

Garritan Steinway Sibelius Sound Set User Manual

Garritan Authorized Steinway © by MakeMusic, Inc.. Steinway is a registered trademark of Steinway & Sons in the United States and/or other countries. Sibelius is a registered trademark of Avid Technology, Inc. in the United States and/or other countries.

The information in this document is subject to change without notice and does not represent a commitment on the part of The Sound Set Project. The software described by this document is subject to a License Agreement and may not be copied to other media. No part of this publication may be copied, reproduced, or otherwise transmitted or recorded, for any purpose, without prior written permission by The Sound Set Project. All product and company names are trademarks or registered trademarks of their respective owners.

User manual by Joel Avery and Jonathan Loving

Copyright ©2012 The Sound Set Project. All Rights Reserved.

The Sound Set Project, a wholly owned division of Sound Notes LLC, has no affiliation with Avid Technology, Inc.

The Sound Set Project Sound Notes LLC PO Box 811 Bowling Green, OH 43402 USA

info@soundsetproject.com www.soundsetproject.com

Contents

2. Overview 5 2.1 Requirements 5 2.2 Package Structure 6 2.3 Files 8 3. Installation 10
2.2 Package Structure 6 2.3 Files 8 3. Installation 10
2.3 Files
3. Installation 10
-
3.1 General 10
3.2 Mac OS X 11
3.3 Windows 12
4. Preparing the Score 14
4.1 New Scores
4.2 New Scores (Manuscript) 15
4.3 Existing Scores
5. Playback Configuration 18
5.1 Selecting the Sound Set 18
5.2 Manual Sound Sets 19
5.3 Assigning Sounds
5.4 Using Multiple Sound Sets 22
5.5 Preferred Sounds
6. House Styles 26
6.1 Instrument Staves
6.2 Playback Dictionary
6.3 Fonts
7. Working with Sounds 30
7.1 Articulations/Techniques
7.2 Dynamics
7.3 The Mixer
7.4 'Implied' Techniques
8. Common Terms 38
9. Contact and Support 40
10. Credits 41

1. Introduction

Thank you for choosing The Sound Set Project. The Sibelius sound set you are using is a product of countless hours of trial, error, research, and development working towards an integration that not only provides deep functionality, but does so in an intuitive, easy-to-use, and flexible way that meets the diverse needs and workflows of our users. With each integration we aim to provide you a powerful and efficient way of using today's sampled sounds within a notation-based composing environment, with as little extraneous markup as possible, allowing you to focus and spend more time on your music and less on the technical challenges this medium presents.

We are committed to continually evaluating and improving our integrations, and it's through the support of users like you that we are not only able to create new integrations, but refine and expand our existing integrations to better serve your needs. As these products evolve we will release updates, often for free, that feature new functionality and address users concerns, requests, or other issues. We encourage you to periodically check our website or subscribe to our newsletter so you can be certain you have the best and most recent integration available.

If you have any questions, comments, concerns, or suggestions, please contact us using the information found at the end of this user manual. Your feedback helps shape the integrations you use by providing invaluable insight into working methods, preferences, computer environments, and more. The more you share with us, the more we can do for you.

We sincerely hope that you enjoy working with this Sibelius sound set and wish you the best in all of your musical endeavours.

-The Sound Set Project

2. Overview

2.1 Requirements

Minimum system requirements for the Garritan Steinway Sibelius sound set are set out below, separated by the version of Sibelius with which the sound set is to be used.

Sibelius 5

Mac OS X 10.4 or higher Windows XP, Windows Vista or Windows 7 (32-bit/64-bit) 2GB RAM

Sibelius 6

Mac OS X 10.4 or higher Windows XP, Windows Vista or Windows 7 (32-bit/64-bit) 2GB RAM

Sibelius 7

Mac OS X 10.6 or higher Windows Vista or Windows 7 (32-bit/64-bit) 2GB RAM

Automatic Loading Compatibility

Sibelius 6.1 - 7.x+

The size of your score, number of voices to be used, complexity, and a number of other factors will determine how much computing power is required for your work. As a general rule, we suggest that your system should meet the recommended, rather than the minimum, system requirements for both the version of Sibelius you are using and the sample library you intend to use.

For large libraries, we recommend streaming samples from a dedicated hard drive or solid state drive (SSD) for the best performance. When working with large libraries, laptop users in particular are encouraged to work with an external hard drive connected via FireWire 800, eSATA, or other high-performance data transfer protocol (this excludes USB 1.0 and 2.0) as the system drive in many laptop computers is too slow and not suited to sample streaming.

2.2 Package Structure

Each sound set package contains a variety of files that serve different purposes in the integration of that sample library or hardware MIDI device. To better distinguish these files and make installation quicker, we have separated them by function and structured each sound set package in a consistent manner.

After extracting the sound set .zip archive, the folders in the sound set package include:

01 Documentation
02 Sound Sets
03 House Styles
04 Playback Configurations
05 Manuscript Templates
06 Patches
07 Additional Resources
08 Previous Versions

The package you download may not contain all of these folders, or some of the folders may be empty, depending on the requirements for that specific integration. Folders may contain additional subfolders that further separate files by Sibelius version, functionality, operating system (Mac/Windows), or other important differences.

A brief description of these folders is given below. For specific information about the files included in your sound set download, refer to **Section 2.3 - Files** in this user manual.

01 Documentation

The Documentation folder is present in all sound set packages. It contains the user manual, drum and percussion maps, MIDI input maps, changelogs, addenda, and other written documents that provide important information regarding the sound set and its use.

02 Sound Sets

The foundation of every integration, the Sound Sets folder holds the Sibelius sound set XML files. Depending on the integration there could be anywhere from one to four or more sound sets included in this folder, each addressing a different compatibility or workflow requirement. This folder is present in all sound set packages.

03 House Styles

A majority of our sample library integrations include House Style files in the .lib format. These files contain additional settings such as playback dictionary entries, custom instrument staves, and percussion mappings. House Styles are version-specific, meaning they are designed for a specific version of Sibelius. When included, there will be a minimum of three .lib files in this folder.

04 Playback Configurations

The Playback Configurations folder contains preset playback configurations that define sounds and assign channels. They are generally included as a way of reducing setup time for large sample libraries that are not able loaded automatically, and when custom programming or simulated autoload is used in an integration. Playback configurations, like sound sets, are XML files and will often be separated by operating system (Mac/Windows) and plugin format (VST/AU).

