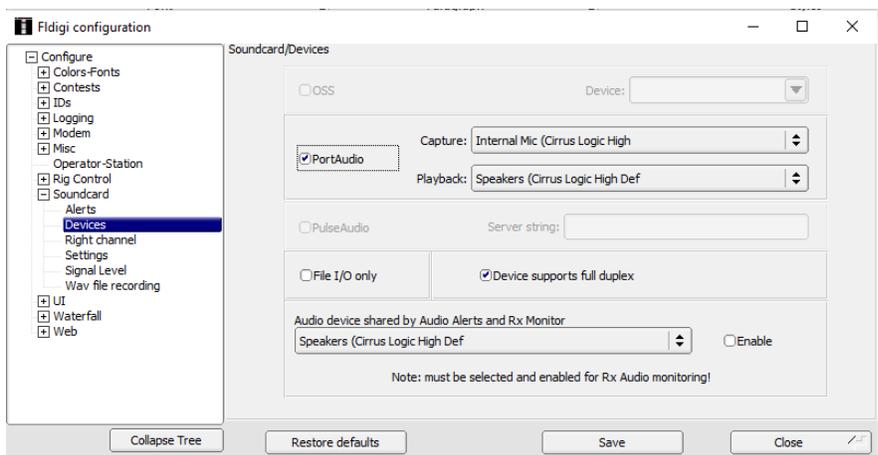
Your screen will look slightly different because your hardware will probably have a different name. Click on the bar next to 'Capture' and you should see something like this:
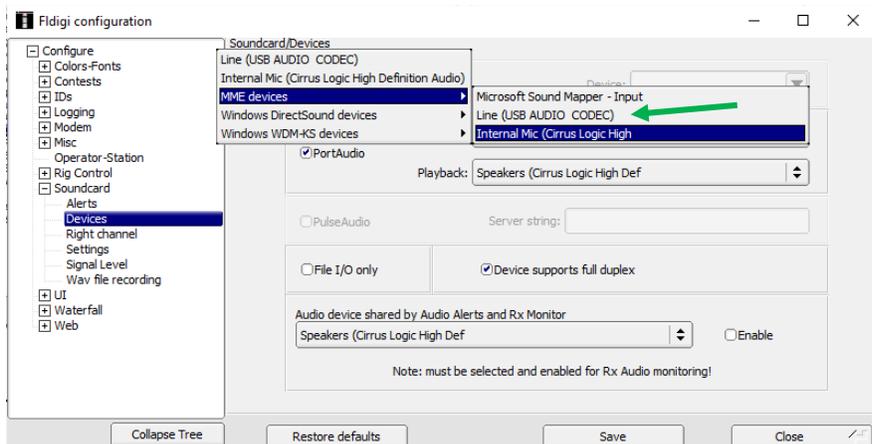
You need to select 'Line (USB AUDIO CODEC)'; do this for the 'Playback' bar also and choose 'Speakers (USB AUDIO CODEC)'. Your screen should look like this:
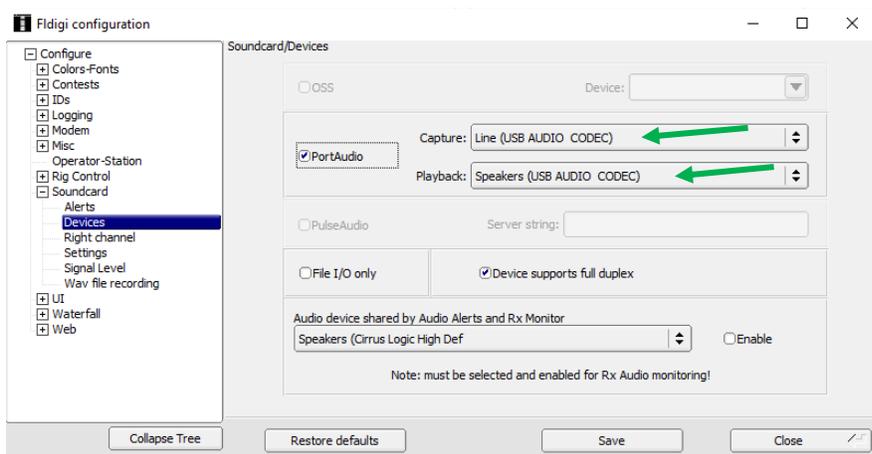
Click 'Save' and then 'Close'. That has Fldigi and your SignaLink set up to talk to each other.

