Kenwood TM-V71A - digirig 1.9 - fldigi 4.1.22 - Windows 10

A few words of caution, in light of the ever-changing landscape of hardware and software:

1. These comments worked for several HTs, but I chose to put only one in the title.

2. fldigi 4.1.22 found the correct COM port, but later versions didn't. However, the COM port drop list can be edited, so the correct COM port can likely be entered. Use the Device Manager to confirm COM port number.

3. There are several ways to get to the Windows Sound dialogue. This document assumes you know how to get there.

4. Properly configure Windows drivers before starting fldigi. Then fine tune levels as necessary.

I always turn off my radios before dis/connecting anything but the antenna.

The first thing to notice is that I have named my device so that it is easier to identify in programs that use it.

Signal ink DV V1		Sound ×
SIGUALINK KA VI	→ □	Playback Recording Sounds Communications
SignaLink TX V1		Select a playback device below to modify its settings:
There are 2 SignaLink hardware	Device:	OMEN 27 qs
and driver versions. If you don't	Capture: digirig 1.9 RX (USB PnP Sound Device)	Ready
know which version you have,	Playback: digirig 1.9 TX (USB PnP Sound Device)	Speakers Sound Elaster Recon3Di Default Device
just leave off V1 or V2.	Server string:	digitig 1.9 TX USB PnP Sound Device Default Multimedia Device

In Playback and Recording, the digirig should NOT be a Default or Default Comm Device. Only fldigi will be using it.

In the Playback tab of the Sound dialog, select the digirig device driver, and click Properties.

If dB isn't displayed, right click the slider.

-Levels: Mic was set at 0.0 dB; it had no effect on the TX levels. At the lowest setting, no signal is sent. I set mine 1 step from the bottom, at -27.5 dB, and found that just a few dB more had a large impact on the signal as viewed in the receiving system. At -21.7 dB, the signal filled the RX fldigi SIG band limits. This suggests a lot of gain in the digirig hardware. I did all my testing with Tune at 512 Hz, because the fldigi SIG display doesn't have the same time adjustments that an oscilloscope has, and 512 Hz gave me a better view of the waveform.

-Enhancements: Select Disable all enhancements.

-Advanced tab: CD quality. I select both Exclusive Modes.

-Spatial sound: Off.

Select Apply, and OK.

In the Recording tab of the Sound dialog, select the digirig device driver, and click properties.

-Listen: Unselect Listen to this device.

-Custom: Unselect AGC.

-Levels tab: Set at runtime; initially, +1.0 dB. Increase the digirig driver level from until the signal fills the fldigi SIG band. These findings are why I recommend using Tune at the start of a net so that receiving stations can be configured to optimal level settings.
-Advanced tab: CD quality. I select both Exclusive Modes.
Select Apply, and OK.

In the Communications tab of the Sound dialog, where there might be a choice to let Windows manage sound levels, select "Do Nothing", if it is available.

In fldigi... Config Dialog... Rig Control > Hardware PTT ... Select ONLY: Use separate serial port PTT, Use RTS. ... Device: Choose or enter the proper COM port. ... Click Initialize. Soundcard > Device ... Enable PortAudio, and select your devices Soundcard > Right channel: Unselect everything.

*** See the fldigi User Manual for RX/TX Audio Levels. I have found that the digirig Recording audio levels can easily overwhelm the fldigi SIG display band. Recall that the fldigi RX audio stream includes the radio volume > (hardware gain) > driver gain; the SIG level will depend on all 3. I had my TH-F6A volume set at about 20% when I adjusted the driver gain to +1.0 dB.

2024-05-14