05 Manuscript Templates

Included as an alternative to manually configuring new scores, the manuscript paper templates can be selected during score creation to save some time. These files are included for all packages that contain House Styles, and are likewise version-specific.

06 Patches

Sometimes it's necessary to re-program all or part of a sample library to achieve the best integration. We may also include preset instrument and multi files, often in packages that contain playback configurations, to reduce setup time and provide a comprehensive starting template. Any such instrument programming, multi, or preset is included in the Patches folder.

07 Additional Resources

Files that don't fit into folders 01-06 are included in the Additional Resources folder. There is no specific file type or purpose for files this folder, so if present in your sound set package it's best to refer to **Section 2.3 - Files** for information about what the files in this folder are and how they are meant to be used.

08 Previous Versions

In cases where an update would not be backwards compatible (e.g., due to changes in the library patches or programming), we may include the previous version files in the sound set package. The files in the Previous Versions folder are separated first into sub-folders by version number and within that folder structured in the same 01-07 format as the primary (current) sound set files.

2.3 Files

The following files are included and required to use the Garritan Steinway Sibelius sound set.

Garritan Steinway Basic

01 Documentation

Garritan Steinway Sound Set User Manual.pdf - Sound set user manual

02 Sound Sets

Garritan Steinway Basic.xml - Sound set (automatic loading) Garritan Steinway Basic (Fixed).xml - Sound set (manual loading)

03 House Styles

Garritan Steinway Basic (5).lib - House Style (Sibelius 5) Garritan Steinway Basic (6).lib - House Style (Sibelius 6) Garritan Steinway Basic (7).lib - House Style (Sibelius 7)

05 Manuscript Templates

[SSP] Garritan Steinway Basic (5).sib - Manuscript Template (Sibelius 5)
[SSP] Garritan Steinway Basic (6).sib - Manuscript Template (Sibelius 6)
[SSP] Garritan Steinway Basic (7).sib - Manuscript Template (Sibelius 7)

Garritan Steinway Standard

01 Documentation

Garritan Steinway Sound Set User Manual.pdf - Sound set user manual

02 Sound Sets

Garritan Steinway Standard.xml - Sound set (automatic loading) Garritan Steinway Standard (Fixed).xml - Sound set (manual loading)

03 House Styles

Garritan Steinway Standard (5).lib - House Style (Sibelius 5) Garritan Steinway Standard (6).lib - House Style (Sibelius 6) Garritan Steinway Standard (7).lib - House Style (Sibelius 7)

05 Manuscript Templates

[SSP] Garritan Steinway Standard (5).sib - Manuscript Template (Sibelius 5) [SSP] Garritan Steinway Standard (6).sib - Manuscript Template (Sibelius 6) [SSP] Garritan Steinway Standard (7).sib - Manuscript Template (Sibelius 7)

Garritan Steinway Professional

01 Documentation

Garritan Steinway Sound Set User Manual.pdf - Sound set user manual

02 Sound Sets

Garritan Steinway Professional.xml - Sound set (automatic loading) Garritan Steinway Professional (Fixed).xml - Sound set (manual loading)

03 House Styles

Garritan Steinway Pro (5).lib - House Style (Sibelius 5) Garritan Steinway Pro (6).lib - House Style (Sibelius 6) Garritan Steinway Pro (7).lib - House Style (Sibelius 7)

05 Manuscript Templates

[SSP] Garritan Steinway Pro (5).sib - Manuscript Template (Sibelius 5)
[SSP] Garritan Steinway Pro (6).sib - Manuscript Template (Sibelius 6)
[SSP] Garritan Steinway Pro (7).sib - Manuscript Template (Sibelius 7)

NOTE: This document uses file names and images from the Garritan Steinway Professional sound set.

3. Installation

3.1 General

Sound set installation is a series of copy/paste actions. Before you begin, close Sibelius and all other running programs. We suggest placing the sound set package on your desktop for convenient access during the installation process. The most frequent problems encountered during installation are a result of file and folder name mistakes, so read each step carefully and you'll be able to avoid those issues.

The locations given are the only locations in which the files should be installed, and where they will all work correctly. If you have trouble finding a folder, take note of any special instructions regarding hidden folders, and then contact our support team for assistance rather than attempting to install in similarly named folders located elsewhere.

When installing, do not copy entire folders from the sound set package to the designated location, instead, copy the files contained in the named folders unless the instructions explicitly state "copy the folder."

Installation will require approximately one to five minutes.

3.2 Mac OS X

Installation under Mac OS X requires copying files to the Sibelius user settings directory which can be found in the following locations:

Sibelius 5

Users/username/Library/Application Support/Sibelius Software/Sibelius 5

Sibelius 6

Users/username/Library/Application Support/Sibelius Software/Sibelius 6

Sibelius 7

Users/username/Library/Application Support/Avid/Sibelius 7

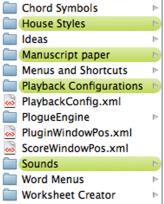
Note: If using Mac OS X 10.7, the user Library folder is hidden by default. Follow the instructions in our knowledge base article <u>Library Folder Not Visible OS X 10.7+</u> before continuing with the installation.

In the Sibelius user settings directory locate folders named **House Styles**, **Manuscript paper**, and **Sounds**. If any folders are missing, create the missing folder(s) and name them appropriately.

Copy the XML files from the **02 Sound Sets** folder in the sound set package to the **Sounds** folder in the Sibelius user settings directory.

Copy the .lib file for your version of Sibelius from the **03 House Styles** folder in the sound set package to the **House Styles** folder in the Sibelius user settings directory.

User Settings Directory, Mac



Copy the .sib file for your version of Sibelius from the

05 Manuscript Templates folder to the **Manuscript paper** folder in the Sibelius user settings directory.

Note: In Sibelius 7, manuscript templates can be organized by placing the .sib file in a subfolder of the Manuscript paper folder. The name of the subfolder (e.g., "Sound Set Project Templates") becomes a category in Sibelius's score setup dialog and will group all sound set manuscript templates together.

