

Digitizing 78s for The National Jukebox

This document explains, step by step, how to digitize 78rpm discs for The National Jukebox

Arrival

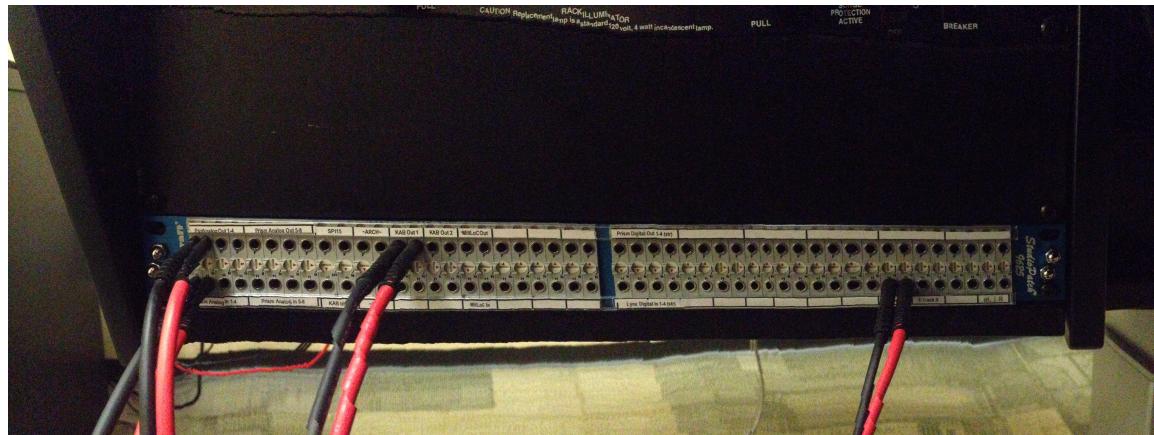
Discs will be set in the "to be digitized" space with their barcodes already checked, already selected in SP.com, cleaned, "pitched" and stylus-selected, ready to be put on the turntable and digitized.

Care and Handling

Generally held at a 45 to 90 degree angle from the ground with the flap up, four fingers on the bottom and thumb on top to stabilize

Hold sleeve at bottom with the flap side up, reach with other hand into the sleeve with palm up, holding flap up with your thumb. Locate spindle hole with index/middle finger and use that to pull record out.

Hardware setup



Check Souvenir EQS MK12

1. "Phono Sel" should be "out"
2. Left and Right should be at 65
3. Resistance should be 47k
4. **EQ should be set to FLAT**
5. Rumble Filter should be "in"
6. stereo|mono should be "out"
7. Mono Mix should be set to center arrow
8. Gain dB should be set to -3

