

Process for Using I/Q with SDRUno and MultiPSK:

[Note: For this example, Windows 10, Version 10.0.19041 is the operating system. The RSP in the example is an RSPduo using VRX 0, but it also works with the RSP1A.]

1. Install and setup Virtual Audio Cable (Ver 4.64.0 works fine)

Open Virtual Audio Cable Control Panel by clicking the VAC icon (a sort of snake). If no icon is available, open the "vcctlpan.exe" application in the C:\Program Files\Virtual Audio Cable directory for 64bit PC's or C:\Program Files (x86)\Virtual Audio Cable for 32bit PC's.

Select the cable that you will use (here #7) and configure it so that it shows:

SR = 192000..192000, BPS = 8..16 and NC=1..2. Press "Set" at the right-hand edge of the upper panel (picture, below).

The rest of the settings are defaults. [Note: Only one VAC cable has to be enabled.]

Note: This works for LRPT and FM/RDS. For other Multipsk modes, it could be set to SR = 48000..48000, BPS = 8..16 and NC=1..2.

2. Start MultiPSK (Ver 4.44.1 works fine), and make the following selections from the Configuration Screen:

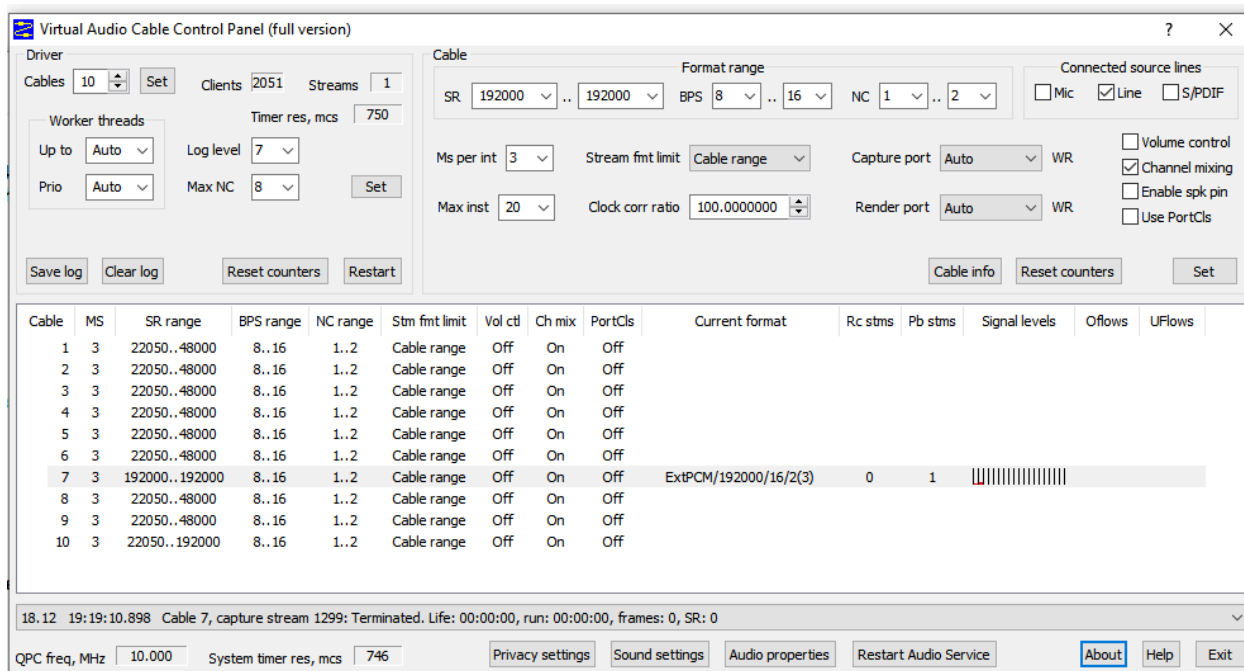
"Sound card input" to the cable you will use. Be careful, because the Sound card number and the Line number (cable number) will likely be different.

NOT controlling the SDRPlay.

Select "Direct via the sound card"

Go the RX/TX screen. When you do, a connection is established between MultiPSK and the selected VAC cable. Verify on the VAC Control Panel that information shows for the cable that you want. On the "Current format" column, the format should show ExtPCM 192000/16/2(3):

Note: In case of failure (displayed on the bottom line), run the Windows mixer, select the VAC and confirm the format in the "Advanced statistics" panel, then push on "Test" if available.



