



Delta Media Server

AudioMapper

User Guide



AudioMapper : User Guide

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About AudioMapper

Audio channels in supplied media may not match theatre speaker location requirements. They may simply need to be reversed, ignored, or reassigned between output locations – such as channels split between screen locations and ride vehicles. Audio media resources in a show may also need to be adjusted for consistent sound balance. For example, the same show might be used in acoustically different theatres, or ride vehicle channel volumes need to be lower.

7thAudioMapper creates a JSON audio mapping file for DeltaAudio to use. The structure of this file is a series of input-output channel mappings with per channel volume, operating in order of priority. Each input-output mapping can be filtered according to audio file characteristics: for named files, files of a type, with specific number of inputs, with a particular prefix, or on a particular timeline.

Use with Delta versions

Whilst custom audio mapping has been available in Delta from version 2.5.33, **AudioMapper** was introduced with installations of Delta 2.6.66 as a more convenient way of writing the JSON files. From that version on, the app will already be in C:\Program Files\7thSense\Delta\Utilities.

If using an earlier version of Delta, obtain the file 'AudioMapper.exe' from support@7thsense.one and copy it into C:\Program Files\7thSense\Delta\Utilities. The app will be added to the Windows Start menu.

- AudioMapper simply creates the file for DeltaAudio to read; it does not need to be running with a show.
- Mapped channels all have their own volume level controls.
- The maximum number of inputs and of outputs is 64.
- Each set of filters and its input/output map is called a mapping. Up to 64 of these mappings can be added to the JSON file.

To enable AudioMapper to work, registry key **Delta/Hardware/AudioEnableCustomMapping** must be set to 1.

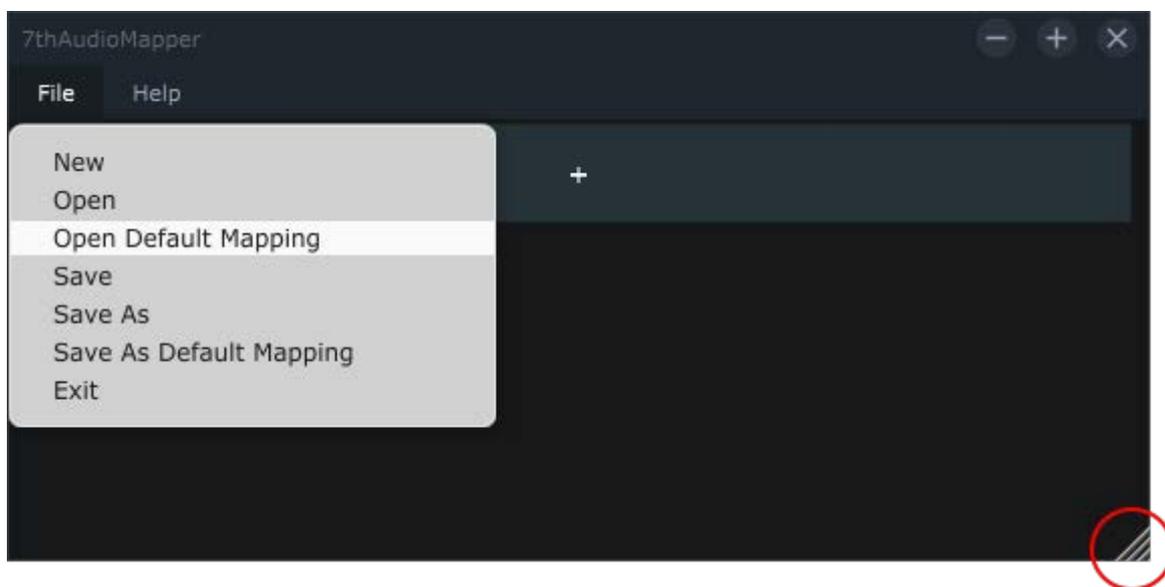
Registry Edits

7thSense software uses the Windows Registry extensively, and on occasion we make recommendations for changes.

