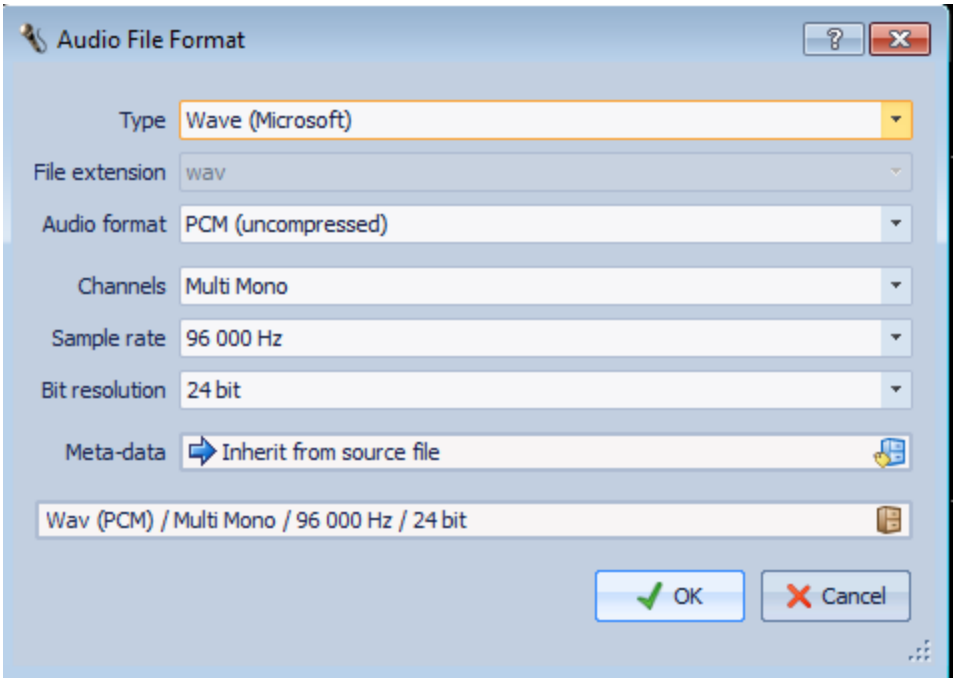
Digitizing Cylinders

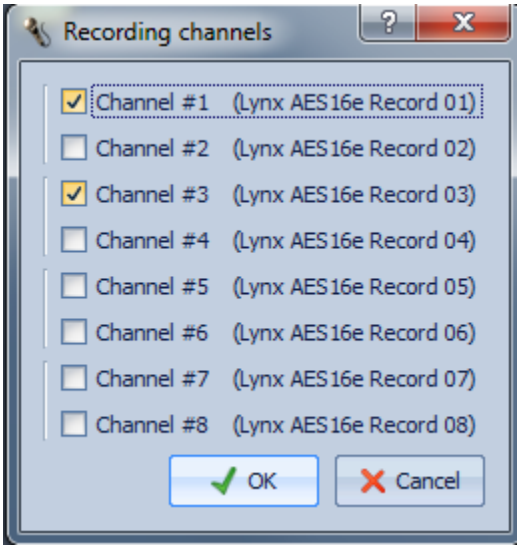
Please see this wiki page for all the pre-setup instructions.

Make your record-enable window look like this

1. We have a preset named "cylinders" that ~should~ load all of this for you but ALWAYS DOUBLE CHECK
2. We're creating a "Named File"
    a. when you're recording more than 2 channels at a time Wavelab makes you do this, but it's good practice anyway
    b. items in brackets should be replaced with the values they represent, e.g. cylNumber=15631. don't ever put brackets in a file or pathname.
    c. We're naming it: cusb-cyl[cylinderNumber].wav
    d. We're saving these to an NHDC drive:
        i. R:\Cylinders\avlab\audio_captures\[cylinderNumber]
        ii. If we save to a networked drive like this it allows you to access your work from wherever
    e. Auto-start if sound detected
        i. this just makes it less of a hassle when you trim the start-end of a file
        ii. we set it to -35dB and record the 500ms before that detection happens
        iii. you can access that in the "Values" tab
        iv. basically, you hit record, you drop the needle, and it starts recording automatically
3. Wav (PCM)/ Multi Mono/ 96 000 Hz / 24 bit

a. 

