Playing Logic Instruments in Digital Performer

This shows how to play the instruments that come with Logic and GarageBand in DP. This example is done in DP 11.33 and Logic 10.7.9 on a 2018 i7 Mac mini running macOS 12.7.6. It uses the 16 channel version of BlackHole to move audio, and the IAC driver in macOS to move MIDI.

This assumes you have a project in Logic with some instrument tracks using one or more of the instruments that come with Logic, with MIDI in each of the instrument tracks.

This builds on the notes from MOTU on how to use Garageband instruments in Digital Performer, adding the ability to access more than one instrument at a time.

In this example there is a Logic project with four instances of different drum instruments originally from Garageband.

1. Start an empty Digital Performer project. In Setup > Configure Audio System > Configure Hardware Driver choose both your usual audio device, and BlackHole 16ch. It might be necessary to set BlackHole as the Master Device. In my case with The Scarlett 18i8 and BlackHole 16ch, timing drifts slowly if the Scarlet is the Master Device.
2. Create four MIDI and four Audio tracks, and perhaps a Master track if you want one. Set the inputs for the MIDI tracks to whatever you like, it doesn't matter in this case. I have it set to my usual controller, a Roland A49. Set the outputs of the MIDI tracks to IAC Driver Internal, channels 1 to 4. You might have to go to AudioMIDI Setup and add this driver if it does not appear in your MIDI output options. Set the inputs for the four audio tracks to Blackhole 16ch pairs. In this example, I've used channel pairs 3-4. 5-6, 7-8, 9-10. Set the output for the audio channels to whatever you usually use for monitoring. Turn the "input" monitoring on for the four audio tracks. (It's below the Solo/Mute/Rec buttons). Figure 1 shows a screenshot of the Digital Performer project with these settings. Figure 2 shows the Hardware Driver settings.
3. Open the Logic project. Export the MIDI tracks, and import them into Digital Performer. Note the tempo setting in Logic — it might not transfer to Digital Performer and you might need to set the tempo manually in Digital Performer. You might was to delete the MIDI regions in Logic. As long as you don't accidentally press Play in Logic, it doesn't matter, but I've done that and things get confusing when both DAWs are playing the instruments.
4. In the Logic navigate to Logic Pro > Settings > Audio, and set the output device to BlackHole 16ch. Set the outputs of the four instrument tracks in Logic to the same BlackHole 16ch pairs used for the audio track inputs in Digital Performer. They will probably just appear as "Output 1-2" etc in Logic unless you have gone into the windows that let you add labels to the channels. Figure 3 shows the Logic settings. Ignore the input settings for now. You can leave the MIDI In settings to the four tracks to All because they will be set in the Environment.
5. Go to the Logic Environment page. Apple has hidden it. You get there by clicking Option-Window > Open MIDI Environment. The reason you have to do this, is that Logic will play all instruments from all inputs regardless of the settings you make in the Tracks view of the project. This is the only way to get specific MIDI to specific instruments. The Environment window will contain a lot of stuff, but somewhere will be the four Instrument channels of interest. It is best to move these four channel to the left side of the window and move all the other stuff off to the right so it can be scrolled out of view.
6. Unser the New Menu add a Physical Input, and a Channel Splitter if these are not already in the window. The Physical Input will show all the MIDI sources available to Logic. IAC Driver Internal will be one of them. Create a cable by dragging the mouse from the output arrow on the right of the Physical Input to the Channel Splitter. You might have to go to a lower

screen resolution to be able to see the arrows. Now create a cable from the the channel 1 output of the Splitter to the first of the four Instrument channels, another from the channel 2 output to the second instrument, and so on. You might note that the cables overlap each other making it difficult to see which see what is connected to what. See Figure 4 for the setup in the current example.

7. If you record enable one of the audio tracks in Digital Performer and start recording the audio being returned from Logic will show up on the audio track, You can look at the position of the transients and compare these to the location of the MIDI to see any latency. In my example the difference is unnoticeable, but if you see a lag, it is just a matter shifting the MIDI in the Digital Performer MIDI tracks by the amount of the timing error.
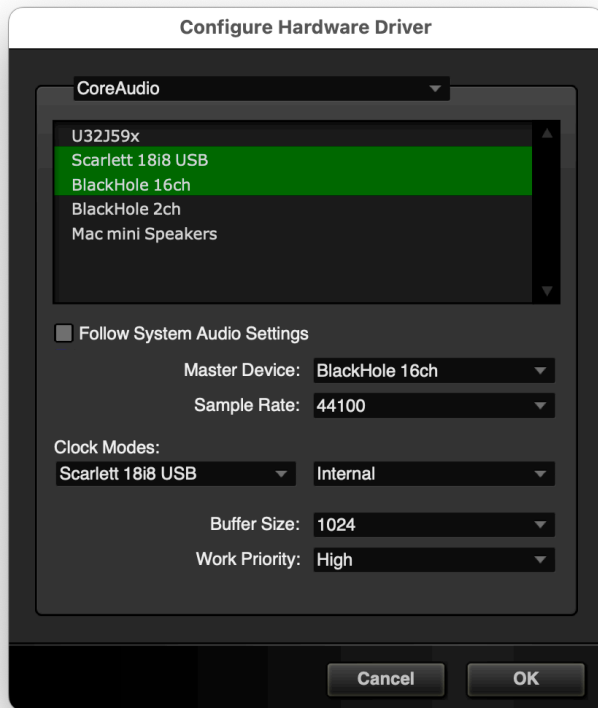
Fig 1 DP Setup

Fig 2 DP Hardware Configuration

Fig 3 Logic Setup

Fig 4 Logic Environment