- Before making any changes, close DeltaGUI and DeltaServer.
- DeltaServer can take up to 10 seconds to fully close in the background, even if it appears that all the Windows have closed. Ensure that Delta has *fully* closed before opening and/or refreshing, and finally editing. The best way to ensure this, is to watch Windows Task Manager > Details list. You will see 'DeltaServer.exe' in this list if DeltaServer is still running. If it won't close for any reason, you can right click on it in the list and choose 'End Process Tree'.
- Make a note of any setting before you change it, in case you want to change it back.
- Only make the changes as recommended and only to those registry keys.

Using AudioMapper

From Windows Start, find *Delta > AudioMapper*, right-click and find **Run As Administrator**. This will present a fresh view, to add new mappings, or open an existing file to edit it. The window can be resized as required.



File Menu

New

Clears the current JSON mapping file from view. Alerts for an open and unsaved file.

Open

Open an existing JSON file to edit, add new maps. Alerts for an open and unsaved file.

Open Default Mapping

Open C:\Program Files\7thSense\Delta\audiomapping.json. Alerts for an open and unsaved file.

Save

Save the current JSON to the current name and location.

Save As Default Mapping

Save the current JSON to the default active name and location (C:\Program Files\7thSense\Delta\audiomapping.json). Alerts that overwriting an existing default mapping file.

Save As

Save the JSON in view to a new filename or location, for example as a backup.

Exit

Closes AudioMapper with an alert for an open and unsaved file.

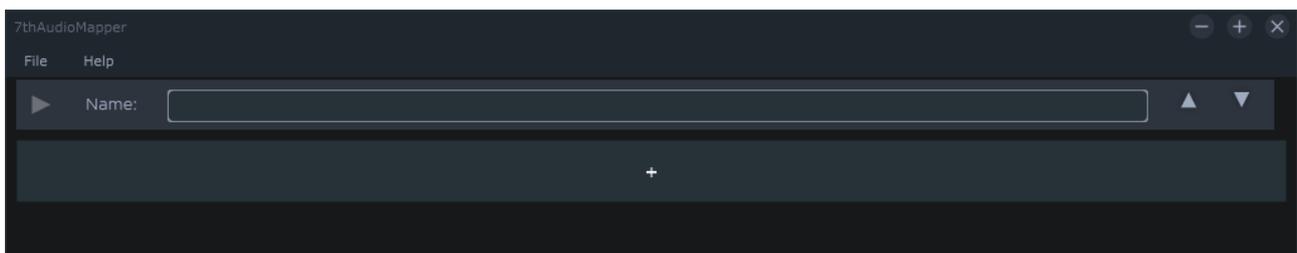
File locations

The audiomapping.json file must reside in the same folder as DeltaAudio. This is the only file that DeltaAudio will listen to.

Other files, backups or copies can be held anywhere with indicative names, but to make any one the default, open it in AudioMapper and 'Save As Default' file.

Creating an Audio Mapping File

To add a map, click the long grey bar with a + on it. This will display the Name bar:



- Click this bar at any time to add further mappings.
- Name your mapping as you wish, e.g. for its location or function.