3.3 Windows

Installation under Windows operating systems requires copying files to the Sibelius user settings directory which can be found in the following locations:

Sibelius 5 (Windows XP)

C:\Documents and Settings\username\Application Data\Sibelius Software\Sibelius 5

Sibelius 5 (Windows Vista/Windows 7)

C:\Users\username\AppData\Roaming\Sibelius Software\Sibelius 5

Sibelius 6 (Windows XP)

C:\Documents and Settings\username\Application Data\Sibelius Software\Sibelius 6

Sibelius 6 (Windows Vista/Windows 7)

C:\Users\username\AppData\Roaming\Sibelius Software\Sibelius 6

Sibelius 7 (Windows Vista/Windows 7)

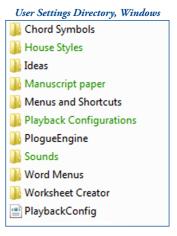
C:\Users\username\AppData\Roaming\Avid\Sibelius 7

Note: The Application Data and AppData folders are hidden by default. If not visible, follow the instructions in our knowledge base article <u>AppData Folder Not Visible</u> <u>Windows</u> or <u>Application Data Folder Not Visible Windows</u> before continuing with the installation.

In the Sibelius user settings directory locate folders named **House Styles**, **Manuscript paper**, and **Sounds**. If any folders are missing, create the missing folder(s) and name them appropriately.

Copy the XML files from the **02 Sound Sets** folder in the sound set package to the **Sounds** folder in the Sibelius user settings directory.

Copy the .lib file for your version of Sibelius from the **03 House Styles** folder in the sound set package to the **House Styles** folder in the Sibelius user settings directory.



Copy the .sib file for your version of Sibelius from the **05 Manuscript Templates** folder to the **Manuscript paper** folder in the Sibelius user settings directory.

NOTE: In Sibelius 7, manuscript templates can be organized by placing the .sib file in a subfolder of the Manuscript paper folder. The name of the subfolder (e.g., "Sound Set Project Templates") becomes a category in Sibelius's score setup dialog and will group all sound set manuscript templates together.

4. Preparing the Score

4.1 New Scores

Launch the Sibelius program and create a new score from the Quick Start dialog or **File > New** in Sibelius's menu. Select the Blank template (no staves) from the list of manuscript papers. It's okay to select a different template, however, the instrument staves will need to be replaced so the Blank template may save some time. Before adding instruments to your score, the House Style file must be selected.

Sibelius 5/Sibelius 6

Click **Next** and then **No** if Sibelius asks "Do you wish to create instruments now?" Select the Garritan Steinway House Style from the list of House Styles and click **Back** to return to the manuscript selection screen. Finally, select **Change Instruments** to display the Instruments dialog.

Sibelius 7

Select the Garritan Steinway House Style from the House Style drop-down menu, then click the **Change Instruments** button to display the Add or Remove Instruments dialog.

H.S. Select, Sibelius 5 / 6





NOTE: Selecting the House Style during score creation is not required. Alternatively, the House Style can be imported after the score is created, and custom instrument staves added at that point. See **Section 4.3 - Existing Scores** for details.

From the Instruments/Add or Remove Instruments dialog, select the Garritan Steinway ensemble (in Sibelius 7, use the **Choose From** drop-down menu).

If you selected a manuscript other than the Blank template, remove any existing staves for instruments you wish to play through the Garritan Steinway library by selecting them in the **Staves in score** list at the right and clicking **Delete from Score**. Then, add all instruments you require to the score using the staves found in the Garritan Steinway ensemble.

With the instruments added to your score, continue through the score setup options as usual and click **Finish** (Sibelius 5 and Sibelius 6) or **Create** (Sibelius 7) when done.

4.2 New Scores (Manuscript)

The manuscript paper template is an alternative method of creating a new score that does not involve selecting a House Style, removing instrument staves, or moving back and forth through the score creation dialogs. While functionally the same as the process described in **Section 4.1 - New Scores**, using the manuscript paper template is perhaps a bit faster and, optionally, allows for inclusion of a second House Style during score creation.

All manuscript paper templates are based on the standard Sibelius House Style and use the Opus/Times (Sibelius 5 and Sibelius 6) or Opus/Plantin (Sibelius 7) fonts. For more information about working with fonts, see **Section 6.3 - Fonts**. By default, manuscript paper templates do not contain any instrument staves.

To use the manuscript paper template, launch Sibelius and select the Garritan Steinway manuscript from the list of manuscript papers.

Manuscript,	Sibelius	51	6

[SSP] Garritan Steinway Pro (6)	h
Bass staff	111
Big band	M
Blank	

Select Change Instruments to display the Instruments/

Add or Remove Instruments dialog and add the required instruments to your score using the Garritan Steinway ensemble (in Sibelius 7, the ensemble is listed in the **Choose From** drop-down menu).

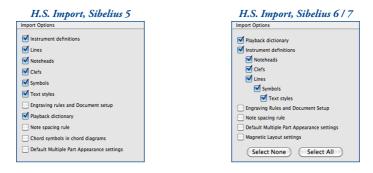
With the instruments added to your score, continue through the score setup options as usual and click **Finish** (Sibelius 5 and Sibelius 6) or **Create** (Sibelius 7) when done.

NOTE: When using the manuscript paper template, do not select the House Style for the library during score setup. Those settings are included in the manuscript paper file.

4.3 Existing Scores

In order to use the Garritan Steinway sound set with an existing score, the custom staves, playback dictionary, and other settings must first be brought into the score. This is accomplished by importing the Garritan Steinway House Style and changing certain elements of the file, a process referred to as "converting" the score.

Open the score requiring conversion and select **House Style > Import House Style** in Sibelius's menu (Sibelius 5 and Sibelius 6) or **Import** from **Appearance > House Style** in the ribbon (Sibelius 7) to display the House Style import dialog. Select the Garritan Steinway House Style from the list and the import options as shown in the images below. Because importing a House Style can alter the appearance of your score, it's important to select only the options indicated to prevent undesirable changes. Click **OK** to import the House Style.



Once the House Style is imported, the existing instrument staves must be changed to the custom instrument staves for the library. This ensures that the sounds will allocate and play correctly. The easiest, and most efficient, way to do this is by creating instrument changes.

Select an entire staff (triple-click) and open the Instrument Change dialog from **Create** > **Other > Instrument Change** (Sibelius 5 and Sibelius 6) or by selecting **Change** from **Home > Instruments** in the ribbon (Sibelius 7).

In the Instrument Change dialog select the Garritan Steinway ensemble and a custom staff equivalent to the staff selected in the score (e.g., if the staff selected in the score is a flute, select a custom flute staff). The options **Add clef (if necessary)** and **Announce at last note of previous instrument** can be deselected. Click **OK** to apply the change.

Continue through the rest of the score, repeating these steps for every staff you want to playback through the Garritan Steinway library.

Finally, any device or patch assignments manually made in the mixer need to be reset. With the mixer open, shift-click the device readout (number "1" in the images below) and select **(auto)**. This sets all devices to their automatic assignment. To complete the mixer reset, shift-click the patch readout (number "2" in the images below) and select **(auto)** to set all instrument assignments to their defaults.