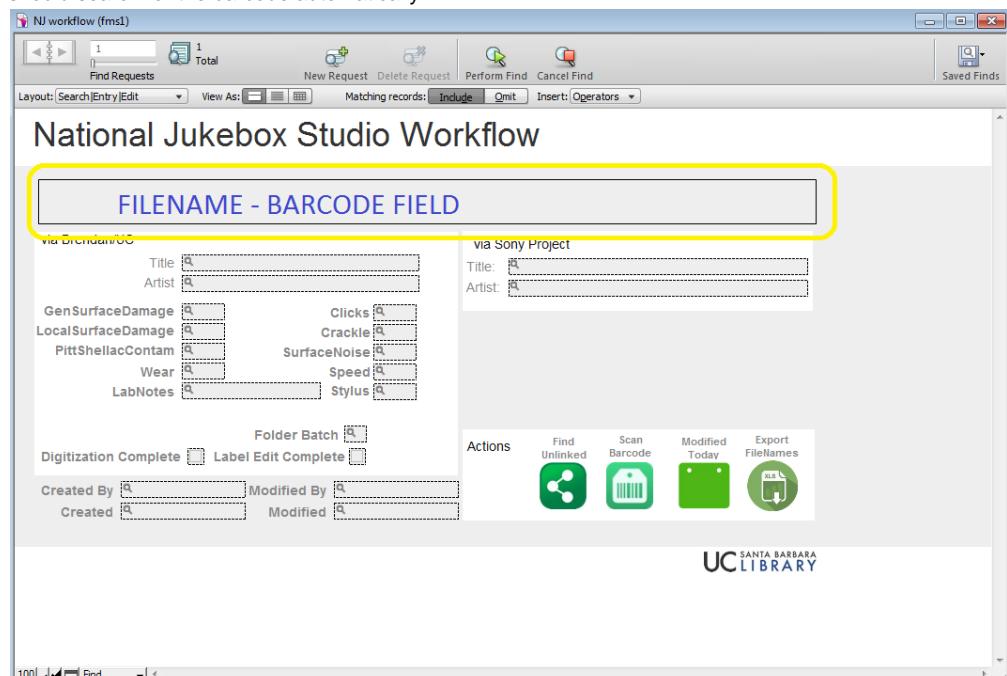
Software setup

Filemaker

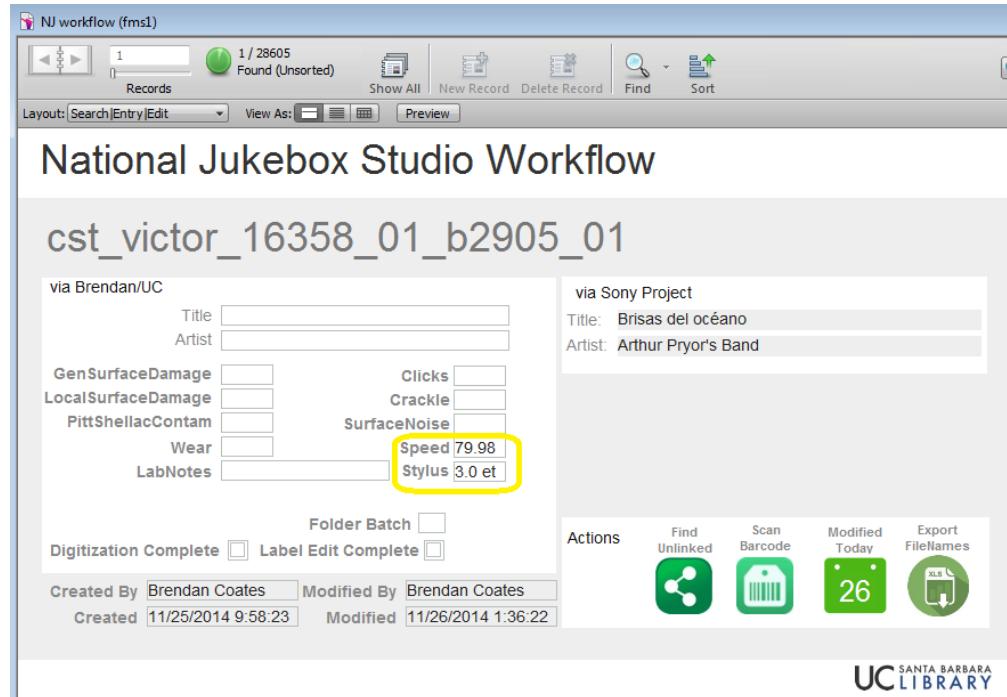
The database we use is called "NJ workflow"

To start working on 78s

1. Press "Find"
2. select the unlabeled text box just below the title
3. Scan the barcode into this box
 - a. at the end of every barcode is a "return" character that presses "enter" after the barcode is read into a field. After you scan it, it should search for the barcode automatically