Control Arrows in the Name Bar

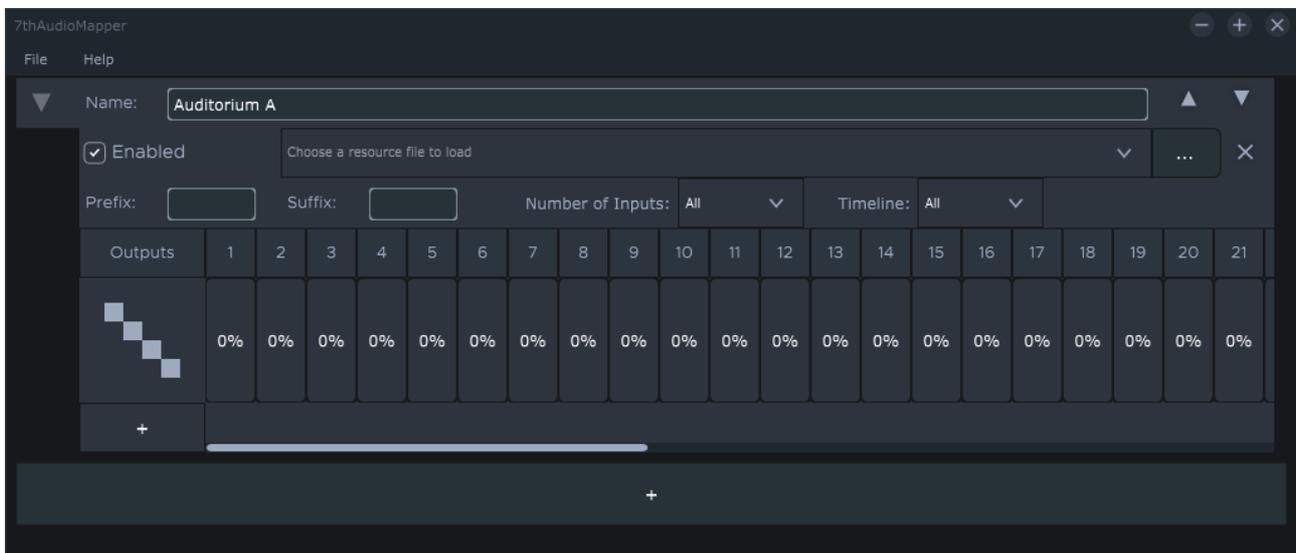
Left: expand or collapse this mapping.

Expand will collapse all others. Files will open with all mappings collapsed, showing just the Name Bars.

Up/Down: re-order your mappings.

The order is the priority in which any filters they contain are applied.

Expand your new mapping to reveal the filters header. Note at the top that each mapping can be **enabled** or disabled (tick, left), or **deleted** (cross, right):



Audio File Filters

File name

Choose a specific file (use the ... to browse)

Prefix

All files starting with these characters.

Suffix

All files of this type.

Number of Inputs

All files with this number of channels (1-64).

Timeline

All files on this Delta Timeline number.

Where filters are left empty, the default is 'all'.