The importance of the mixer reset can not be overstated. Any lingering manual assignments that reflect devices no longer available or sound IDs specific to a different sound library/device will result in incorrect allocation and/or playback of your score with the Garritan Steinway library. For this reason, among others, using the mixer to assign sounds is strongly discouraged (see **Section 7.3 - The Mixer**).

5. Playback Configuration

5.1 Selecting the Sound Set

Now that the score is ready, a new playback configuration needs to be created so Sibelius knows which plugin(s)/device(s) and sound set(s) to use for playback. To create a new playback configuration, open the Playback Devices dialog from **Play > Play-back Devices** in Sibelius's menu (Sibelius 5 and Sibelius 6) or by clicking the **dialog launcher button** in the **Play > Setup** group in the ribbon (Sibelius 7).

At the top of this dialog Sibelius displays the name of the currently active playback configuration, with buttons for several different actions including **Save**, **New...**, **Rename...**, and **Delete**. Click **New...**, enter a name for the playback configuration, and then click **OK** to create it.

When you create a configuration, Sibelius uses the settings of the current configuration to create the default state of the new one. Select each plugin or device listed in the **Active Devices** pane that is not required and click the **<< Deactivate** button to remove it from the configuration.

Once the unneeded plugins have been removed, select the appropriate device from the **Available Devices** pane and click the **Activate** >> button to add it to the configuration. If you are working with large scores or require many instruments/articulations you may wish to activate several plugin instances to accommodate all of the sounds.

In the **Active Devices** pane, use the dropdown menu in the **Sound Set** column to select the Garritan Steinway sound set. If you activated multiple plugin instances, assign the sound set to those as well. Click the **Save** button at the top of the Playback Devices dialog to save your changes.

Pl	ayback Devices
Туре	Sound Set
ArU)	Garritan Authorized Steinway Pro
	Туре

If using a sound set that enables Sibelius to load sounds automatically, your configuration is complete and you can now close the Playback Devices dialog. If Sibelius is not able to load sounds automatically, or you have chosen to use a manual loading sound set, continue with the instructions in **Section 5.3 - Assigning Sounds**.

5.2 Manual Sound Sets

There are several ways in which Sibelius allocates and assigns sounds depending on the type of sound set being used. Perhaps most familiar is the automatic (loading) method, such as is used by the Sibelius Player, whereby Sibelius loads, assigns, routes, and manages all sounds automatically without requiring direct user input. Automatic loading, however, is not available for all plugins and isn't always preferable even when it is available. For libraries that cannot be loaded automatically, or if you prefer manually managing channels and assignments, a manual sound set must be defined.

The term manual sound set is often a source of confusion, so it's important to understand what it is before continuing. A manual sound set tells Sibelius what sounds are available and the device and MIDI channel where those sounds can be found. Without this information, Sibelius will allocate sounds based on SoundWorld priorities and it's unlikely they will correspond to the actual location of the sounds (and further, these allocations are subject to change).

There are two (broad) scenarios in which manual sound sets are used. The differences are subtle, but important, as the term manual sound set may, on the surface, seem to contradict the second.

Scenario 1 - Without a sound set XML file

When a sound set XML file is not used, sound IDs are defined directly in the manual sound set and assigned to a channel. The manual sound set in this sense is a true "manually created sound set," that is, an XML file does not exist with instrument definitions so these definitions are manually created.

Scenario 2 - With a sound set XML file, but without automatic loading

In this scenario, Sibelius still must be told where the sounds are located. However, while MIDI channels assignments are part of the **Manual Sound Set** dialog, the sounds are not being defined manually as they are in the first scenario. Instead, the definitions are taken from the sound set XML file and applied to channels.

Essentially, the second scenario can be viewed as channel routing rather than creating a manual sound set, despite the fact that the same term is used. When discussed in the next section, the use of manual sound set refers exclusively to this second scenario.

5.3 Assigning Sounds

In order for Sibelius to allocate sounds correctly, a manual sound set is required when automatic loading is either not available or not being used. If you haven't already, please take a moment and read **Section 5.2 - Manual Sound Sets** before proceeding with these instructions.

Manual Sound Set Tab			
Active Devices Manual Sound Sets		Preferred Sounds	Effects
~		•	

Continuing from **Section 5.1 - Selecting the Sound Set**, in the Playback Devices dialog select the **Manual Sound Sets** tab to display channel assignment and routing

options. Using the **Device** drop-down menu, select the device(s) for which a manual sound set will be defined and check the box next to **Use manual sound set**. Then, use the **No. channels** option to set the number of MIDI channels the selected device supports. Most devices support 16 MIDI channels.

Select the device you want to configure from the **Device** drop-down menu. Under **Sound Settings** enter an unassigned MIDI channel number (1-16) in the **Channel** field and then use the **Program name** drop-down menu to select the desired instrument patch from the sound set. Click the **Apply** button at the bottom of the dialog to apply your channel assignment.

Manua	l Sound Set, Device	e Setup
	Active Devices	Manual Sound S
Device:	ARIA Player	Show
Sound set:	Garritan Authorized Steinway	Pro 🛟
6	🗹 Use manual sound set	
No. channels: 1	.6	

Manual Sound Set, Patch Assignment

Sound Settings		
Channel:	1	
Program name:	Steinway Under Lid	•
	Send program change	
Program number:		
	Send bank change	
Bank high:	Bank low:	
Sound ID:	keyboard.piano.grand.steinway.under lid	0
	General MIDI-compatible drum map	
	Test Apply	

Continue assigning sounds in this manner until all sounds you require have been assigned to a device and MIDI channel. Click the **Save** button at the top of the Playback Devices dialog to save your assignments.

Once channels are assigned, the sounds need to be loaded. Select a device using the **Devices** drop-down menu and click the **Show...** button to display the plugin interface. If using sounds outside of Sibelius, in either a standalone program, VST Host, or on another computer, the **Show...** button will be inoperable. Instead, open the corresponding device interface where it is being used.

For each channel assignment in your manual sound set, find and load the instrument patch of the same name, assigning it to the same channel as you did in Sibelius. Repeat this for each device in the configuration that uses a manual sound set. When finished, click the **Save** button at the top of the Playback Devices dialog to save your completed configuration and close the Playback Devices dialog.

NOTE: Because playback configurations are separate from scores, changes made to playback configurations are not saved when the score is saved. In order to preserve your changes and manually loaded sounds for your next session, the playback configuration must be saved from the Playback Devices dialog anytime changes are made.

