



KITHARA

2

Table of Contents

1. Disclaimer	1
2. Welcome to Kithara	2
Document conventions	3
3. Installation and setup	4
Installing Kithara using Native Access	4
Loading Kithara in Kontakt	4
4. Kithara overview	6
Layer Inspector	7
Performance controls	8
5. Source browsers	9
6. Snapshots	10
Snapshots overview	10
Loading a Snapshot	10
Saving a User Snapshot	11
Deleting a User Snapshot	12
7. Layers page	13
Sound panel	13
Shape panel	14
Mapping panel	16
8. Fragments page	18
Quickly randomizing the fragments	18
Variation Slots panel	19
Voices panel	23
Harmony panel	24
9. Effects page	27
Character effects	27
Mix effects	30
10. Settings page	33
Velocity settings	33
Transpose settings	34
Tightness setting	34
Resonance setting	34
Aftertouch settings	35
11. Modulating your sound	37
Assigning parameters to the Modwheel slider	37
Removing parameter assignments	38
Which parameters can be modulated?	38
12. Credits	39

1. Disclaimer

The information in this document is subject to change without notice and does not represent a commitment on the part of Native Instruments GmbH. 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 Native Instruments GmbH, hereinafter referred to as Native Instruments.

“Native Instruments”, “NI” and associated logos are (registered) trademarks of Native Instruments GmbH.

All other trademarks are the property of their respective owners and use of them does not imply any affiliation with or endorsement by them.

Document authored by Nicolas Sidi

Software version: 1.0 (09/2024)

2. Welcome to Kithara

From classical, flamenco, and steel guitars to the balalaika, cuatro, and ronroco, enter a world of cinematic guitars with Kithara. Each instrument is recorded in stunning detail, creatively performed, and transformed with rich sound design. From e-bow pads to granular mandolin soundscapes and rhythmic tremolos, Kithara blends raw, organic tones with modern possibilities, letting you craft everything from delicate plucks to sweeping textures.

Kithara's four-layer engine offers deep control of over 350 sound sources. The Attack layer delivers crisp plucks, while the Sustain layers introduce depth with textural loops, strummed beds, e-bow drones, and pads. The Release layer adds natural decay or subtle sound design elements. Transform the tone of each layer with curated Character FX, adding vintage warmth with Degrade, distortion textures with Shatter, or a dreamlike blur with Diffuse.

Kithara's fragments engine introduces granular, fluttering effects, creating evolving harmonic patterns and adding depth and motion to your soundscapes. With precise control over movement and harmony, the Fragments engine lets you shape velocity, pitch, and density. Kithara's flexible modulation system lets you dynamically evolve your sounds in real time. The options page offers advanced customization of the instrument's response and behavior.

This document shows you how to [install and setup](#) Kithara and describes all features in detail, starting with the [overview](#).

We hope you enjoy Kithara!



Document conventions

In this document the following formatting is used to highlight useful information:

<i>Italics</i>	Indicates paths to locations on your hard disk or other storage devices.
Bold	Highlights important names, concepts, and software interface elements.
[Brackets]	References keys on the computer keyboard.
▶	Denotes a single step instruction.
→	Denotes the expected result when following instructions.

The following three icons denote special types of information:



The **light bulb** icon indicates a useful tip, suggestion, or interesting fact.



The **information** icon highlights essential information in a given context.



The **warning** icon alerts you of potential risks and serious issues.

3. Installation and setup

Before making music with Kithara, you must install and set up the necessary software. Follow these instructions to get started.

Installing Kithara using Native Access

Native Access is where you will install the software for Kithara. If you are new to Native Instruments, you will first have to create your Native ID. To learn more about Native Access, visit our [support page](#).

1. Download and install Native Access [here](#).
2. Create a Native ID if you do not yet have one.
3. Login to Native Access using your Native ID.
4. Click the **Available** tab.
5. Click **Install** for the following products:
 - Kithara
 - Kontakt or Kontakt Player

→ The software is installed automatically.



If the software is already installed, click the **Updates** tab and install available updates before proceeding.

Loading Kithara in Kontakt

Once installed, you can start using Kithara in Kontakt. Kithara is not an independent plug-in, so you first need to open an instance of Kontakt or Kontakt Player.

Kontakt offers two ways to load an instrument, the Library browser and the side pane browser.

To load an instrument using the Library browser:

1. Open Kontakt as a plug-in in your host software (DAW) or as a stand-alone application.
2. By default, Kontakt opens the Library browser on first launch. If you have turned this off, click **Library** in Kontakt's header to open the Library browser.
3. Locate Kithara in the Library browser. You can use the search bar to quickly find it.
4. Click on the arrow icon (➤) in the top right corner of the instrument's artwork to load the instrument and its first preset.
5. Alternatively, you can click the instrument's artwork to display its presets in the list on the right of the browser window.
6. Double click any preset to load it. The first entry, identified by a keyboard icon, loads the instrument with its default preset.

To load an instrument using the side pane browser:

1. Open Kontakt as a plug-in in your host software (DAW) or as a stand-alone application.
2. In the side pane on the left, make sure that the **Instruments** category is selected (this should be the case by default), otherwise click **Instruments** to select that category.

3. Locate Kithara 's artwork tile below.
4. Click on the arrow icon (➤) in the top right corner of the instrument's artwork to load the instrument and its first preset.
5. Alternatively, you can click the instrument's artwork to display the list of its presets.
6. Double click any preset to load it. The first entry, identified by a keyboard icon, loads the instrument with its default preset.