Next, we need to make sure you don't inadvertently transmit sounds from Windows.

You should have a speaker icon in the lower left part of your computer screen (NOT in Fldigi, but your desktop – barely visible at the end of the lower arrow). Right-click on the icon and then select 'Sounds' (you can also get to this through the control panel):
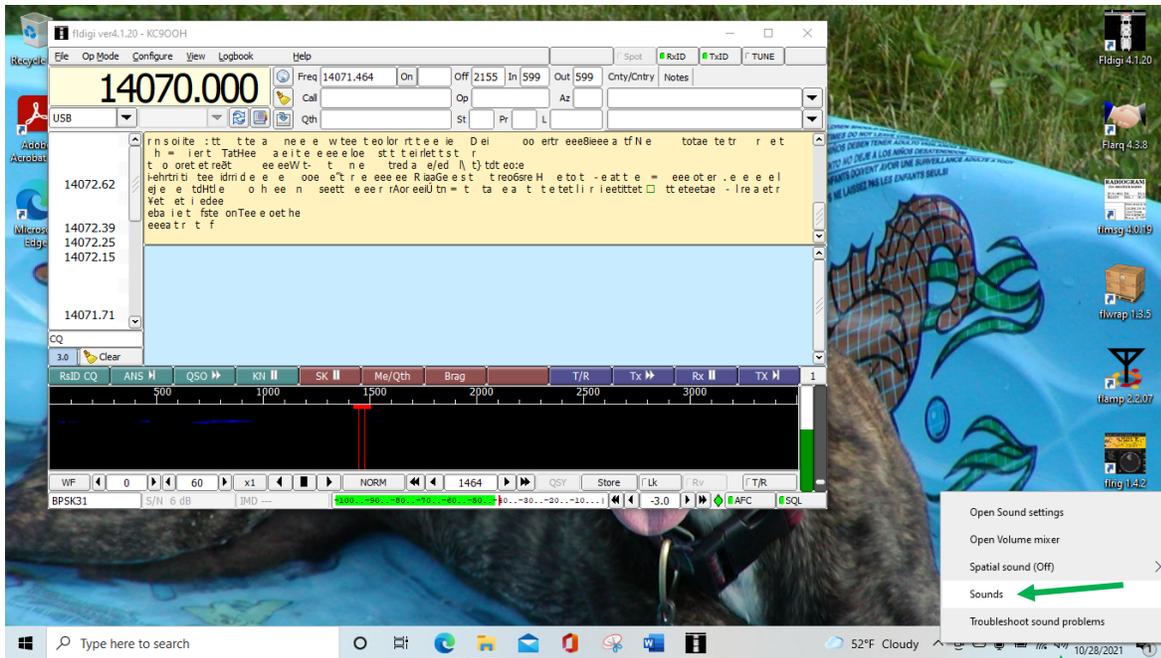
Then you should see:
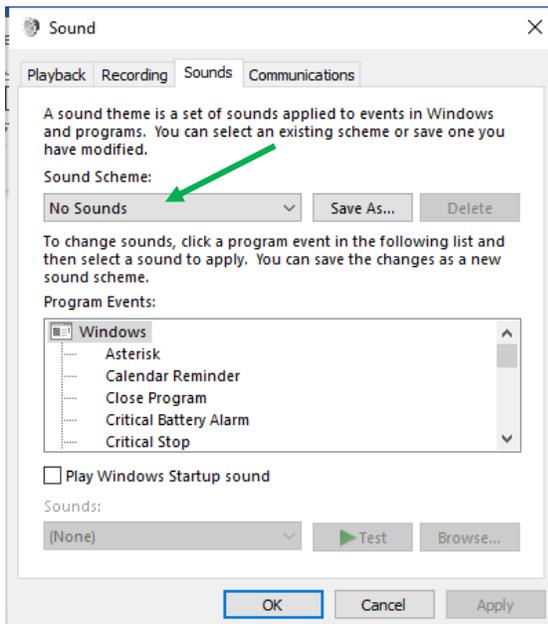
You may see something different here, depending on your system. I have Windows sounds turned off, but you may have a sound scheme chosen. If you intend to use this computer mainly for radio stuff, you should probably go ahead and click on the 'Sound Scheme' drop-down and choose 'No Sounds'. This will eliminate the chance of a Windows sound being transmitted accidentally. Click on the 'Playback' tab:
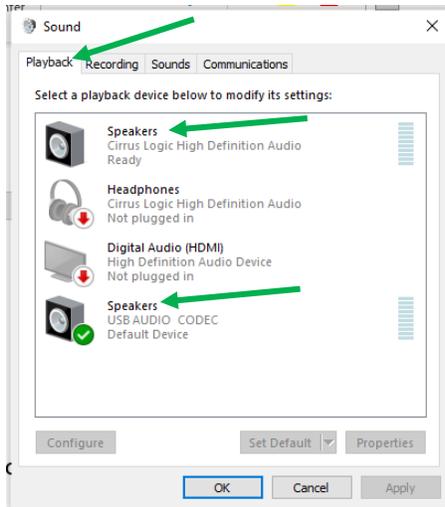
Notice that there are now two devices labeled 'Speakers': the Cirrus Logic device (the installed system soundcard), and the USB Audio Codec, which is the SignaLink. When my SignaLink installed, my system set it as the default device. To prevent other programs from sending sounds through your Signalink, you should set your actual speakers as the default device. Click on the installed speakers/soundcard and the 'Set Default' button will become active. On my system, I had two choices: set as default device, and set as default communications device. I set the speakers as default for both. Now it shows:
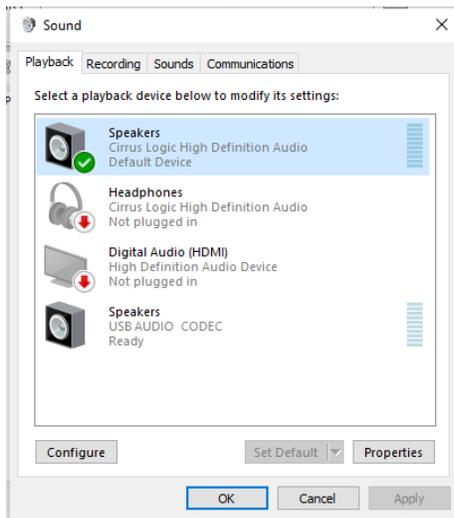
Th important thing here is that the USB Audio Codec does NOT show as a default device. Now click the "recording" tab, and set the default to something other than your SignaLink:
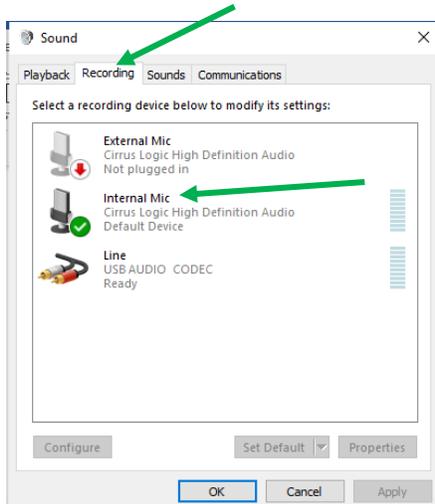
In this case, the internal mic is now the default device.

You should now be ready to test your setup. The SignaLink instruction manual is a valuable resource for testing and adjusting your setup. I know real Hams don't read manuals, but in this case, you need to, and carefully!

ANY TIME WINDOWS DOES AN UPDATE YOU NEED TO CHECK THESE SETTINGS! You will also need to check the volume settings you made as part of your testing that you did according to the instructions for your SignaLink. In my experience, some updates don't affect the settings, but many do, so you need to check. Any time things suddenly stop working, this should be the first place to check. MY ADVICE IS TO CAREFULLY RECORD ALL OF YOUR SETTINGS ONCE THINGS ARE WORKING PROPERLY SO YOU CAN EASILY RESTORE THEM FOLLOWING AN UPDATE. This will save many headaches.

Hopefully these instructions will have you up and running. If not, Fldigi has an extensive manual available, and also be sure to check your SignaLink manual for something you may have missed. Good luck!

Off to the digital net…