3. Start SDRUno (Ver 1.40.2 works fine) for the VRX (Virtual receiver) device you will use.

Open "Sett" on the VRX ("SDRUno RX Control" window), and select "OUT". Scroll "WME Output Device" to the Cable you selected (here #7"). Close the panel.

ON the VRX screen, Set "IQ OUT"

Set WFM and 192K.

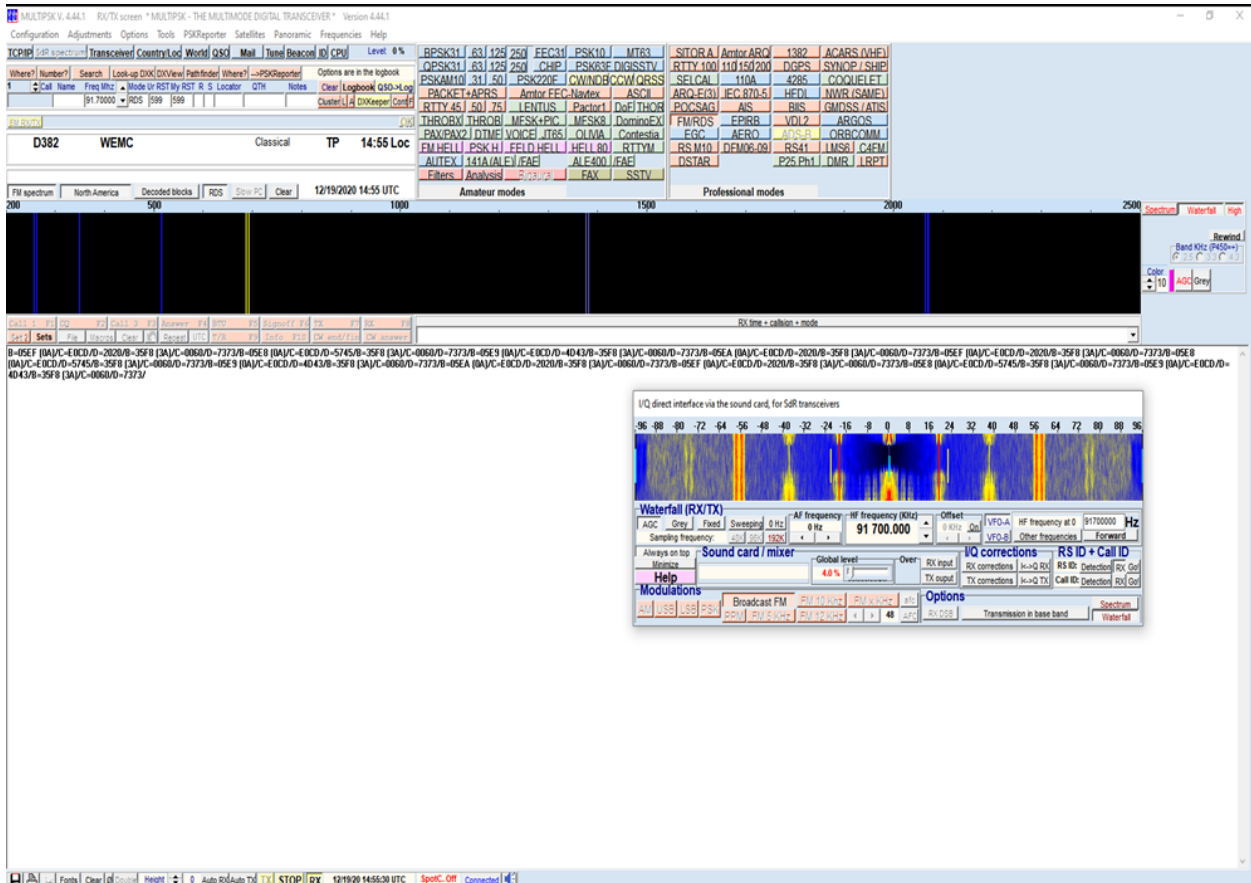
For modes other than LRPT or FM/RDS (VDL2 for example), remain on WFM, but change the filter width: either a preset 60 KHz filter, or better, a manually adjusted 44 KHz filter).

Select "PLAY"

Data should start flowing from the RSP to MultiPSK. It will be visible on the VAC Control Panel in the "Signal Levels" for the selected cable.

The RSP MultiPSK's modes and can now be used as normal.

An excellent test is to set the RSP for an FM broadcast station and MultiPSK for FM/RDS as shown:



For decoding other modes such as VDL2, the I<->Q RX button on the MultiPSK I/Q Direct Interface screen may have to be pushed to get the data to decode. It depends on the SDRplay receiver but, usually, leave the “I<->Q” off to start.