

Configuring basic multi-channel outputs in Hauptwerk 3

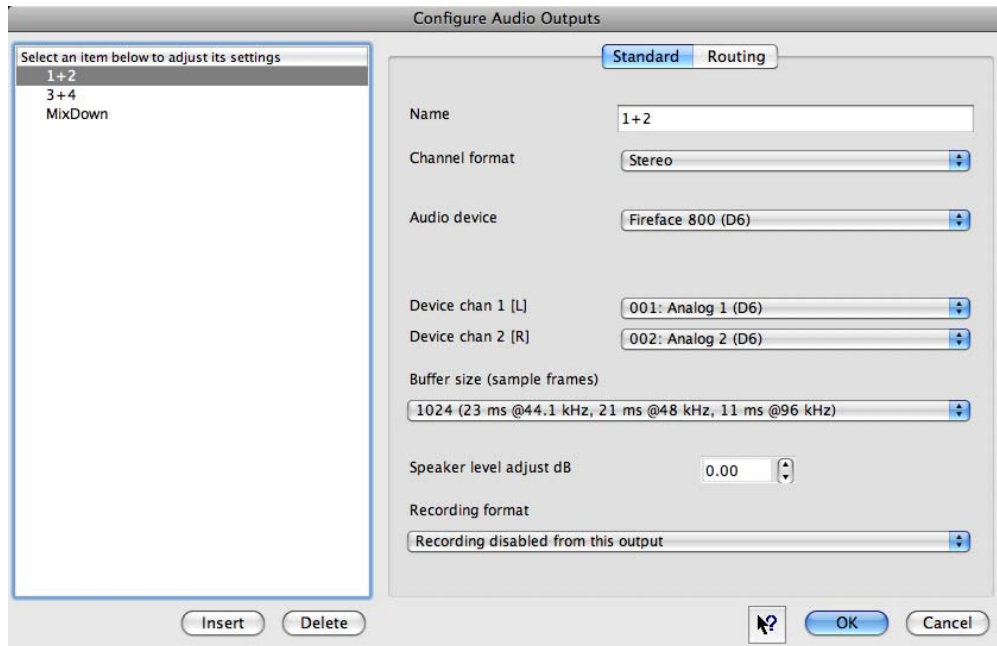
This tutorial will show you how to configure a simple multi-channel setting in Hauptwerk for which you can use as an example for more complex methods of multi-channel audio allocations. For this example we are assuming that 4 speakers are being used as 2 groups of stereo pairs. Using this we can assign one pair of speakers to one audio group and the other pair of speakers to a second audio group.

Step 1 – Audio Outputs:

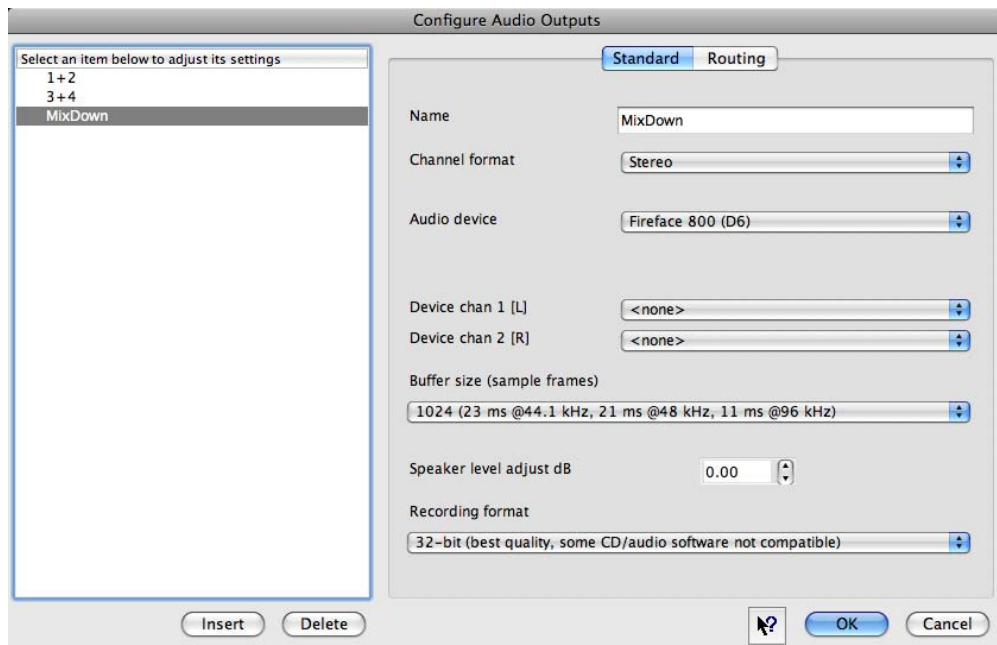
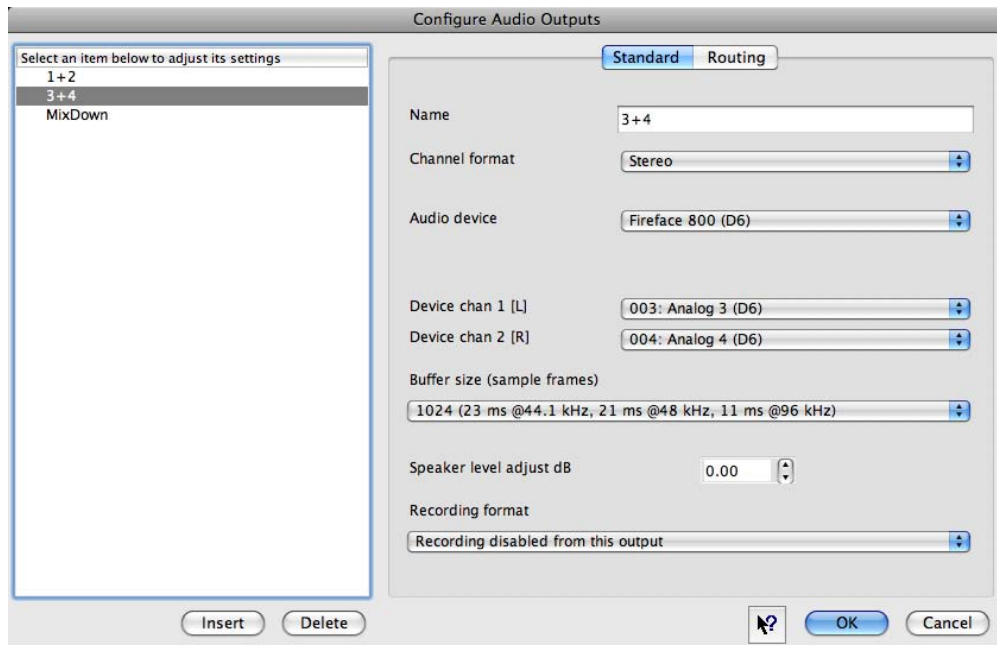
Open Hauptwerk and go to General settings | Audio outputs.

Insert audio output instances as shown in this example and assign audio channels to each that you want to use for routing to your audio interface.

Audio outputs 1+2 are to be routed to your first speaker pair using the audio interface channels 1+2. Click OK.



Audio outputs 3+4 are to be routed to your second speaker pair using the audio interface channels 3+4. Click OK.