5.4 Using Multiple Sound Sets

Creating a playback configuration that combines multiple sound sets is, for the most part, the same as creating a configuration for a single sound set. There are, however, some additional things to consider depending on what type of sound sets are being combined. Multiple sound sets may also result in duplication of instruments (i.e., instruments available in more than one active sound set) requiring use of Preferred Sounds for proper allocation (see **Section 5.5 - Preferred Sounds**). There are three distinct cases worth noting.

Two or more sound sets, with autoload

Mixing multiple autoloading sound sets is the most straightforward combined usage scenario. The playback configuration can be created normally, and should include at least two active devices (one for each sound set). With each device assigned to a different sound set, save the configuration and close the Playback Devices dialog. Sibelius will then allocate and load sounds for the staves in the score using the instrument definitions found in the active sound sets.

Two or more sound sets, without autoload

Not unlike multiple autoloading sound sets, using multiple sound sets that require manual sound set definitions is a matter of activating an appropriate number of devices and assigning them to the different sound sets. When assigning channels, each device will display the patches from the sound set is has been assigned. If there is anything to be mindful of, it's to be certain patches are loaded in the correct device when working with multiple libraries powered by the same plugin.

Two or more sound sets, mixed autoload

Fundamentally, this scenario is the same as the others. A device needs to be added to the configuration for each sound set that will be used, and for the sound set requiring a manual sound set, setup requires the same steps as if it was used on its own.

The issue that presents itself here is the possibility of saving automatically loaded sounds with the configuration. Since automatically loaded sounds are always loaded directly from the library, the sounds saved in the configuration will not be "seen" by Sibelius resulting in double-loading.

Double-loading may not be a serious issue for you depending on how powerful your computer is (specifically, how much RAM is available) and the size of the score. At best it will increase the time needed to load the configuration as sounds are loaded, unloaded, and loaded again; at worst, it can result in Sibelius crashing.

The best way to avoid this is to create your mixed automatic and manual loading playback configuration before opening a score. This will allow you to create the configuration and save your manually loaded sounds before Sibelius attempts to load anything automatically. Once saved, open a score and Sibelius will then load those sounds it can automatically, preserving your manually loaded sounds and preventing the doubleloading problem.

For more information on double-loading and how to resolve it once it has happened, see our Knowledge Base articles: <u>Sounds Load Twice</u> and <u>Sounds Load When Sibelius</u> <u>Starts</u>.

NOTE: In a default Sibelius 7 installation, the Playback Devices dialog is not accessible until a score has been opened. In order to create a mixed configuration as described here, Sibelius 7 users can either create a new Blank score, or assign a keyboard shortcut to the Playback Devices window so it can be opened prior to opening a score.

5.5 Preferred Sounds

When multiple sound sets are used in the same playback configuration there is a good chance that some instruments will be available in more than one device. For example, "Library A" and "Library B" may both have a solo violin sound. Even though the patch names in the sound sets are probably different, to Sibelius these two solo violin sounds are equivalent because the underlying sound ID is the same. This poses a problem because Sibelius will arbitrarily select one of these sounds which may or may not be the desired sound.

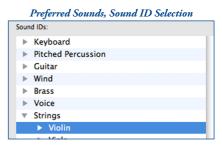
To instruct Sibelius from which device a sound should play, Preferred Sounds rules can be added in the playback configuration. Using Preferred Sounds, sounds can be assigned very specifically or very broadly to a particular device based on their sound IDs.

NOTE: Preferred Sounds, despite their use in directing sounds to a device, are not a replacement for a manual sound set when one must be used. They should be used in addition to any channel assignments made in a manual sound set.



From the Playback Devices dialog select the **Preferred Sounds** tab to view currently applied Preferred Sounds rules (if any) and add new rules.

Select a sound ID using the expanding list at the left of this dialog. The more specific your selection, the more targeted the preferred sound rule will be. For example, if you select **Strings**, all instruments whose sound IDs begin with "strings" will be allocated to the designated device. However, if you select **Strings > Violin**, only instruments whose sound IDs begin with "strings.violin" will be allocated to the designated device.



Once you've made your selection, use the drop-down menu at the right to select the device you want to use for this sound, and click **Add** to apply the rule. Be sure to save the playback configuration after adding or editing rules so that the changes are stored.

An important aspect of preferred sound assignments is the use of wildcard characters in the sound IDs that are selected. Using the solo violin example, the complete rule is:

For the sound ID: **strings.violin.*** prefer this device: **My Plugin**

While it's the use of wildcards that makes Preferred Sounds so flexible, each rule should be evaluated to see what effect it may have on other sounds. In this case, not only has the solo violin sound been assigned, because of the wildcard character, violin section sounds have also been assigned to this device. If the violin section sound should play from a different device than the solo violin sound, a second rule is required:

For the sound ID: **strings.violin.ensemble.*** prefer this device: **My Other Plugin**

This second, and more specific, rule overrides the broader rule created previously allowing violin section sounds to play from a different device. Keep this in mind while assigning Preferred Sounds rules and you'll be able to target sounds correctly.

6. House Styles

6.1 Instrument Staves

Within the Garritan Steinway House Style are custom instruments staves for each root patch in the library. A root patch is any patch defined as the default sound for an instrument (e.g., a basic sustain sound). Staves are not defined for individual articulations (e.g., pizzicato) as these sounds can be triggered by an appropriate articulation or technique instruction in the score.

Depending on the library and its programming, these staves perform a variety of different functions that aid in the integration of the sample library. Their primary purpose is to ensure sounds allocate properly and articulations switch correctly for every patch in a library. This is accomplished by assigning each staff to a specific, unique, sound and/ or defining drum and percussion maps. Secondary purposes include altering transpositions, normalizing SoundStage positioning, panning, providing alternate microphone positions, string tunings, and other similar functions.



The custom staves can be found in an ensemble, named for the library to which they correspond, in the Add/Create Instruments dialog and the Instrument Change dialog. Staves are further sorted within the ensemble by instrument type (brass, wind, etc.) or the folder structure of the library. Each individual staff contains a prefix identifier in brackets indicating what library the staff is designed for. The prefix for the Garritan Steinway library is: **[GAS]**.

The staff name displayed in these dialogs consists of the library prefix, the patch name, and any additional identifying information (e.g., transposition). This name is for your reference only and will not print in the score. The names written in the score generally reflect standard naming conventions for the instrument. In-score names can be changed to whatever you like without compromising functionality.