How Delta uses the Mapping Files

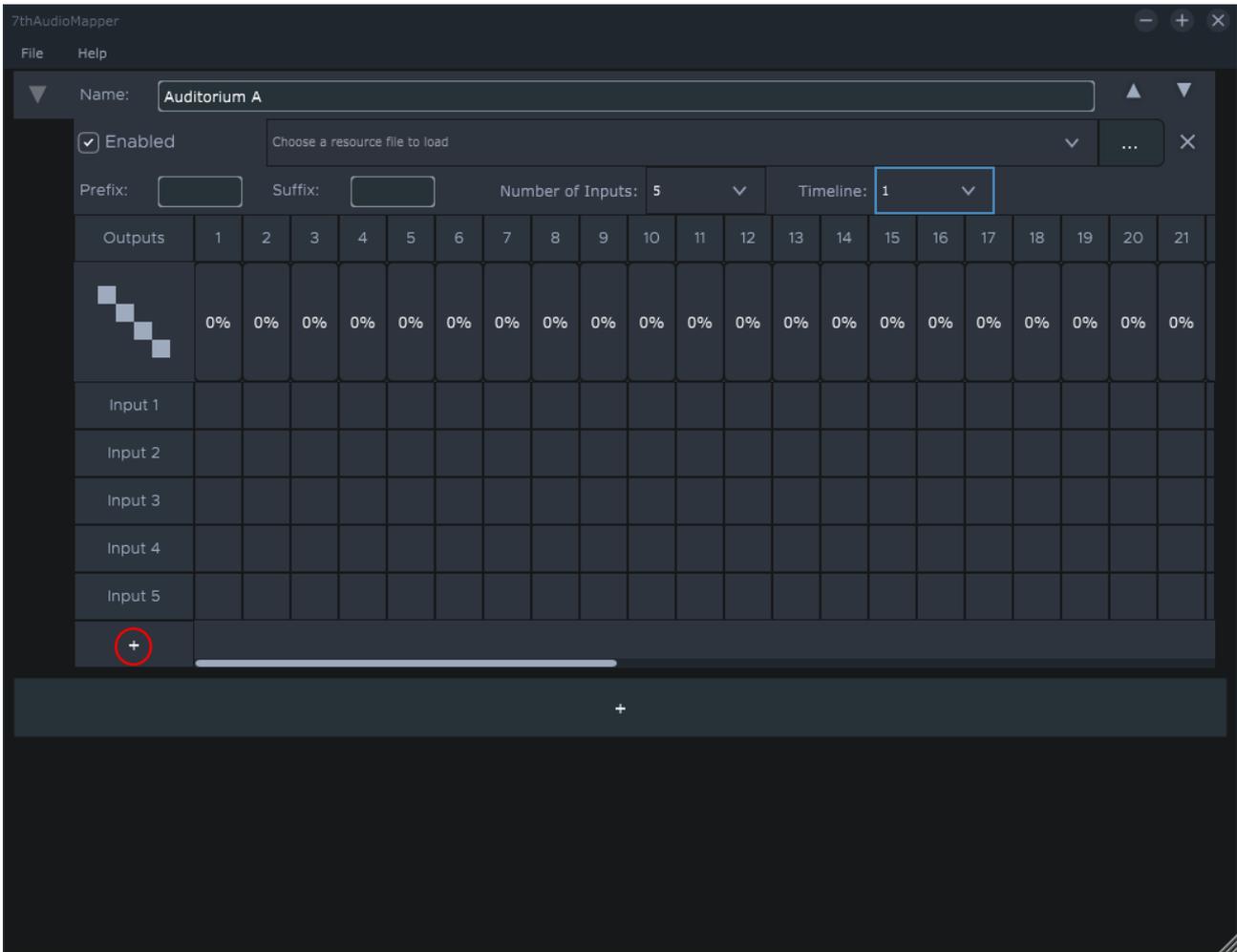
DeltaAudio reads the JSON file and applies all enabled maps according to the filters created. The order of mappings is one of priority: an audio file matching filters in Mappings 1 and 3, for example, will be mapped according to mapping 1 and not mapping 3. If no filters are added, it will simply match all available inputs in every audio file to the mapped outputs.