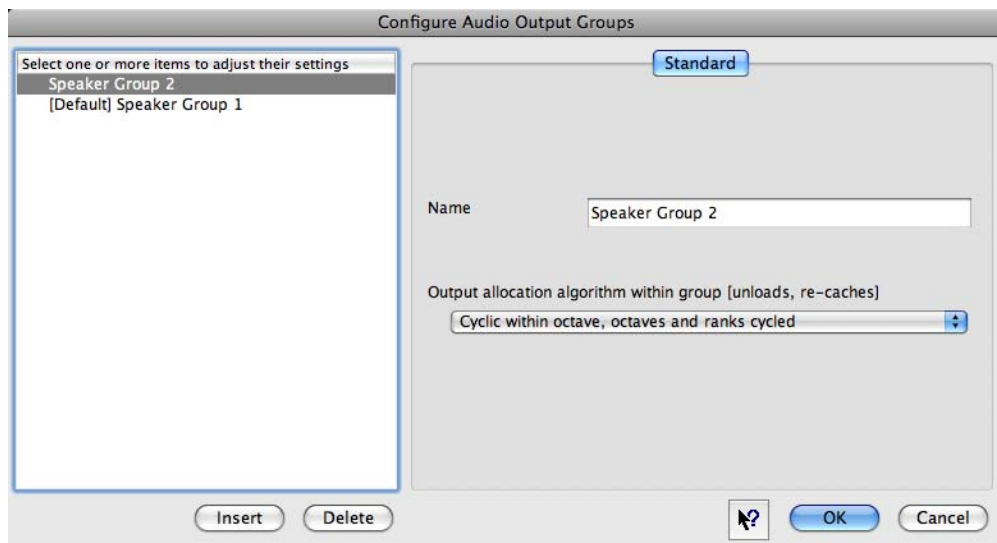
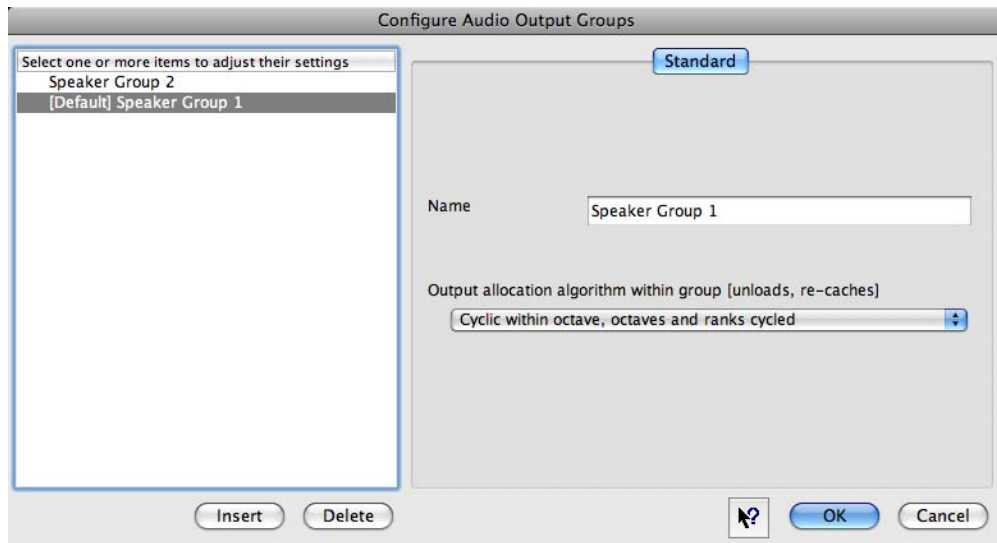


Note the we have also added a MixDown output which is not actually being routed to physical speakers, rather this is for creating an auxiliary mixdown for the other outputs to route to. By doing this we can create internal recordings using the built-in Hauptwerk recorder for recording all outputs to one single stereo mixdown. You can also apply this method for routing all channels for a reverb aux mixdown, but that is not the focus of this tutorial. Click OK.

Make sure the “Recording format:” option is set to None for both outputs (1+2 and 3+4) and that it is set to either 16 bit or 32 bit for the MixDown output. If you enable recording for the outputs Hauptwerk will record tracks for each output consuming more disk space and putting higher loads on the hard drive for streaming several audio recordings in real time to disk.