Several different staves may be available for a single instrument that account for different ways of writing for that instrument. For example, a French horn patch may have staves designated as "In F" and "In F (No Key)." Sounds in unpitched percussion patches containing multiple instruments are often made available collectively on a 5-line staff and individually using 1-line staves.

In cases where multiple staves are available for a patch, they are equivalent as far as playback and sound allocation; the difference is how the staff appears in the score.

6.2 Playback Dictionary

The workhorse of the Sibelius playback system, the playback dictionary contains the instructions (usually sound ID changes) that tell Sibelius which sound ID should be used when a certain articulation, line, symbol, or text instruction is written in the score. Using the changes defined in the dictionary, Sibelius is able to match written techniques to the appropriate sound in a library or device, or choose the closest matching sound if an exact match is not found.

The Garritan Steinway House Style contains a significantly modified and extended playback dictionary in order to accommodate all of the sounds available in the Garritan Steinway library. In order for multiple sound sets and House Styles to be used together, it's essential that playback dictionary entries do not conflict with each other. As such, certain entries and definitions are present in all of our playback dictionaries even though they may not be required for that particular library.

Our edited playback dictionaries generally do not change the behavior of Sibelius's default entries so as to maintain compatibility with libraries that use an integration produced by another party (e.g., the bundled Sibelius Sounds library). Where exceptions are made and default entries are modified, we research those entries, their behavior, and use throughout most every sound set available and will only make the change if it will not have an adverse effect on other integrations.

6.3 Fonts

A House Style file is made up of many interdependent settings that impact the way a score is displayed. The ability to move these settings collectively is one of the factors that makes integrations like this one possible, however, it comes with an unfortunate side effect: playback and staff settings can not be separated from score presentation. As a result, when a House Style is imported or a manuscript paper template is selected, settings that may not fit your layout and presentation needs are brought in as well.

The settings transferred in the Garritan Steinway House Style are intended solely for playback purposes and they do not impose, alter, or require any specific layout or formatting settings (e.g., note-spacing rules, staff positions, etc.). A majority of these settings can be eliminated simply by importing the House Style using the options indicated in **Section 4.3 - Existing Scores**, which preserves your layout and preferences.

Text Styles are a notable exception. Because certain playback settings are dependant on Text Styles, importing the House Style requires that they be imported as well. Fortunately, if necessary, there is an easy way to restore your own Text Styles and font settings after importing the House Style for playback purposes.

Every House Style and manuscript paper template uses Sibelius's default Text Styles consisting of the Opus/Times (Sibelius 5 and Sibelius 6) and the Opus/Plantin (Sibelius 7) fonts. If your score uses these fonts, importing the House Style will be of no consequence and the steps below are unnecessary.

To restore the desired Text Styles and fonts, first create your score or import the Garritan Steinway House Style as described in **Section 4.1 - New Scores**, **Section 4.2 - New Scores (Manuscript)**, or **Section 4.3 - Existing Scores**. Then, open the House Style Import dialog again from **House Style > Import House Style** in Sibelius's menu (Sibelius 5 and Sibelius 6) or by selecting **Import** from **Appearance > House Style** in the ribbon (Sibelius 7).

Select a House Style that uses the desired fonts from the list at the left, and then deselect all import options except for **Text styles**. Click **OK** to import this House Style. Your score now contains all of the playback settings for the Garritan Steinway library and will use the desired fonts.

NOTE: Import all House Styles to be used for playback purposes prior to importing the House Style that will reset Text Styles and fonts.

7. Working with Sounds

7.1 Articulations/Techniques

There are three primary ways of changing articulations and playing techniques in your score, articulation markings, text instructions, and lines. Symbols may also be used, but are not as common. Through the sound set these instructions are interpreted and the appropriate MIDI data is generated, whether that be a keyswitch, continuous controller change, or other similar message, invisibly, and automatically.

Each of these methods creates sound changes in slightly different ways, and while standard notation practice will generally dictate which method is used in a given context, understanding how each one works together and separately is important.

Articulation Markings

Includes such markings as staccato, staccatissimo, marcato, tremolo, etc. Articulation markings are in effect for the duration of the note to which they are attached, after which the sound is reset or changes to the next indicated sound. Using articulation markings is perhaps the most obvious way of changing sounds in a score, but may not be the most efficient in all contexts.

Articulation marks generally change sounds by way of a sound ID change, with a fallback behavior that will simulate the technique in the event a matching sound ID is not found. For example, if a staccato mark is written but a staccato sample is not available, Sibelius will shorten the note duration to mimic the staccato effect.

The fallback behavior, while useful, is not entirely reliable with different issues appearing in different versions of Sibelius. The two most common issues, which extend to staff lines as well, include fallback behavior overriding a sound ID change and the fallback behavior being executed in addition to the sound ID change (unmeasured tremolo and slurs, respectively, are examples). In practice this will have little effect on your work since the sound set and House Styles are built to accommodate these inconsistencies, but it's something to be aware of.

Because articulation markings are automatically reset/changed at the end of the note, repeated notes using the same articulation (e.g., staccato) can suffer from a pulsing and ill-defined effect, especially at faster tempi, as superfluous MIDI data is generated (a reset and retrigger for each individual note as opposed to once per passage). Our Knowledge Base article <u>Fast Staccato Passages Muddy</u> sheds some light on this issue.

Text Instructions

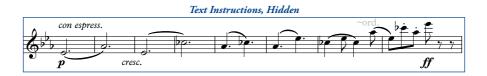
Given that there are a limited number of articulation markings but seemingly infinite technique variations, text instructions are responsible for a substantial number of sound changes. Typically entered using Expression and/or Technique Text, nearly all text instructions remain in effect until explicitly disabled making them an ideal choice for sound changes that should persist for an extended period of time.



Used alone, text instructions should be written in the score at the place the technique is to begin and a reset instruction entered where the technique should end. For example, a passage to be played pizzicato might be indicated with the text instruction **pizz**. and ended with the instruction **arco**. While some text instructions come in natural pairs (such as **pizzicato** and **arco**, above; **mute** and **open**, etc.), others do not and will need to be reset with an appropriate instruction such as **normal** or **ord**.

The most important thing to remember is that unlike a live musician, who will interpret instructions in the context of the piece, Sibelius reacts to markings literally. Context may indicate that a **marcato** text instruction should naturally be discontinued, and any live player would recognize this, but Sibelius must receive an explicit instruction or the marcato sound will persist.