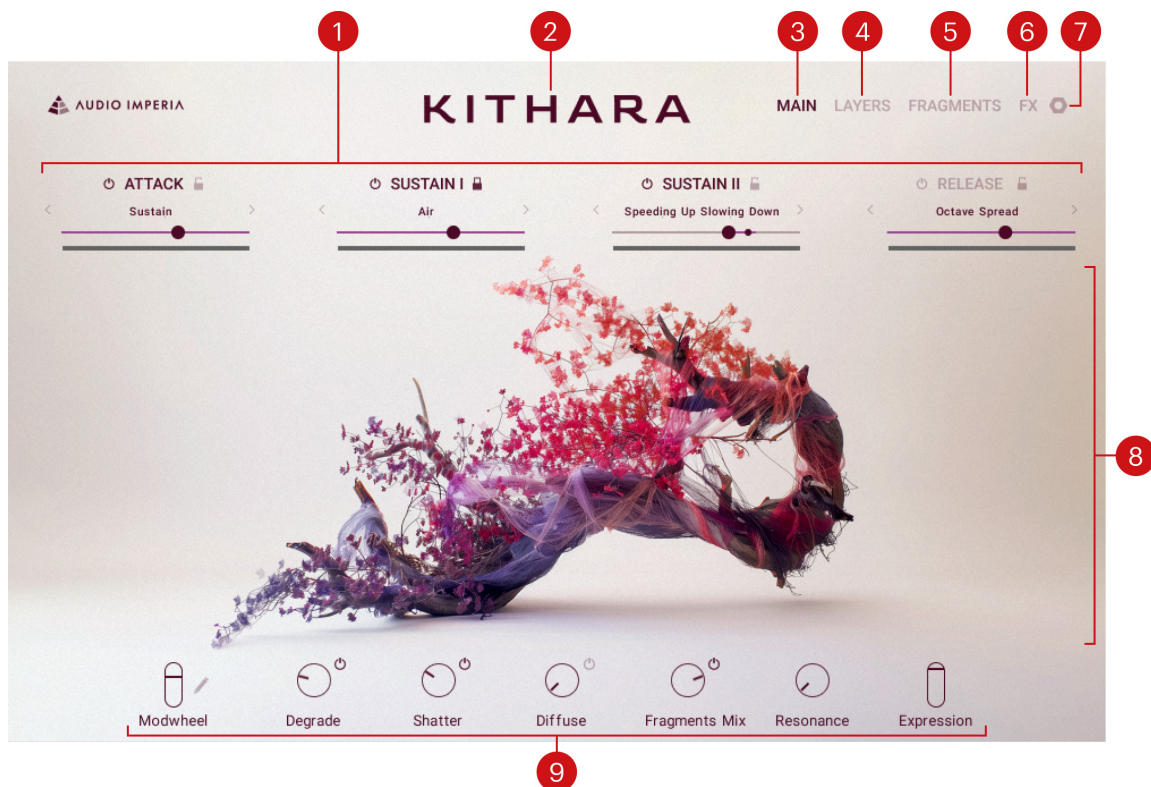


If you are new to Kontakt and want more information, visit [Kontakt Player](#) and [Kontakt](#).

4. Kithara overview

Kithara lets you construct your sound using multiple, time-evolving layers that trigger samples of plucked string instruments. The **Attack**, **Sustain 1**, **Sustain 2**, and **Release layers** form the main parts of the sound: Each layer triggers its own samples, which you can choose from a dedicated set of sources. You can configure the sound of each layer independently. On top of them, the **Fragments layer** adds a cloud of short ghost notes (the “fragments”). While the Fragments layer uses the same set of sources as the Attack layer, it manipulate the samples in a totally different way, using your settings to generate random series of notes that can extend over the entire duration of the sound. Finally, you can process these five layers with a custom selection of effects.

Once you have completed the installation and loaded Kithara in Kontakt, you can start playing the Instrument. Kithara opens with the Main page. The Instrument provides the following key elements and global controls:



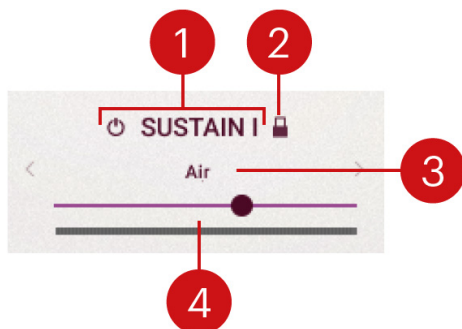
- 1. Layer Inspector:** Contains basic controls for the Attack, Sustain 1, Sustain 2, and Release layers. For each layer, you can switch it on and off, see the source currently in use, switch to another source by clicking the next and previous buttons, browse all available sources by clicking the source name, adjust the layer volume, and lock this layer to keep it untouched as you switch to another Snapshot. The Layer Inspector is visible on the Main and Layers pages. Refer to [Layer Inspector](#).
- 2. About:** Click the instrument name to open the About screen, which displays the credits for this instrument.
- 3. MAIN:** Opens the Main page, which shows the artwork depicted above. This is the default page that appears when you load the Instrument in Kontakt.
- 4. LAYERS:** Opens the Layers page, where you can adjust the settings of the Attack, Sustain 1, Sustain 2, and Release layers, which make up the main sound components of Kithara. Refer to [Layers page](#).