Mapping Inputs to Outputs

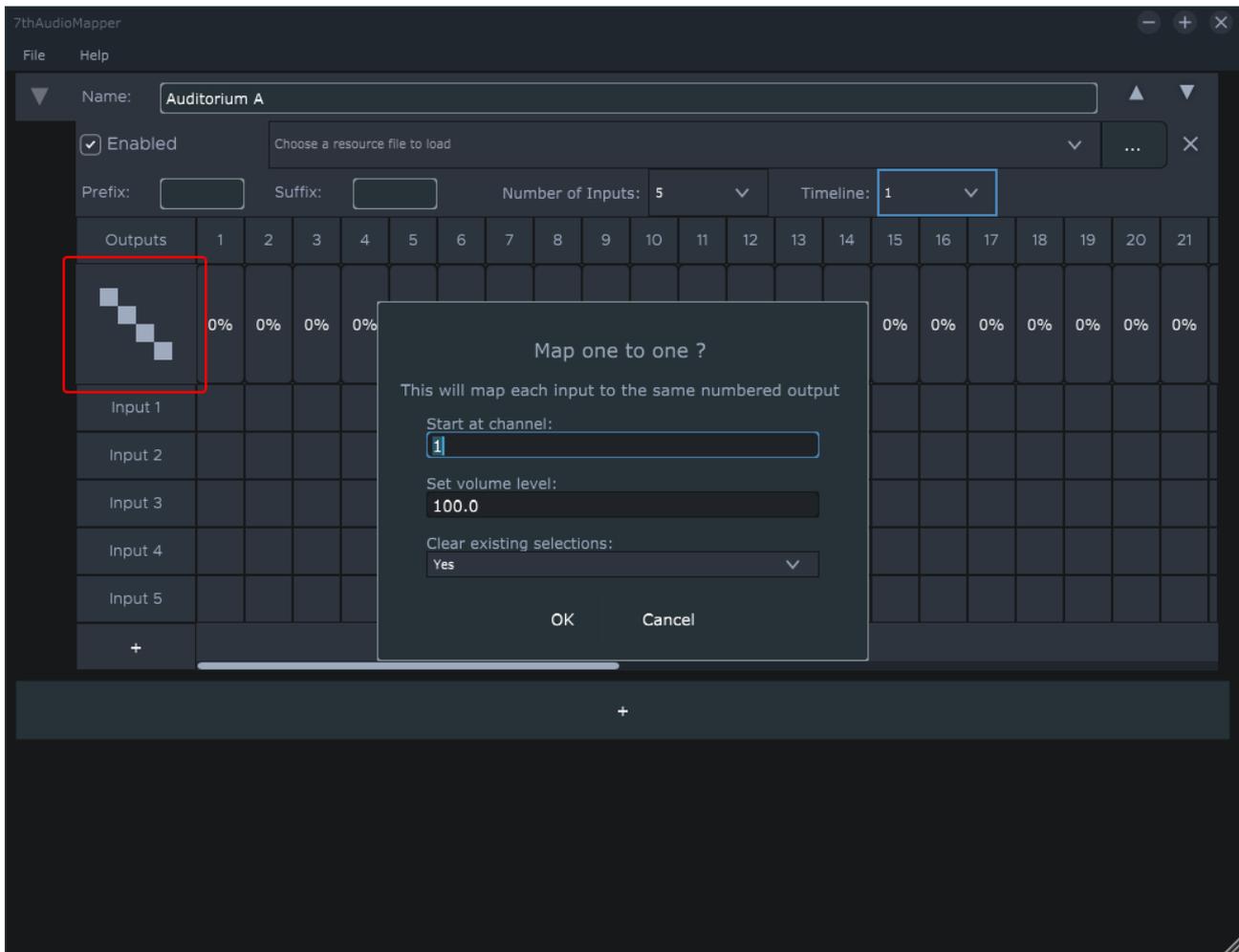
To see all possible output channels use the light grey scrollbar at the bottom of the map.

To add an input channel, click the smaller + box on the left. Add an input for every channel in the file(s) available through the filter.

- The **channel order** in an audio file to be represented as inputs 1 to n here, is a matter for the production designer, who should advise you.
- If you **do not want to use** an input channel, add it but simply leave it unmapped.
- To **delete** an input channel (i.e. it is not required) click the 'Input #' label. The remaining channels will be sequentially renumbered.



You can now map inputs to outputs, either by clicking in the grid squares, or start by mapping all one-to-one by clicking the icon:



Start at channel

Map sequentially from this output channel.