b. ^^you can get to that by clicking on the hyperlink with the settings

4. Set Input (2)
    a. we capture Channels 1,3. 1 has the unprocessed audio from the cylinder and 3 has the processed audio from the NR rack
    b. 

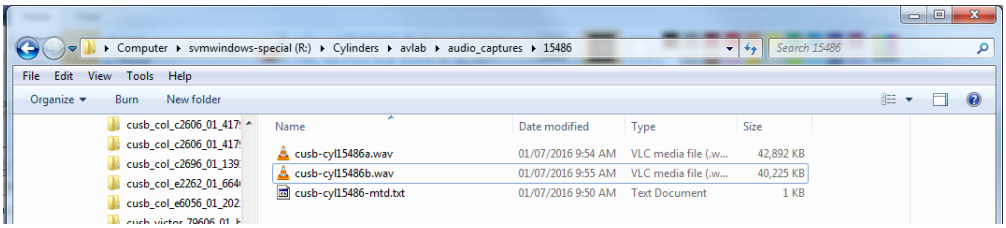
5. Disk Capacity
    a. this shouldn't be an issue but definitely check it

Once you get your cylinder on the machine and Wavelab configured properly, it's time to set the noise reduction. Here's how:

1. Make sure all of the Cedar boxes are on
2. Make sure that the DCX, CRX, and DHX all have "Process: Off"
    a. if they're not responsive just power-cycle them
3. Make sure that the AZX+ is set to zero
    a. Press and rotate the button on the right
4. Start the cylinder playing
5. Adjust the DCX
    a. Turn the "Process: On"

    b. turn the "Sensitivity" knob up until the amount of clicks you hear is acceptable
6. Adjust the CRX
    a. Turn the "Process: On"
    b. set the "detector" to "detect"
    c. Turn the "sensitivity" all the way up
    d. turn the "level" up until you no longer hear crackle
        i. it might sound underwater, that's ok
    e. set the "detector" to "decrackle"
    f. back off the sensitivity until it sound ok adn you can't hear any gurgling/ digital noise
7. Adjust the DHX
    a. turn the "Process: On"
    b. set the attenuation all the way up
    c. turn the level up until you hear no hiss
    d. back off the attenuation until the results are satisfactory
        i. no digital gurgling/ noise
    e. generally the variance should be at 12noon
8. verify that the BRX is at 60Hz (the frequency of line noise from an outlet). The default on power-on is 50Hz (Euro standard).
9. Toggle between the raw signal and the recorded signal to ensure that the significant properties of the recorded content are still intact

Once the cylinder has been recorded:

1. Press "Stop" on the record window
2. two files will open in Wavelab with suffixes, a is our raw file and b is our broadcast master
3. Trim the head and tails of the processed files. The processed file should have 2s heads and tails form the start and end of the content
4. press Shift + S
5. save them to your shared folder:
    a. R:\Cylinders\avlab\audio_captures\[cylinderNumber]\cusb-cyl[cylinderNumber][useCharacter].wav
    b. cylinderNumber
        i. the number on the label on the top of the box
    c. useCharacter
        i. we have characters that tell us what the file is, if it's a raw or processed transfer, if it's a .mov, etc. it's a digital preservation thing that we could honestly implement better but hey
        ii. a = raw transfer; b = noise reduced raw transfer. a= channel 1; b= channel 3. a=cusb-cyl15631-L.wav; b=cusb-cyl15631-R.wav; etc.
    d. Here's a handy example of what a folder should look like once you're done
        i. 

6. X-out of all the files from your Wavelab session and do another one