5. **FRAGMENTS:** Opens the Fragments page, which lets you set up an additional Fragments layer. The Fragments layer uses its own source samples, parameters, and effects to create a cloud of ghost notes that adds subtle sonic details to your sound textures. Refer to [Fragments page](#).
6. **FX:** Opens the Effect page, where you can configure various effects that will process the sound of your instrument. Refer to [Effects page](#).
7. **Settings** (nut icon): Opens the Settings page, which provides global parameters adjusting the transposition and the keyboard response. Refer to [Settings page](#).
8. **Central area:** This is the biggest part of the instrument and it shows the various pages and Browsers.
9. **Performance controls:** Provide a set of controls and shortcuts directly available while playing the Instrument. The Performance controls are always visible except on the Settings page. Refer to [Performance controls](#).

Layer Inspector

The Layer Inspector contains a basic set of controls for each of the four main layers: Attack, Sustain 1, Sustain 2, and Release. It is visible on the [Main page](#) (the default page) and on the [Layers page](#).

For each layer, the Layer Inspector contains the following elements:



1. **Layer On/Off:** Activates or deactivates the layer. Deactivating a layer will deactivate any new notes in that layer while leaving the sound of existing notes untouched.
2. **Lock:** Prevents the layer from being changed. When Lock is activated, the layer settings stay untouched when loading other Snapshots.
3. **Layer Source selector:** Displays the name of the source sample used in the layer. You can click the source name to open the layer's [Source browser](#) and select another source for that layer. Alternatively, you can click the left and right arrows to quickly load the previous or next source from the browser's result list without opening the browser.
4. **Layer Volume slider:** Adjusts the volume level of the layer. As you play, the horizontal meter below shows the layer's current level.



The four Layer Volume sliders can be modulated using the **Modwheel** slider. For more information on how to assign parameters to the **Modwheel** slider, refer to [Modulating your sound](#).


Performance controls


The Performance controls contain five knobs and one slider that are preassigned to the most useful parameters when playing live, and a modulation slider that you can freely assign to the parameters of your choice. The Performance controls are available at the bottom of all pages except the Settings page. You can adjust them in real-time or automate them in your DAW to add more expression to your music.

The Performance controls contain the following elements:



- **Modwheel:** You can assign any number of parameters to the Modwheel slider, which allows you to **control them all at once** from this slider, from your MIDI keyboard, or from your DAW. Click the little pen icon next to the Modwheel control to **change your parameter assignments**.
- **Degrade:** Adjusts the amount of **Degrade effect** applied to the sound. The on/off switch at the top right turns the effect on or off.
- **Shatter:** Adjusts the amount of **Shatter effect** applied to the sound. The on/off switch at the top right turns the effect on or off.
- **Diffuse:** Adjusts the amount of **Diffuse effect** applied to the sound. The on/off switch at the top right turns the effect on or off.
- **Fragments Mix:** Adjusts the volume of the **Fragments layer**. The on/off switch at the top right turns the Fragments layer on or off completely. Note that the switch affects only the next played notes, leaving any already sounding notes untouched.
- **Resonance:** Adjusts the amount of sympathetic resonances between the strings. Increasing these resonances creates a fuller and deeper sound.
- **Expression:** Adjusts the overall volume of the instrument.

 The **Resonance** control is equivalent to the Resonance control in the [Settings page](#).

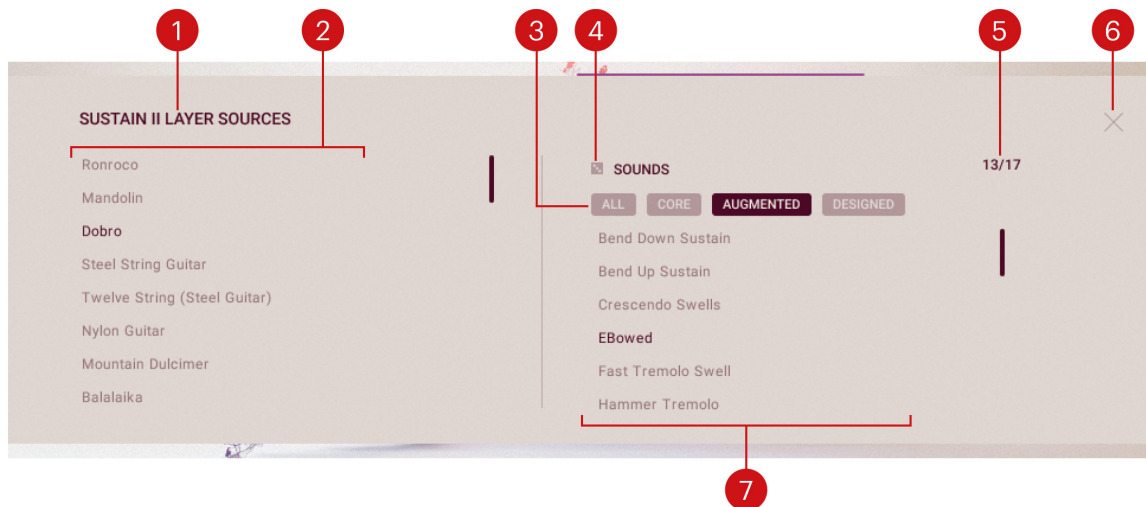
 Except for the **Expression** slider, the Performance controls can be modulated using the **Modwheel** slider on the left. For more information on how to assign parameters to the **Modwheel** slider, refer to [Modulating your sound](#).

5. Source browsers

Kithara lets you browse and load the samples used as sources in the five layers of the instrument:

- For the main four layers (Attack, Sustain 1, Sustain 2, and Release), you can browse the source samples by clicking the respective source names displayed in the [Layer Inspector](#).
- For the Fragments layer, you can browse the source samples by clicking the source name displayed in the Source section of the [Variation Slots panel](#) in the Fragments page.

