

Routing Exercise

Working with Sends, Busses and Auxiliary Channel Strips

In this exercise you will create a Logic project which includes three audio tracks 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.

Instructions

1. Download the routingExercise.zip file from Brightspace. Uncompress the file into your folder. (You might notice that the audio files used in this exercise are the same as the ones used in the EQ Exercise.)
2. Create a new Logic project with one audio track and import or drag-drop the three audio files you downloaded.
3. Open the Mixer (Press the shortcut key *X*).
4. Do a quick *Static Mix* if you want.
5. Add an Auxiliary Channel Strip to the Mixer.
 - a. **First Method**
 - 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 strip 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, on the Track 1 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, solo that track and as you listen to the soloed track, 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

- i. On track 1, go to the Sends section again 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. For each of the remaining tracks, solo it and 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 the electric piano track. See if you can find one that sounds good.
 8. Once your mix is completed, save your project as a package which includes the audio files, compress the file and upload it to Brightspace.

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*):
 - a) *Recommended.* With the reverb Aux strip set to -12db, use the circular dial on the track Send to control the signal level.
 - b) *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.
 - c) *Sometimes a combination of the above two methods can be used effectively.*
- 3) In most cases, when applying Reverb to a track as a Parallel Effect, make sure the dry/wet mix is set to 100% wet in the Reverb plugin. Then, control the amount of reverb with the methods outlined in #2 above. (If you were to apply reverb directly to an instrument/audio track you would use the dry/wet setting in the Reverb plugin to control the amount of reverb.