- b.
4. When the barcode has been found, this window will pop up



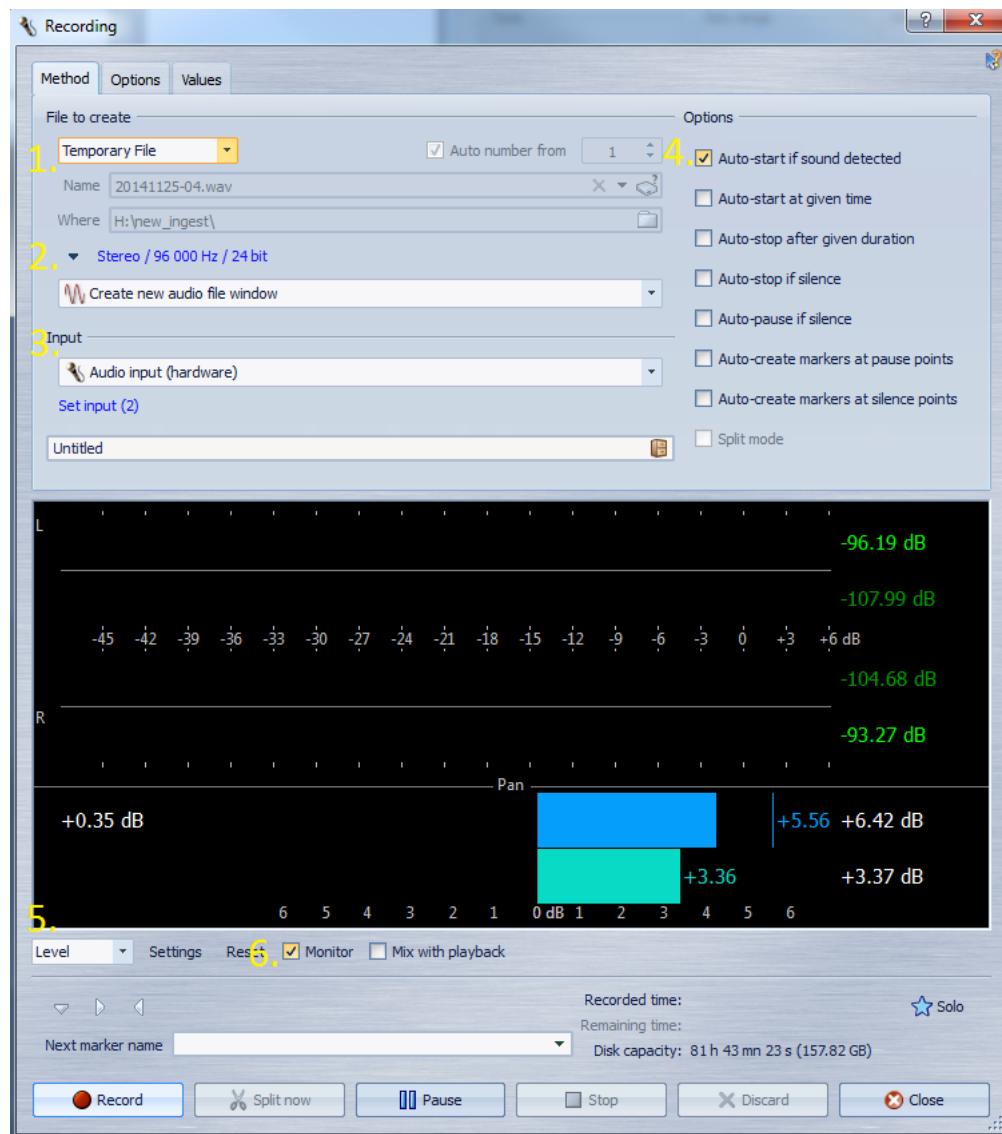
- a.
- b. Please note the area highlighted in yellow will not be filled in for you, you will have to determine the speed and stylus size yourself
5. Give the physical inspection and record your findings on the left-hand side of the boxes.
 - a. GenSurfaceDamage: the general condition of the record: how many scratches, bad grooves, different shellac shadings are there across the whole surface of the record?
 - b. LocalSurfaceDamage: are there any significant cracks, potholes, dings, missing shellac, etc.?
 - c. PittShellacContam: how much pitting, how speckled does it look?
 - d. Wear: how shiny is it, how mottled does the surface appear?
 - e. fields are ranked 0-5 according to the following guide:

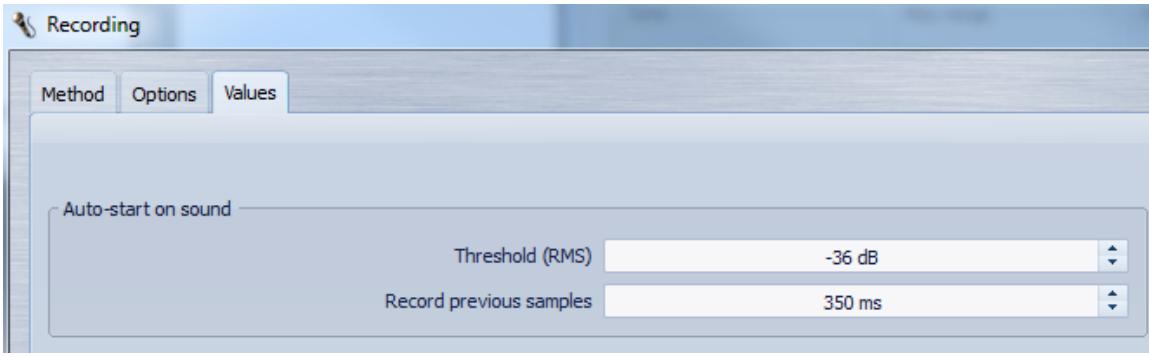
- i. "0" - does not exist (rare)
 - ii. "1" - exists
 - iii. "2" - is notable
 - iv. "3" - is significant
 - v. "4" - is destructive
 - vi. "5" - is catastrophic (rare)
6. At this time you can set the record on the turntable, find the speed and stylus size, etc

Wavelab

Turn on Wavelab and click the red "record" button on the bottom

Verify that the record-enable window looks like this:





1. That you're creating a "Temporary File"
2. That you're set to "Stereo / 96 000 Hz / 24 bit"
3. That "Input" is set to "Audio input (hardware)" AND that it reads "Set input (2)"
 - a. this is so that we only record channels 1&2
4. That "Auto-start if sound detected" is checked
 - a. this makes creating the archival master so much easier
 - i. In the "Values" tab, make sure that the Threshold is set to -36dB and that Record previous samples is set to 350ms
5. That "level" is selected (so you can verify that you're getting signal)
6. That "monitor" is selected (so that you can see the monitor in the first place)