In any case, a Source browser opens and provides the following elements:



1. **Browser name:** Indicates the layer for which you are browsing source samples.
2. **Instrument filter:** Clicking an instrument from the list will narrow the Sounds list to the samples from that instrument. Only one instrument can be selected at a time. The scroll bar on the right lets you display the remaining entries.
3. **Processing filter:** Clicking a processing category will narrow the Sounds list to the samples in that category. The following categories are available: **CORE** (traditional guitar techniques / playing techniques), **AUGMENTED** (unconventional articulations), and **DESIGNED** (processed samples). You can click multiple categories to show samples from any of them, or **ALL** to show samples from all categories.
4. **Select Random (dice):** Randomly selects an entry from the current Sounds list.
5. **Counter:** Shows the number of results in the Sounds list compared to the number of samples available for the selected instrument.
6. **Close (X):** Closes the Source browser.
7. **Sounds list:** Shows the source samples available for that layer in the selected instrument and processing category. The loaded sample is highlighted. You can click another sample from the list to load it into the layer. The scroll bar on the right lets you display the remaining entries.

6. Snapshots

Snapshots are Kontakt's underlying file format for instrument presets. They offer a quick and convenient way of browsing for new sounds and saving custom presets. When a User Snapshot is saved, all parameter adjustments and instrument settings are stored within the preset. Using Snapshots, you can create your own preset sounds, save them in the .nksn file format and use them in other projects, across computers or even share them with other users.

Snapshots overview

Snapshots contain the parameters and controls:



1. **Load Snapshot:** Opens the Snapshot menu where you can load a Snapshot from the **Factory** or **User** library. For more information, refer to [Loading a Snapshot](#).
2. **Snapshot Name:** Displays the name of the currently selected Snapshot.
3. **Snapshot Previous/Next** (<> icons): Allows you to quickly browse and load Snapshots. Pressing an arrow icon will load the previous or next Snapshot in the selected category. If no Snapshot is active, the first Snapshot on the list will be loaded. For more information, refer to [Loading a Snapshot](#).
4. **Save Snapshot** (floppy disk icon): Allows you to save changes made to a sound. When a User Snapshot is saved, the macros settings, parameter controls, and sequence are stored within it and can be accessed at any time via the **User** library. For more information, refer to [Saving a User Snapshot](#).
5. **Delete Snapshot** (bin icon): Deletes the currently selected Snapshot from the **User** library. You can only delete **User** Snapshots and not **Factory** Snapshots. For more information, refer to [Deleting a User Snapshot](#).
6. **Snapshot View** (camera icon): Provides access to the Snapshot features described above; saving, loading, browsing, and deleting. When **Snapshot View** is selected, configuration settings and features relating to the **Info View** are replaced in the display.

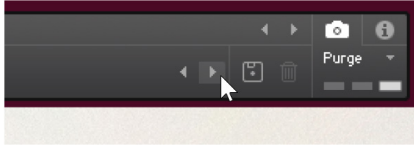
Loading a Snapshot

Snapshots are loaded from the drop-down menu in the top header of the instrument. You can also use the arrows to the left of the floppy disk icon to load the previous or next preset.

To load and browse Snapshots using the arrow icons:

1. Click the Snapshot View (camera icon) to open Snapshot view.

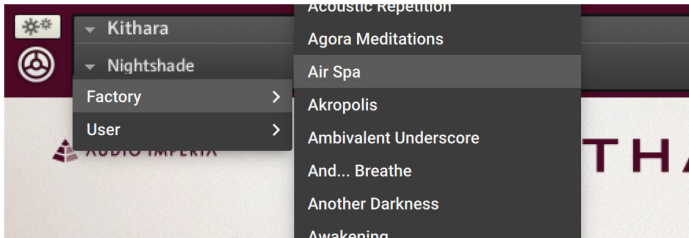
- Click the arrow icons (<>) in the Snapshot header to browse through the Snapshots list.



→ The previous or next Snapshot will load immediately each time an arrow icon is clicked.

To load a Snapshot from the library:

- Click the Snapshot View (camera icon) to open Snapshot view.
- Click the arrow icon next to the Snapshot name field to open the Snapshot menu.
- Select the **Factory** category to load a Factory preset, or select the **User** category to load one of your own Snapshots.
- Select an instrument category, if available.
- Select a Snapshot to load it.



→ The loaded Snapshot is displayed in the instrument header.

i The **User** category will not appear until you have first saved a Snapshot.

Saving a User Snapshot

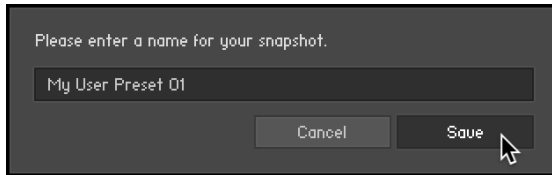
User Snapshots can be saved at any time while you are working in Kontakt using the Instrument Header. When a sound parameter has been adjusted, that Save button (disk icon) becomes active.

i If you are using Kontakt's Default view, the Instrument Header can be shown or hidden from the **View** menu in the Kontakt Header.

To save a Snapshot:

- Click the Snapshot View button (camera icon) to open Snapshot view.
- Click the Save button (floppy disk icon).
- Enter a name for your new Snapshot in the **Save** dialog box.