Differences between markup for live players and computer playback are quite evident here, but it is possible to prepare scores that play correctly without excess visible and unnecessary markup. Any text instruction that you do not want to print can be hidden in the score by entering a tilde \sim in front of the part to be hidden.



Lines

Staff lines are similar to articulation marks with two notable differences: they may act on multiple sequential notes, and the length of the line determines the point at which the technique or effect ends. Staff lines require less discussion than articulations or text instructions, but the behavior of three common lines deserves a mention.

Playback of slurs is dependent on a minimum of two notes, the first note to which the slur is attached and the last note (and any notes in between). While the slur marking will create a sound ID change at the beginning of the first note, the legato transition will not be heard until a subsequent note has been triggered. The transition will then sound for each note under the slur line.

Glissando and portamento lines react the same way as slurs but are worth mentioning on their own because the effect of "waiting for the second note" is much more pronounced. When written, glissando and portamento lines often indicate a transition should be applied in the space between the notes to which the line is attached. Live players accomplish this by looking ahead, finding the desired ending pitch, and applying the transition accordingly. By contrast, Sibelius is not able to look ahead to determine the ending pitch and instead must wait for that note to be triggered before applying the transition effect. The result is a transition that triggers in the space of the second note rather than the space between notes.

Unfortunately, there is no easy way of overcoming this (short of entering hidden pitches between the notes in an effort to "fake it"), but with the growing number of libraries offering true glissando and portamento transitions, many include the ability to control the speed of the transition. Though not a perfect solution in every situation, when this control is available, altering the speed of the transition may help to disguise this effect in some small way.

7.2 Dynamics

Fundamentally, dynamics in Sibelius consist of two parts, the **Attack** strength and the **Dynamic** level. The Attack and Dynamic values are set in the playback dictionary, with a number in the range 0-127. Attack and Dynamic are assigned to MIDI functions in the sound set for each patch, and optionally, for specific articulations/ techniques, allowing the values set in the playback dictionary to be sent using whatever MIDI function(s) a device responds to.

Different libraries and devices use different methods of controlling dynamic and attack levels, some of which respond better than others in Sibelius, but generally fall into two categories, crossfaded velocity layers and separate velocity layers.

Crossfaded Velocity Layers

Crossfaded patches (often abbreviated XF or DXF) allow for even, continuous changes in level from the quietest to loudest sample. Crossfading frequently uses MIDI CC1, commonly mapped to the ModWheel, to control dynamics and may or may not utilize note velocity at all (or may assign it to another related function, such as attack speed). These patches are generally preferable in Sibelius as they allow for smooth crescendo and diminuendos over sustained notes. Depending on patch programming, the Attack value sent by Sibelius may have no effect.

Separate Velocity Layers

Patches programmed with separate velocity layers allow attack and dynamic to be controlled separately, but usually prevent the continuous change in dynamics resulting in staggered and "jumping" dynamics. Because the MIDI controller assigned to dynamics (typically MIDI CC7 or CC11) operates within the active velocity layer rather than the instrument as a whole, the output of low velocities at a *fff* dynamic is not the same as high velocities at that same dynamic.

While there are exceptions to this, the majority of devices that use velocity layers for sustaining instruments will pose a problem when it comes to continuous dynamic changes in a Sibelius score.

Perhaps the best workaround is to utilize hidden dynamics and a plugin to create a smooth dynamic change that ends at the desired level. Enter the dynamic mark that should appear (print) in the score followed by a hidden marking that is the same as the ending dynamic, such as p-fff. Then, use the **Cresc./Dim. Playback** plugin to create the crescendo from p to ffff using either MIDI CC7 or CC11.



This works because the second, hidden, dynamic mark is the mark interpreted during playback and triggers the same velocity layer as the note following the crescendo. By using the **Cresc./Dim. Playback** plugin, the entire range of 0-127 is available for this upper velocity layer allowing for a distinct and noticeable dynamic change across the duration of the note.

Recording Dynamics

As evidenced by the workaround presented above, dynamics in Sibelius are linear in nature. In the right, or wrong, context this can result in very unnatural dynamic movement, lacking the subtleties that make the music come alive.

If you are working with a MIDI keyboard or controller that is capable of inputting continuous data (via a fader, knob, wheel, foot pedal, etc.) you can overcome this by recording dynamic changes in real time, shaping the performance while preserving the appearance of the score.

Open the Flexi-time Options dialog from **Notes > Flexi-time Options...** in Sibelius's menu (Sibelius 5 and Sibelius 6) or by clicking the **dialog launcher button** in the **Note Input > Flexi-time** group in the ribbon (Sibelius 7).

On the **Flexi-time** tab, select **Overdub** in the **Existing Music** section at the lower left of the dialog. Under **Voices** at the upper right, deselect **Record into multiple voices**, and then select an unused voice (1-4) for the MIDI data to be recorded in.

Switch to the **Notation** tab briefly and verify that **Keep controller messages** is selected in the **MIDI Messages** section and then click **OK** to apply your settings.

Align the playback cursor where you would like to re-

cord dynamics, and when ready, start recording by pressing the record button in Sibelius's transport. When finished, stop recording and your MIDI messages will be entered in the score as hidden text instructions in the voice designated in Flexi-time Options.

Flexi-time, Overdub	
Existing Music	
O Replace	
 Overdub 	

Flexi-time, Voices
Voices
Record into multiple voices
Record into one voice:
○ 1 • 2 ○ 3 ○ 4

7.3 The Mixer

The Sibelius mixer provides control over a variety of parameters associated with playback, including MIDI volume level, panning, plugin audio levels, effects, and sound assignments. With the exception of sound assignments, all of these behave as you would expect and allow for finer control of the sounds used in the score.

Audio and MIDI Levels and Control

An important distinction needs to be made between audio and MIDI levels as controlled by the meters in the Mixer. For staff channel strips, the meters show MIDI activity/level and are not indicative of the audio signal. The volume faders for these channel strips are linked to MIDI CC7 and the pan controls to MIDI CC10. As these are MIDI-level controls, their values can be altered by data in the score, such as dynamic changes.

For devices that offer a secondary volume control (via CC11), the staff volume faders can be used to set overall MIDI volume levels and the value will not change. If, however, the device uses CC7 alone, the value set in the mixer is subject to change when different dynamics are entered in the score. Note that the display in the mixer will not track these changes.

Although generally of little consequence, understanding how these faders operate can prevent frustration when the displayed levels seem to be changing or ignored altogether.