Setting up the turntable

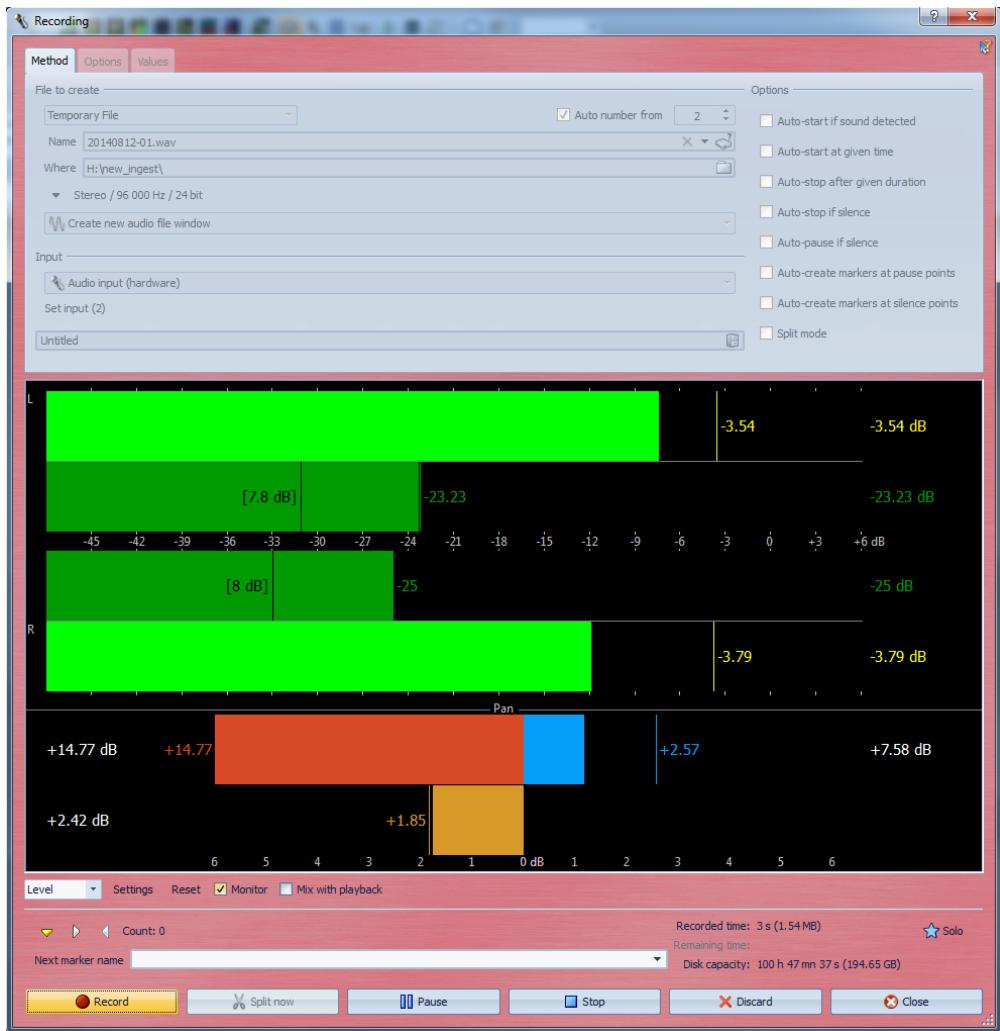
with the settings described in filemaker, and using the [Speed to Percentage Conversion Chart](#), insert the appropriate stylus and set the speed accordingly.

Recording

Press "Record" on the bottom of the window, the window will turn red when sound is detected that is louder than -36dB

Start the turntable, drop the needle and verify that it sits in the groove

Your record window should look like this:



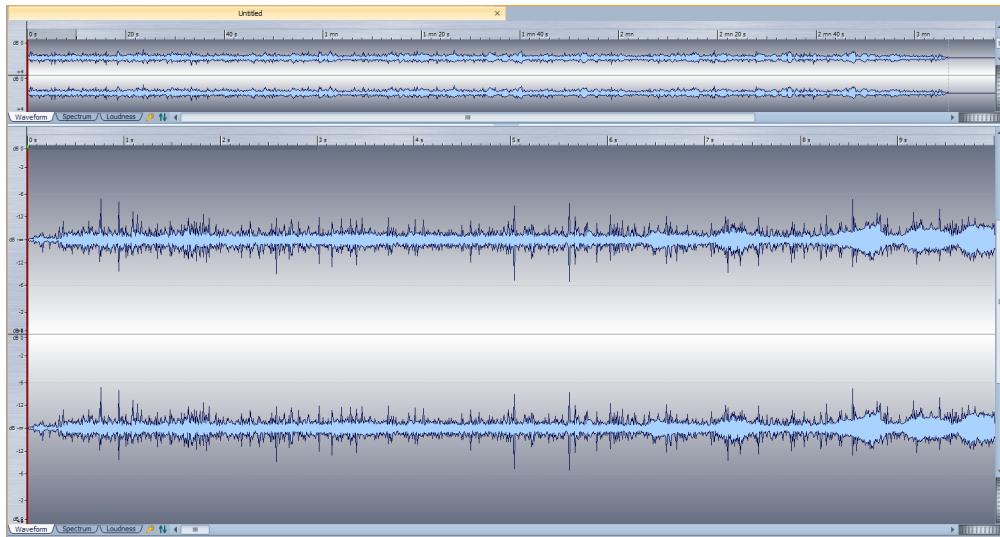
While recording, fill out the other fields in FileMaker for:

1. Clicks: how many discreet clicks are there, typically these are cyclic and only effect a localized portion of the record
2. Crackle: how many multi-click phenomena are there? these tend to not be cyclic and can change throughout the recording. return it's worst level
3. SurfaceNoise: roughly, how much hiss is there?

Wait a couple of seconds for the needle to traverse the length of the run-out before stopping recording.

SAVING the Master copy

So you have it recorded and open in the recording window like so



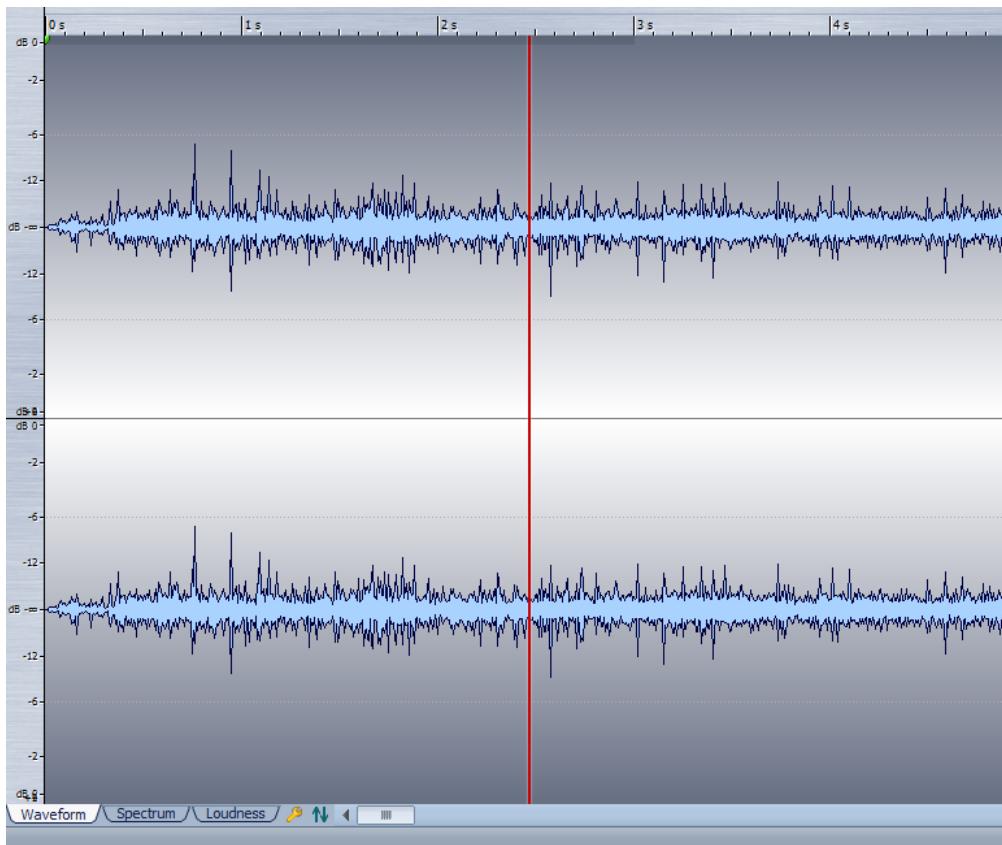
Press "Shift + S" to "save as"

1. verify that you are saving in "R:/78rpm/avlab/national_jukebox/in_process/audio_captures/master-sides"
2. Scan barcode into the "Name field"
 - a. at the end of the barcode is a return character, this automatically presses "save" in this dialog box so it's DOUBLY IMPORTANT that you verify the filepath before scanning the barcode