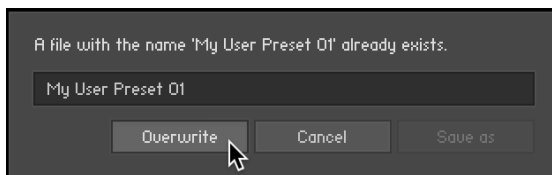
4. Click **Save** to finish the process and close the dialog box.



- Your Snapshot .nksn file is saved to the User Snapshot Library. It appears in the **User** Snapshot list.

To overwrite a Snapshot:

1. Click the Snapshot View button (camera icon) to open Snapshot view.
2. Click the Save button (floppy disk icon).
3. Click **Overwrite** to confirm the process.

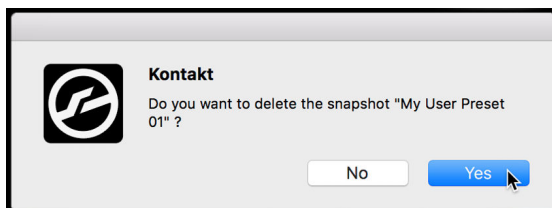


- Your Snapshot .nksn file is saved to the User Snapshot Library, in replace of the old file.

Deleting a User Snapshot

Snapshots can be deleted using the bin icon in the instrument header. To delete a User Snapshot:

1. Click the Snapshot view (camera icon) to open Snapshot view.
2. Load the User Snapshot you wish to delete.
3. Click the **Delete** button (bin icon).
4. Confirm deletion of the Snapshot by selecting **Yes** in the dialog box.



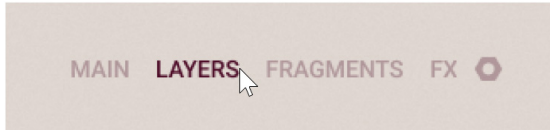
- The User Snapshot .nksn file is deleted from the User Snapshot Library.

7. Layers page

The Layers page lets you configure the four main layers of your instrument: Attack, Sustain 1, Sustain 2, and Release.

To display the Layers page, do the following:

- ▶ Click **LAYERS** at the top right of the instrument to display the Layers page.



Like the Main page, the Layers page shows the [Layer Inspector](#) in its upper part. Below, the Layers page includes three panels, each adjusting a different aspect of the four layers. You can display either panel by clicking the **SOUND**, **SHAPE**, or **MAPPING** button at the bottom of the page:



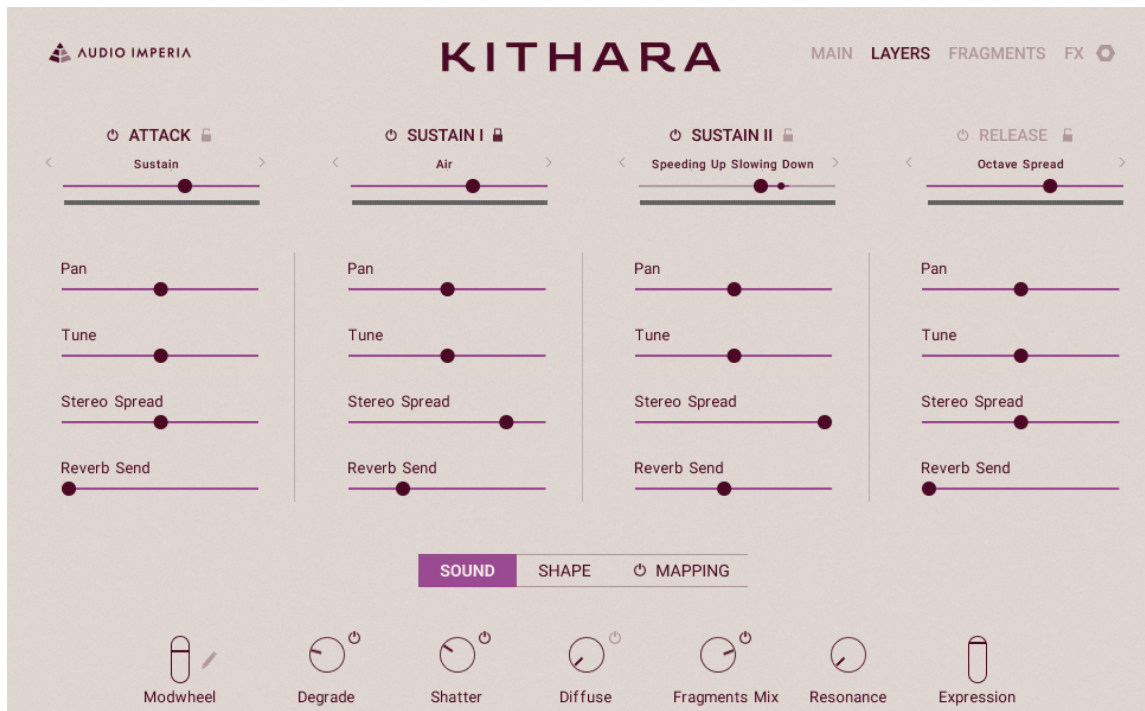
- **SOUND**: Opens the [Sound panel](#), which provides tonal and spatial controls for the various layers.
- **SHAPE**: Opens the [Shape panel](#), which lets you modify the amplitude envelope of each layer and apply a low-pass and a high-pass filters to each of them.
- **MAPPING**: Opens the [Mapping panel](#), where you can customize the key range that will trigger the Sustain 1 and Sustain 2 layers.

Sound panel

The Sound panel provides a set of tonal and spatial controls for the four layers.

To display the Sound panel, do the following:

- ▶ Click **SOUND** at the bottom of the Layers page to display the Sound panel.
- The Sound panel appears in the Layers page and you can adjust its parameters.