Unlike staff channel strips, the virtual instrument and master channel strips display audio signal and control each plugin's audio output level, and the summed audio output level of all plugins, respectively. The virtual instrument faders in particular are useful when mixing libraries together that have widely varied output. By balancing the output levels at the plugin stage, the staff channel strips can be left to mix each instrument at the MIDI-level allowing greater flexibility and range.

Sound Assignments

Two types of sound assignment are possible using the mixer, device assignments and patch assignments. However, with the exception of hardware MIDI synths, assigning sounds and devices in the mixer is bad practice and is best avoided in all but a few specific cases (and even then, only as a last resort). Doing so can result in incorrect sound allocation, cause articulations and techniques to switch incorrectly, or prevent them from switching at all.

The explanation lies in the way Sibelius allocates sounds. Sibelius determines how to allocate a staff based on the sound IDs available in the sound set, the **Best Sound** defined in the instrument staff's settings, and any manual sound set or Preferred Sounds directives present in the playback configuration. This is repeated for each staff in the score until all staves are allocated to an appropriate device and sound.

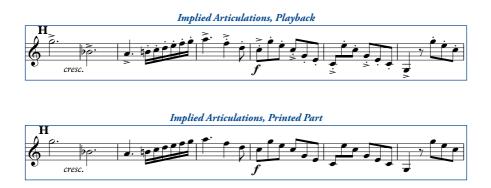
Manually selecting a sound or device in the mixer tells Sibelius "Use this sound regardless of any other setting." This overrides the entire allocation system, and while Sibelius will still work within the system, it's forced to ignore certain things in order to comply with the manual assignment made in the mixer.

The trouble caused by doing this is not often obvious, in fact, depending on the complexity of the library or device, problems may not appear right away. Nevertheless, since there are ways of controlling and guiding sound allocation within the system, including manual sound sets (Section 5.2 - Manual Sound Sets), Preferred Sounds (Section 5.5 - Preferred Sounds), and instrument staves (Section 6.1 - Instrument Staves), it's best to utilize the methods provided rather than "brute-forcing" and overriding the system through the mixer.

7.4 'Implied' Articulations

In **Section 7.1 - Articulations/Techniques** mention was made of the difference between a live player's contextual interpretation of the score and the literal interpretation used by Sibelius. This difference extends beyond techniques that are actually written in the score as well; as a player interprets and phrases his part, notes will become longer, shorter, perhaps staccato or accented, without any of these markings being present in the written part.

Sibelius itself does not allow articulations to be hidden independently of the note to which they are attached, making this sort of phrasing difficult as it will clutter the score with markings that are desired for playback alone, not in print. However, a solution can be found in a third-party plugin **Hide or Show Articulations**, which, as the name suggests, allows articulation markings to be entered for playback sake and then hidden so they do not print. Simple and elegant, it solves an important problem and is highly recommended.



The **Hide or Show Articulations** plugin was developed by Roman Molino Dunn and is available from his website <u>The Music Transcriber</u>.

8. Common Terms

While working with the sound set, reading this manual, or corresponding with The Sound Set Project, you may encounter unfamiliar terms. To alleviate confusion and improve understanding, some common terms associated with the integrations are given below.

ASIO

A low-latency audio driver for Windows systems that accesses sound hardware directly, improving performance.

AU

Audio Unit, the native Mac OS X plugin format.

Audio Interface (Sound Card/Chip)

The interface used to route audio signal to and from the computer.

Automatic Loading

A feature available to certain software plugins whereby Sibelius is able to load required instrument sounds without user input.

Device

Encompassing term for software plugins and hardware MIDI modules.

External Host

Third-party software used to load virtual instruments, possibly on a different computer. An external host may communicate with Sibelius via virtual or physical MIDI connections or other proprietary software interface.

Host (Program)

The software application in which virtual instrument plugins are loaded and configured. Plugins loaded (activated) in Sibelius are said to be hosted in Sibelius.

House Style

A set of rules, settings, and preferences that establish a score's layout, appearance, playback capabilities, and more.

Latency

The time between an instruction to play a note and when that note actually sounds.

Manual Sound Set

Instrument channel and device assignments. Part of a playback configuration.

Manuscript (template)

A Sibelius file containing customized settings, such as those found in a House Style, used as a template when creating a new score.

Playback Configuration

Parameters that determine what plugin(s) or device(s) a score will use for playback.

Playback Dictionary

Assigns sound ID changes and other MIDI functions to notation markings.

Plugin

A software virtual instrument.

Plugin Instance

An active software device in a playback configuration. A plugin that has been activated once is said to be "one instance", twice is "two instances", etc.

Sound ID

A SoundWorld identifier for instrument sounds and articulations.

Sound Set

Instructions that tell Sibelius what sounds a sample library or hardware device contains and how to use those sounds.

SoundWorld

Defines and establishes the relationship between sounds using sound IDs.

Standalone

Use of a virtual instrument as its own program rather than as a plugin within Sibelius or another host. Not all virtual instruments provide a standalone software program.

VST(i)

Virtual Studio Technology (Instrument), a common plugin format for virtual instruments available on both Mac and Windows systems.

x86 / x64

Shorthand indications for software architecture. x86 refers to 32-bit, and x64 to 64-bit.

9. Contact and Support

A number of resources are available if you run into trouble using the sound set, including our Knowledge Base with articles describing common issues, error messages, behaviors, tips, and more. If you don't find an answer to your question, or have additional concerns, you can submit a support ticket or contact support directly by email and we'll work with you to resolve the issue. Please note that while support can be contacted directly, submitting a ticket allows us to process your request more efficiently.

FAQ:	www.soundsetproject.com/support/faq/
Knowledge Base:	www.soundsetproject.com/support/kb/
Submit a Support Ticket:	www.soundsetproject.com/support/
Email Technical Support:	support@soundsetproject.com

All other (non technical support) inquiries can be submitted via our website, or you can contact us using the information below.

On the Web:	www.soundsetproject.com/company/contact/
General Inquiries:	<u>info@soundsetproject.com</u>
Orders/Sales:	orders@soundsetproject.com
Postal Mail:	The Sound Set Project
	Sound Notes LLC
	PO Box 811
	Bowling Green, OH 43402

10. Credits

Integration The Sound Set Project

Project Lead

Jonathan Loving

User Manual

Joel Avery Jonathan Loving

Musical Excerpts

W. A. Mozart, *Horn Concerto No. 3 in E flat major, K.447* (p. 37) Richard Strauss, *Horn Concerto No. 1 in E flat major* (p. 31)

Special Thanks

Sam Butler Chelsea Myers Daniel Spreadbury