Set volume level

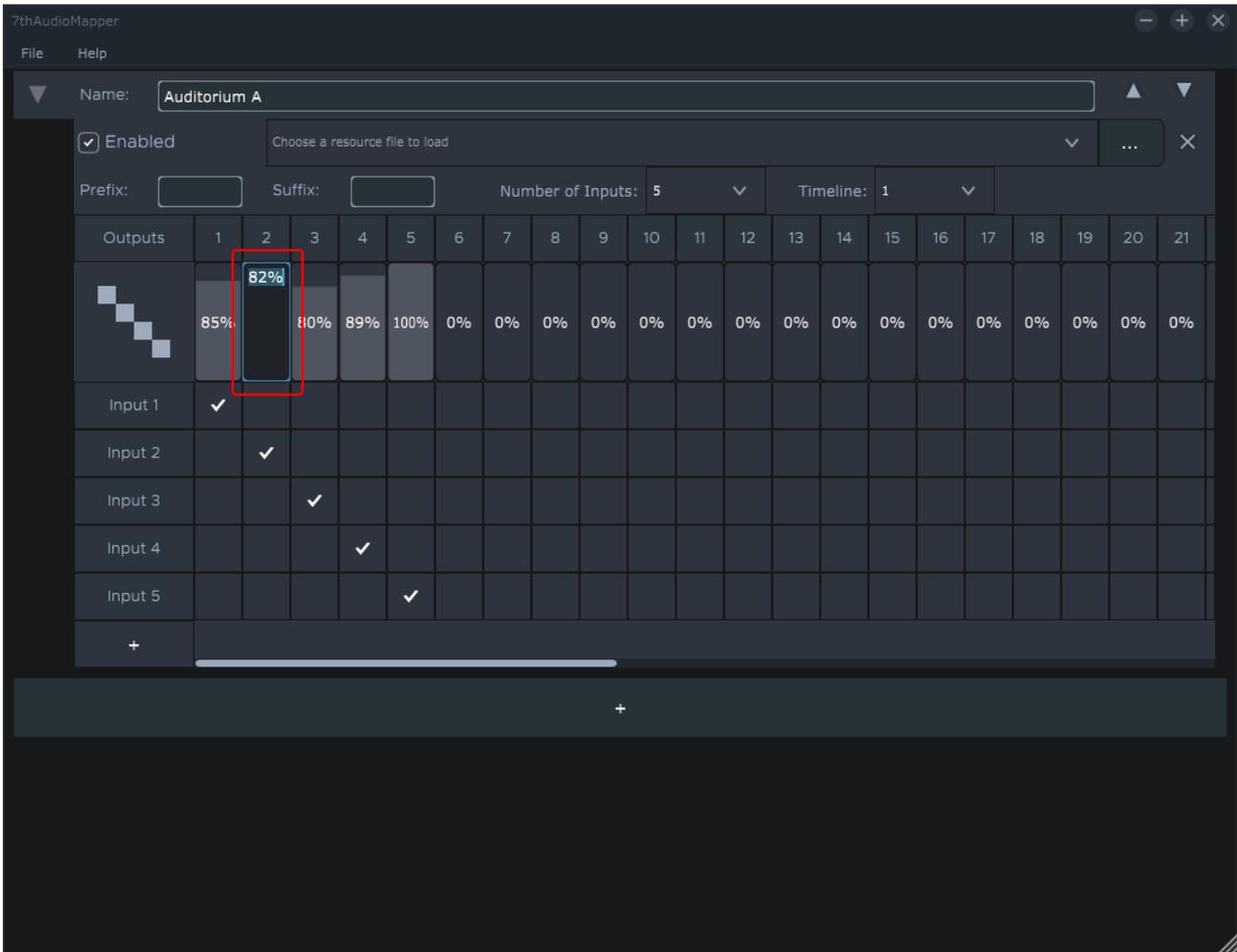
This will set a default volume level for all channels. These can be subsequently changed individually.