For each of the four layers, the Sound panel provides the following controls:

- **Pan:** Adjusts the position of the layer in the stereo field.
- **Tune:** Adjusts the pitch of the layer from -12 to +12 semitones.
- **Stereo Spread:** Narrows or widens the layer across the stereo field.
- **Reverb Send:** Adjusts how much of the layer is sent to the [Space effect](#). The Space effect will process the layer according to its Response setting, but independently from its on/off state, **Wet/Dry** setting, and **Pre-Delay** value.



All the parameters in this panel can be modulated using the **Modwheel** slider. For more information on how to assign parameters to the **Modwheel** slider, refer to [Modulating your sound](#).

Shape panel

The Shape panel lets you modify the amplitude envelopes of your four layers, and apply a low-pass and a high-pass filters to each of them.

To display the Shape panel, do the following:

- ▶ Click **SHAPE** at the bottom of the Layers page to display the Shape panel.
- The Shape panel appears in the Layers page and you can adjust its parameters.



At the top, the Shape panel provides a **VOLUME ENVELOPE** section with the following controls for each layer:

- **Attack:** Adjusts the time taken by the layer to reach its maximum level once you have pressed the key.
- **Decay** (Sustain 1 and 2 layers only): Adjusts the time taken by the layer to move from its maximum level to the Sustain level.
- **Sustain** (Sustain 1 and 2 layers only): Adjusts the level of the layer when you hold the key depressed. This level is measured as a drop compared to the maximum level: With the knob at full left (**-inf dB**) there is no sustain sound; at full right (**0 dB**) there is no level drop, the layer staying at its maximum level as long as you hold the key depressed.
- **Release:** Adjusts the time taken by the layer to fade out once you have released the key.

i While the Attack, Sustain 1, Sustain 2, and Release layers of Kithara have names describing the type of sound they contain, each of them can have its own amplitude envelope including multiple steps (attack, release, etc.). Only the decay and sustain steps are not relevant for the Attack and Release layers, since their sources do not include any sustained, continuously sounding part.

Below, the Sound panel provides a **FILTERS** section with the following controls for each layer:

- **High pass:** Adjusts the cutoff frequency of a high-pass filter applied to the layer. Dragging the slider to the right will progressively remove more low-frequency content.
- **Low pass:** Adjusts the cutoff frequency of a low-pass filter applied to the layer. Dragging the slider to the left will progressively remove more high-frequency content.



Except for the **Decay** and **Sustain** knobs in the Sustain 1 and 2 layers, all the parameters in this panel can be modulated using the **Modwheel** slider. For more information on how to assign parameters to the **Modwheel** slider, refer to [Modulating your sound](#).

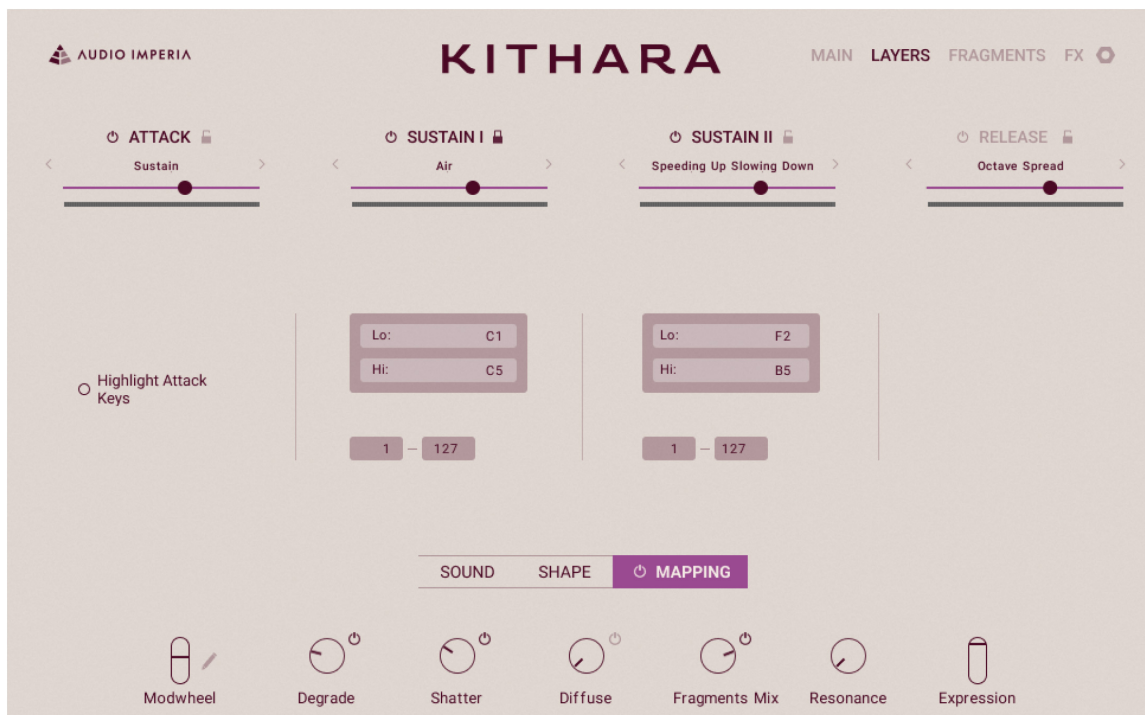
Mapping panel

The Mapping panel allows you to activate custom key and velocity ranges for the Sustain 1 and Sustain 2 layers as well as highlight the keys for the Attack layer.

