

## 4200 Digital Audio Theory

### Lab 5: Multi-Track Scoping & Mixing

#### Objectives:

1. Use Groups, Edit selections & Shuffle mode to scope edit a multi-track to match a scoped version of the song.
2. Use the functions of basic mixing to create a simple fader & pan mix.
3. Use an internal bus & extra audio track to mix down your scoped multi-track.
4. Export the region as a file to your project session folder.
5. Identify the keyboard shortcuts for completing these tasks.

#### What to turn in

- A Mac friendly text document containing the answers to the lab questions (appropriately numbered) and labeled following this example: 4200Lab5FirstInitialLastnameAnswers.
- Your complete *Pro Tools* session folder with NEW AUDIO FILES ONLY, properly labeled as instructed in class (ex. 4200L5FirstInitialLastname), copied onto the *nathanadam* iDisk server or your sections server (for on campus classes).

Pro Tools steps are noted in red.

#### Here are some suggestions for working on this lab:

- When editing your group, if the timing of your edit works well, but the edits across certain instruments are audible, temporarily ungroup the region to adjust edits on individual tracks.
- **Make sure ALL edits are smooth and seamless by creating crossfades at zero crossings** along edit boundaries. You don't want to "hear" any edit points, period.
- The new audio scope must be **perfectly aligned with the reference scope mix**.
- A full video on scoping stereo and multi-track audio is found at [http://www.nathaneadam.com/online/4300/4300\\_Lab\\_Videos/4300Lab1.mov](http://www.nathaneadam.com/online/4300/4300_Lab_Videos/4300Lab1.mov)

#### Multi-track Scoping

Begin this lab by opening the 4200Lab5 session, after you have dragged it into the 4200Lab3 session folder (it will use the same files found in the Lab 3. You will recognize it as the same song you applied signal processors to in a previous lab.

- 1) Save the session as 4200L5FirstInitialLastname.
- 2) Use markers to map out all the sections of the song (Intro, verse, chorus, etc).
- 3) Select all of the multi-track audio files, and create a group so that all of the files will edit as one.
- 4) Import and listen through the "Lab 5 Scoped Mix" into a new stereo track at the bottom of the session.

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- 5) Having listened to the scoped mix, identify the portions of the full track that were retained in the scoped mix.
- 6) Playing back the multitrack audio, use the Up and Down arrows on your keyboard to set Edit In & Out ranges for the sections of audio that need to be removed.
- 7) Using Shuffle Mode, delete the sections so the multi-track is edited to match the imported scope mix.
- 1) Ungroup the multi-track group and use crossfades to smooth out transitions, making the edits inaudible. Clean up extraneous audio noises and long portions of silence.

#### Part 2: Basic Mix

- 8) When the timing of your multi-track edit matches the timing of the scope mix, use the mixing techniques we've discussed in class and on the videos to create a simple fader and pan mix of the track. Reference the scoped mix to get approximate fader levels and pan positions.
- 9) When your mix matches the imported Scope mix, right click the imported Scope Mix Track and choose "Hide and make Inactive"
- 10) Set the outputs of all audio tracks to Bus 1 & 2.
- 11) Now create 1 new stereo audio track and rename it FirstInitialLastnameMIX.
- 12) Set it's input to Bus 1-2, and it's Output to your main mix Analog 1&2 outs.
- 13) Arm the new Mix track, and Record your mix onto the track. Since all of your audio tracks are playing out Bus 1 & 2, they will mix right into your FirstInitialLastnameMIX track.

#### Part 3: Exporting the mix.

- 14) Select the new mix region in the FirstInitialLastnameMIX track. You should see it also select in the regions menu on the right side of your edit window.
- 15) Using the regions menu, choose Export Selected Region as Files. Set the folder it should save to as your project folder (not *in* your Audio Files folder, though).
- 16) Leave the sample rate and bit depth at 24 bit, 44,000, but select Stereo Interleaved Wave as the file types.

#### Part 4: Turn In

- 17) Zip up your Pro Tools session, along with the new Exported FirstInitialLastnameMIX.wav track and the Answers. Upload these to the iDisk.

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**Questions: What are the keyboard shortcuts for the following commands?**

- 1) Show the Automation window
- 2) Set Selection Start & End during playback
- 3) Switch to Shuffle Mode
- 4) Export Selected Regions as Files
- 5) Start Record