Editing and SAVING the access copy

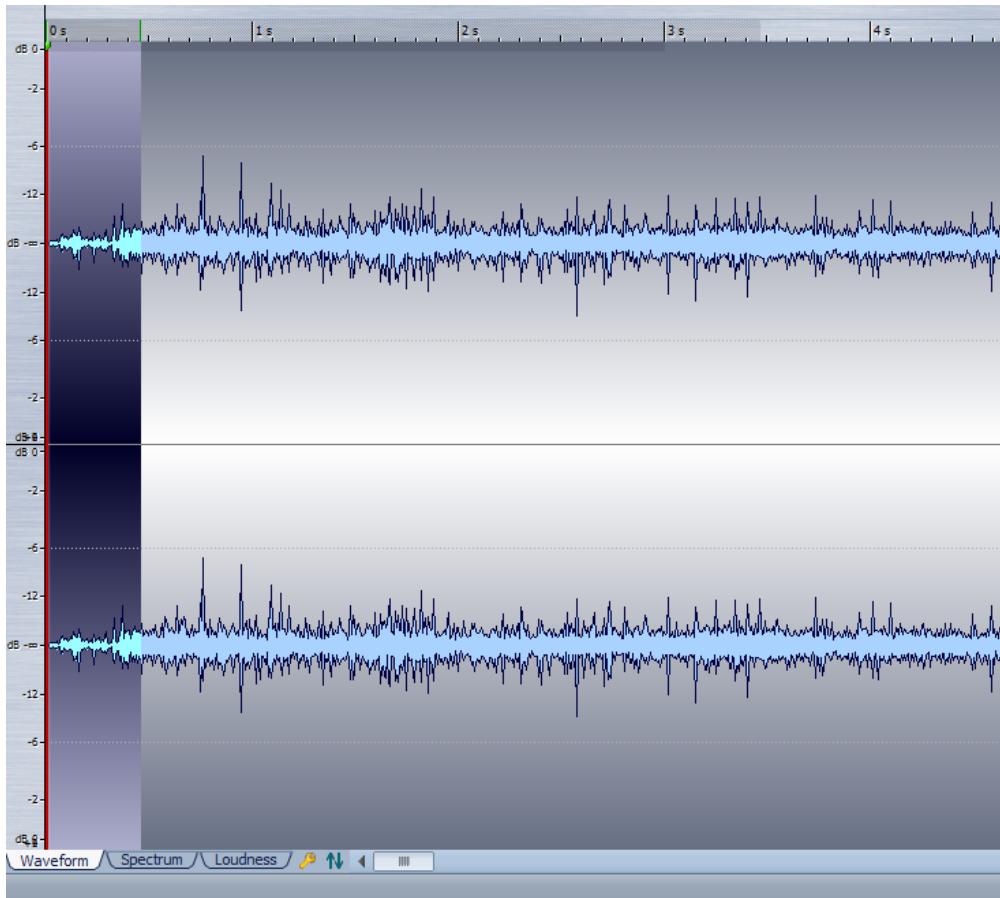
Once you have saved it we need to trim the file so that it has 2s worth of sound on either side of the beginning and end of the "song." These 2s will eventually be faded in and out by a batch-process

Play the file from the beginning and locate the start of the musical or speech content



sometimes it can be tough to tell, but this is where it starts on this file.

Next, set your cursor 2s before the music starts and select back to the beginning of the song



And delete it (backspace)

Next, scroll to the end of the song; find the point where no more musical or speech content is audible; select from 2s after that moment until the end of the song; and delete that.

Once the file is trimmed, press "Shift + S" again and this time it will load with the barcode already in place, but save it to the following path:
R:/78rpm/avlab/national_jukebox/in_process/audio_captures/broadcast-sides

Verify that the record is fully filled-out in Filemaker (be sure to click "Transferred") and start the whole process over 😊