To display the Mapping panel, do the following:

► Click **MAPPING** at the bottom of the Layers page to display the Mapping panel.

→ The Mapping panel appears in the Layers page and you can adjust its parameters.



The Mapping panel provides the following controls:

- **Mapping On/Off** (next to the **MAPPING** label at the bottom): Activates or deactivates custom key and velocity ranges for the Sustain 1 and Sustain 2 layers, and custom coloring for the Attack layer. When this is off, the other controls of the Mapping panel have no effect and all four layers have the same key range, velocity range, and color.
- **Key Range** (Sustain 1 and Sustain 2 layers only): The **Lo:** and **Hi:** fields respectively define the lowest and highest keys that will trigger that layer. You can adjust either key by clicking the field and dragging your mouse vertically.
- **Velocity Range** (Sustain 1 and Sustain 2 layers only): The left and right fields respectively define the lowest and highest velocities that will trigger that layer. You can adjust either velocity by clicking the field and dragging your mouse vertically.

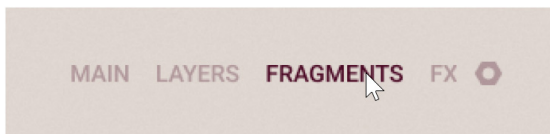
- **Highlight Attack Keys** (Attack layer only): When this is on, the key range for the Attack layer appears in a different color on Kontakt's on-screen keyboard and on the Light Guide of the Kontrol S-Series keyboards. If the key ranges for different layers overlap, the highlighted Attack layer is shown on top of the other layers.

8. Fragments page

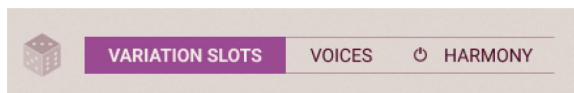
The Fragments page lets you configure the Fragments layer. The Fragments layer generates a cloud of ghost notes (the “fragments”) acting almost like an granular fluttering effect over the top of the four main layers. It triggers random complex sequences of notes that subtly alter the range of the instrument being played.

To display the Fragments page, do the following:

- ▶ Click **FRAGMENTS** at the top right of the instrument to display the Fragments page.



The Fragments page includes three panels controlling different aspects of the fragment generation. You can open either panel by clicking the **VARIATION SLOTS**, **VOICES**, or **HARMONY** button at the top of the page:

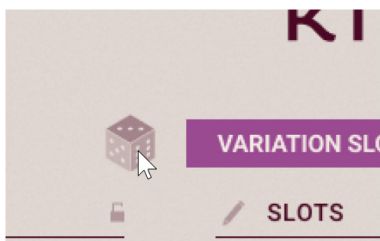


- **VARIATION SLOTS:** Opens the [Variation Slots panel](#), which lets you select the samples used for the fragments and configure the velocities and effects in the fragment cloud.
- **VOICES:** Opens the [Voices panel](#), where you can define the key range and voice assignment logic used for generating new fragments.
- **HARMONY:** Opens the [Harmony panel](#), where you can specify the pitches of the generated fragments in relation to the keys played on the keyboard.

Alternatively you can create a new [random fragment cloud](#) in one go.

Quickly randomizing the fragments

You can quickly generate a new, random cloud of fragments by clicking the big dice icon left of the panel tabs:



- ▶ Click the Randomize Fragments button (showing a big dice icon) to set random values for the parameters on all panels of the Fragments page at once.
- A completely new fragment cloud is created.



When randomizing the fragment cloud, the parameters located in a section with an active lock will be kept untouched. For example, you could compare different random clouds of the current source by activating the lock on the Source section of the Variation Slots panel before clicking the Randomize Fragments button.



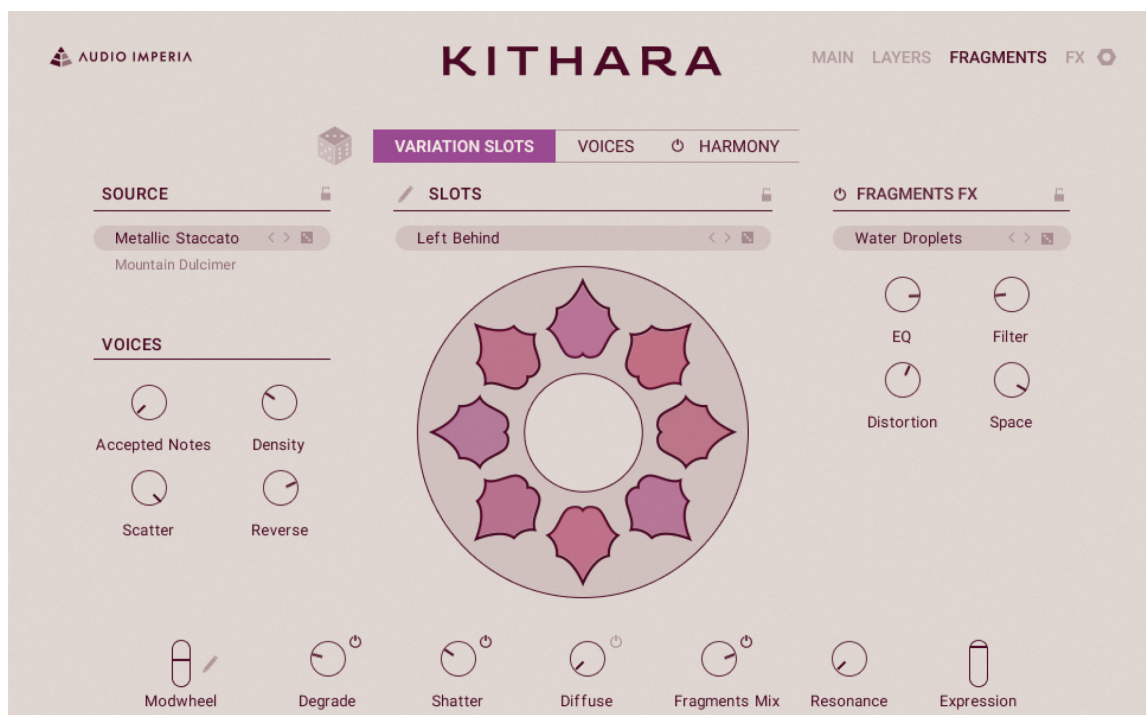
You can also randomize specific aspects of the fragment cloud in the [Variation Slots panel](#).

