Routing Exercise

Working with Sends, Busses and Auxiliary Channel Strips

In this exercise you will import/open a MIDI file then set up two auxiliary channel strips/busses where you can apply *Parallel Effects* (e.g., Reverb) to each track. The idea behind using parallel effects is to blend the original sound (from the track channel strip) with the processed sound (from the auxiliary track). Another reason to use parallel effects is to minimize the computer power needed to create the effect.

Logic Users: In addition, we will be using several premade Channel Strip patches to set up the plugins on each auxiliary channel strip you create.

Instructions

1. Download the routingExercise.mid MIDI file from the course website.
2. In Logic (Should be similar in other DAWs)
    a. Open the MIDI file *OR*
    b. Create a New Project with one software instrument track with an Empty Channel Strip then import or drag-and-drop the MIDI file into the Track View area.
3. Open the Mixer (Press the shortcut key *X*).
4. Do a quick *Static Mix* if you want. Depending on your DAW, you may have to transpose some tracks. For example, in Logic you will probably have to set transposition to 0 in the Bass region. (More in class.)
5. Add an Auxiliary Channel Strip to the Mixer
    a. **First Method** (similar in other DAWs)
        i. In the Mixer area, choose *Create New Auxiliary Channel Strip* from the Options menu.
        ii. You should see a new channel strip with a yellow exclamation point icon appear near the Stereo Out channel strip.
        iii. Toward the top of the new channel strip (in the Input section) you should see the name of the input source for the strip. For example: In 1-2.
        iv. Change that setting to read Bus 1. *(Important: Remember that you set the input source to Bus 1.)*
        v. On the very top of the channel strip find the Settings section. Click to open and find Reverb.
        vi. From the Reverb submenus, choose Small Spaces > Rooms > Realistic Room.
        vii. Note the plugin(s) which have been placed on the channel and that the channel strip name on the bottom of the channel has changed to the patch you've chosen.
        viii. Set the volume of the new Channel Strip to -12db. (In Logic, option-click the fader to set it automatically.)

ix. Next, solo the Saxophone track and on that channel strip locate the *Sends* section.
x. Click to open the dropdown box in one of the slots in the Sends section and choose Bus > Bus 1. (The bus which connects to the Aux strip you just set up.)
xi. After setting the Send to Bus 1, listen to the soloed track and use the circular dial next to the Bus 1 label to control how much signal you want to send to the reverb.

b. **Second Method** – Logic specific – Other DAWs may do something similar
i. On the Saxophone track, go to the Sends section and under Bus 1, add another Send. This time use Bus 2.
ii. As soon as you create the Send to Bus 2, Logic will create a new Auxiliary Channel Strip.
iii. Go to the Settings section of the new Aux strip, click and choose Reverb > Plates > Large Spaces > New Age Plate.
iv. Adjust the Send amount to taste

6. Using the two Aux strips you've created, add Sends to Bus 1 and Bus 2 to the other tracks. Adjust the Sends to taste. See Note 1 below for more about how to set these Sends.
7. *For extra credit* – Add another Auxiliary Channel Strip using either of the above methods, set the channel strip Setting to Tape Delay and experiment with different delays applied to Track 1 only.
8. Once your mix is completed, bounce it to a 160kbps MP3 file and send the file to the assignment address.

Notes:

1) What we have done here is set up a fairly typical Short Reverb (Bus 1)/Long Reverb (Bus 2) processing chain. See if you can create a sense of depth in your mix by controlling the amount of reverb applied to each track (especially the Short Reverb). Keep in mind that the closer the sound is to the listener the less room sound (reverb) they would hear.
2) There are basically two ways you can control the amount of a parallel effect that is applied to the track (aka *the wet/dry mix)*:
    1) *Recommended.* With the reverb Aux strip set to -12db, use the circular dial on the track Send to control the signal level.
    2) *NOT Recommended!* Set the circular dial on the Send to 0.0 then use the fader on the Aux strip to control the dry/wet mix.
    3) *Sometimes a combination of the above two methods can be used effectively.*

BTW, seeing we're working with a MIDI file you might want to experiment using the Piano Roll editor to "sculpt" some notes on each track to make the phrases more musical and human. As demonstrated in class, adjust some note lengths to make the music "breathe" and some note velocities to create a more realistic performance. You want the listener to believe a human played the track, not a machine.