

## Challenge #3 – Folders, Compression, Reverb and Delay

### *Recording, Engineering, and Mixing*

Work with “Captain”. You can find the project files on the CVSTUSHARE (J) drive at Recording Engineering Mixing > Project. **Do not edit these files or delete them!** Make sure you copy this folder to your desktop when you first start working on this project; then copy that folder to your thumb drive at the end of the day.

As always, you are also welcome to create your own tracks (or selectively add and remove tracks from the “Captain” project). Just make sure that the song you create is similar in length and complexity to “Captain” so you can get enough practice with these techniques.

#### General Instructions:

1. Add folder tracks to organize your song. Treat the “L” and “R” tracks as one instrument. These letters indicate that the instrument was recorded with two microphones – one placed on the left side, and one on the right side. So, for example, the “OH L” and “OH R” tracks are the same instrument. That means you should add the same effects to both of these tracks! The easiest way to do this is to create a new track and call it “OH’s”. Click on the light grey folder symbol just to the left of the “io” button to make this a folder track. Move the “OH L” and “OH R” tracks just below the new “OH’s” track – then click twice on the folder symbol of the last track in the folder. That will point the folder symbol of that track up and “close” the piano folder track. (See the image below for an illustration.) When you add compression and other effects, add them to the folder track instead of the individual instrument tracks. That way, the effects will be applied to both the “L” and “R” components of the instrument.



2. Use an equalizer on all of the instruments. You should put a high-pass filter on most instruments (except bass guitar and the kick drum). Remember, you can add this EQ to your folder tracks, so you don't necessarily need to add EQ to every individual track.
3. Add compression to each of the instruments. Make sure that the compressor is adjusted correctly – refer to the compression document on the class web site to double-check your work. Again – add the compressor to folder tracks that represent the exact same instrument, so you don't have to duplicate your settings on “L” and “R” tracks.
4. Check the volume levels of each track. At no point during a song should a track go “into the red” – the little red light above the track should never be lit. If it does light up, turn the track down a bit. Also watch the master volume – it shouldn't go into the red either! When track volume levels get too high, they become distorted and add a very unpleasant sound to the mix.
5. Use the solo button to listen to each track. If you've added an effect, you should be able to hear it. You can click the check box next to the effect name to turn it on and off so you can compare how the track sounds with and without the effect. If you can't hear a difference when you turn the effect on and off, you either haven't adjusted the effect parameters correctly or you should choose a different effect.
6. Use the pan slider (at the bottom of each track) to make sure instruments have their own “space” in the speakers or headphones. Tracks labeled “L” should be partly or all the way to the left and tracks labeled “R” should be partly or all the way to the right (“L” and “R” tracks are one instrument recorded with two microphones).
7. Use your ears to determine what sounds good and what doesn't. Solo individual tracks or groups of tracks to really isolate the instruments. When adjusting EQ or other effect parameters, listen carefully to make sure that the changes you make are actually improving the sound of the instrument. Feel free to play around with the adjustments – but ultimately, you should be LISTENING carefully to each track and to the overall sound in order to determine what to keep and what to leave off.
8. Add reverb and delay as send effects – you should add reverb to virtually all the instruments except bass guitar and kick drum; you can add delay to vocals, snare, and electric guitar to start. Make sure that the reverb and delay is used correctly – refer to the reverb and delay document on the class web site to double-check your work.

When you're done, I'm happy to take a look and listen to your work to make sure you've met the requirements!