Clear existing selections

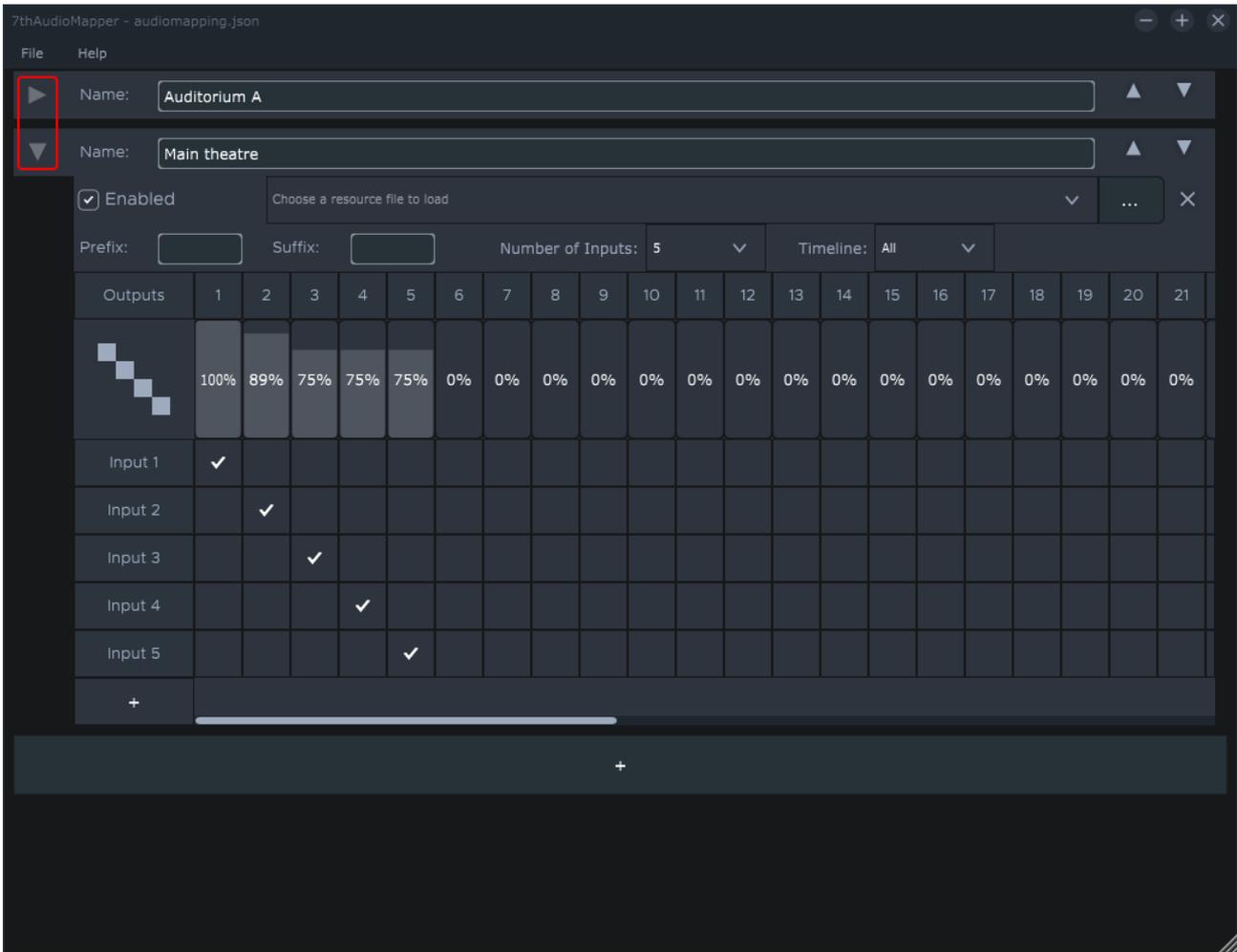
If specific mappings have been made in addition to overall one-to-one, these can be protected, otherwise ('Yes') they will be cleared.

Editing Mapping Volumes

Hovering over a volume enables volume control by mouse-wheel scrolling (30 increments). Alternatively click to enter a specific value:



When there is more than one mapping in the file, only the selected mapping will be expanded:



Document Information

Date	Document edition	Software version	Revision Details	Author/Editor
January 2021	1	AudioMapper 1.0.2	New release	Andie Davidson

Windows Registry Settings

This document is supplied for informational purposes only. Any modification to Windows Registry values that are not exposed via the DeltaServer or DeltaGUI application interfaces – or otherwise advised by 7thSense personnel – may result in performance degradation and/or complete instability of the products. Any attempt to engage 7thSense for support in troubleshooting may result in the reversal of all Registry settings to the factory default or last known good 7thSense-approved configuration. **The customer assumes all risk when manually editing any Windows Registry values on any 7thSense product.**

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