Step 2 – Audio Output Groups:

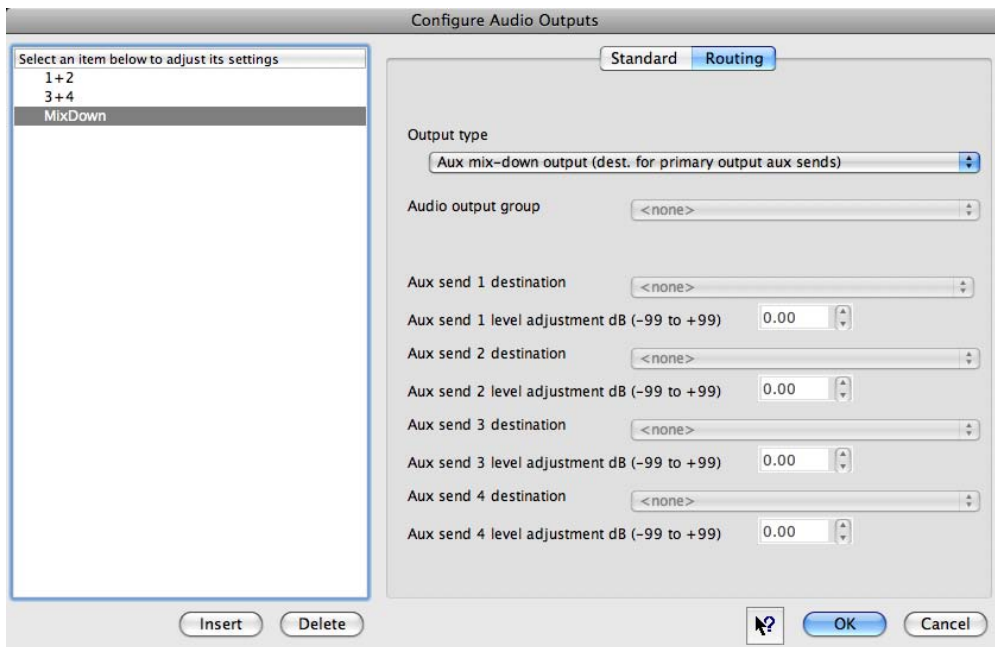
Go to General settings | Audio output groups. A default instance will already be present for you, you can rename this if you wish. For our example we've renamed the default to SpeakerGroup1. Then click Insert and add another group and name it SpeakerGroup2 (or whatever other name you might want to give that is relevant to your speakers.) Click OK.



Step 3 – Audio Channel Routing and Mixdown:

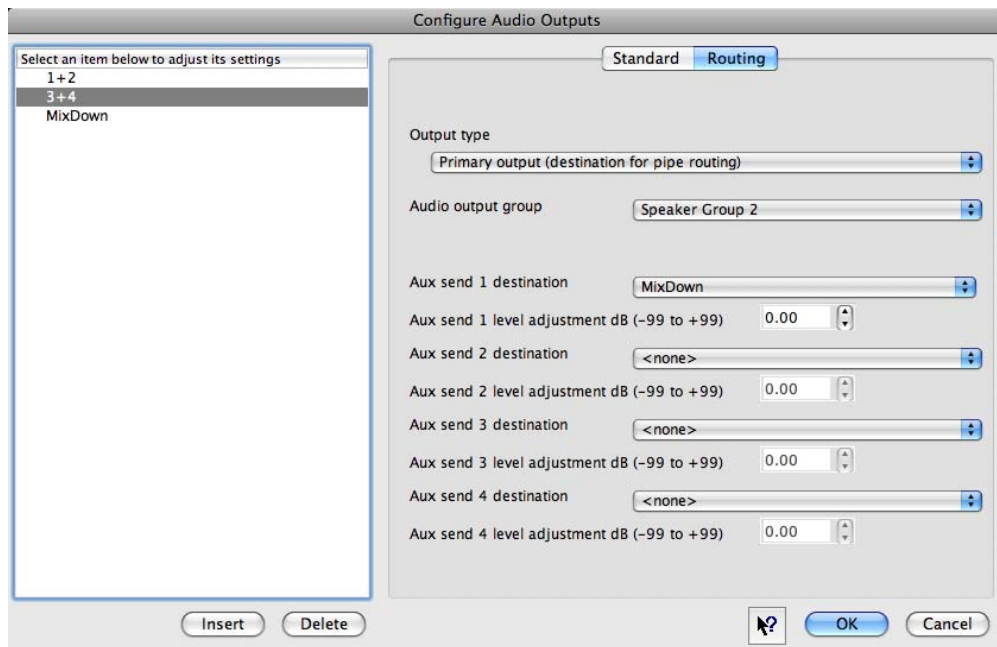
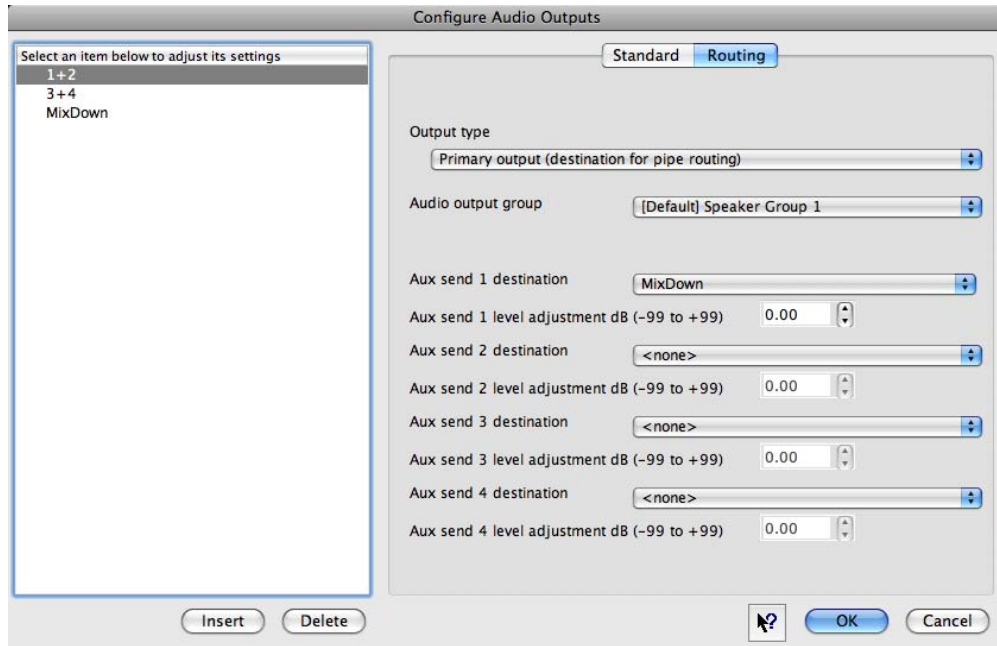
Go back to General settings | Audio outputs. Highlight the output named 1+2. Now we will assign this to the proper audio output group (Speaker Group 1) as well as assign it to the MixDown channels for recording.

First we need to create the MixDown output to act as an aux send. Highlight the MixDown output in the left list then click the Routing tab on the right. Set the Output type to “Aux mix-down output”. Click OK.



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Now click outputs 1+2 on the left side. For simplicity we have assigned outputs 1+2 to SpeakerGroup1 and outputs 3+4 to speaker group 2. Choose the right side drop down menu called Audio output group and select the appropriate group for each set of outputs. Be sure to also set the Aux 1 destination to MixDown for each group. Click OK.



Step 4 - Assigning Ranks to Audio Groups:

Now we are ready to load an organ and assign individual ranks to different audio output groups. In doing this we can specify for any rank to go to a different speaker array and thus improving the spatial characteristics of the instrument.

Go to Organ | Load organ, adjusting rank audio output routing. Choose the organ you wish to play. The Rank and audio routing screen will now appear. In the left choose a rank by highlighting it, then to the right choose the audio output group you wish to assign that rank to. Do this step for each rank. You may also select many ranks at once if you wish to assign them to the same output group (this option requires Hauptwerk version 3.20 and higher.) Once you have finished assigning ranks to the proper outputs click OK and allow the organ to load. Once loaded you will hear the different ranks coming from the speakers that you have routed them to.