Variation Slots panel

In the Variation Slots panel you can select the samples used for the fragments, adjust the overall shape of the fragment cloud, and configure the eight variations that will be randomly triggered as fragments.

To display the Variation Slots panel, do the following:

- ▶ Click **VARIATION SLOTS** at the top of the Fragments page to display the Variation Slots panel.
- The Variation Slots panel appears and you can adjust its parameters.

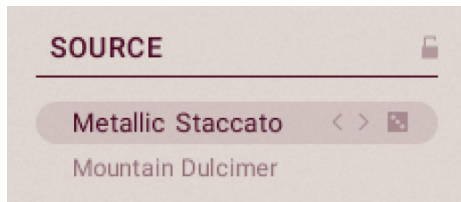


The Variation Slots panel includes the following sections: [Source](#), [Voices](#), [Slots](#), and [Fragments Effects](#).

Source

The Source section lets you select the samples used as source to generate the fragments.

The section contains the following controls:



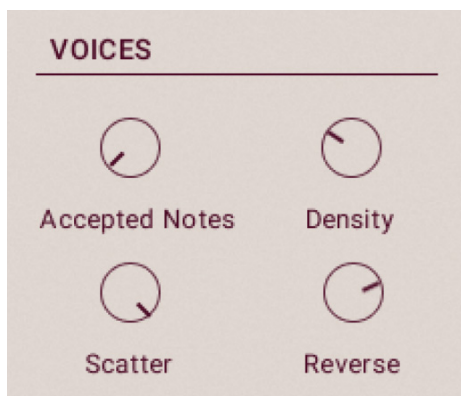
- **Fragment Source selector:** Displays the name of the source used to generate the fragments. You can click the source name to open the layer's [Source browser](#) and select another source for the Fragments layer. Alternatively, you can click the left and right arrows to quickly load the previous or next source from the browser's result list without opening the browser. You can also click the little dice icon on the right to randomly select a source from the browser's result list. Below the selector, a lighter label indicates the instrument from which the source is originating in the Source browser.
- **Lock:** If you activate the lock, the selected source will be preserved when you [randomize the fragment cloud](#) or when you load another [Snapshot](#).

i The Source browser in the Fragments layer provides the same sources as in the Attack layer. However, these are used in a completely different way.

Voices

The Voices section lets you adjust a few key settings that will affect the overall shape of the fragment cloud.

The section contains the following controls:



- **Accepted Notes:** Sets the maximum number of held keys that will generate fragments. The available values range from **1** (only one held key will be used to generate fragments) to **8** (default value). If you hold more keys than the number set here, some of them will not generate any fragments. The choice of the keys used for generating fragments depends on the rule selected in the Voice Assignment section of the [Voices panel](#).
- **Density:** Adjusts the maximum delay between two successive fragments. The actual delays between fragments will be randomly generated below this value. At lower values, the delays between fragments can get longer, resulting in a sparser cloud. At higher values, the delays are kept shorter, resulting in a denser cloud.
- **Scatter:** Adjusts the maximum spread of the fragments in the stereo field. The actual stereo position of each fragment will be randomly generated below this limit. At full left, all the fragments will be set to the center. At full right, the fragments will spread across the entire stereo field.

- **Reverse:** Adjusts the probability that a fragment is played reversed. At full left, all the fragments are played forward. As you raise the value, more fragments are played reversed. At full right, all the fragments are played reversed.



All the parameters in this panel can be modulated using the **Modwheel** slider. For more information on how to assign parameters to the **Modwheel** slider, refer to [Modulating your sound](#).

Slots

The Slots section lets you configure in detail the pool of eight variations from which the generated fragments will take their characteristics.

The section contains the following controls:



- **Slot Edit button** (pen icon): Activates or deactivates the [Slot Edit mode](#), which lets you adjust the settings of each variation slot individually.
- **Lock:** If you activate the lock, the variation slots will be preserved when you [randomize the fragment cloud](#) or load another [Snapshot](#).
- **Pool Preset selector:** Selects from a list of presets for the entire pool of variations. Each preset includes a set of eight variations with individual velocities and effect settings. You can also click the left and right arrows to switch to the previous or next pool preset, or click the little dice icon on the right to randomly select a preset from the list.
- **Variation Pool:** The picture represents the current variation pool and its eight variation slots. Each slot contains a variation with specific values for five different settings: the velocity and the four effect amounts (EQ, Filter, Distortion, and Space). Each new fragment being generated will take the velocity and effect amounts of one random variation from the pool. In the picture, each setting is represented by a distinct color, while the color transparency indicates the setting value: Lower values have faded, transparent colors, and higher values have plain, bright colors.

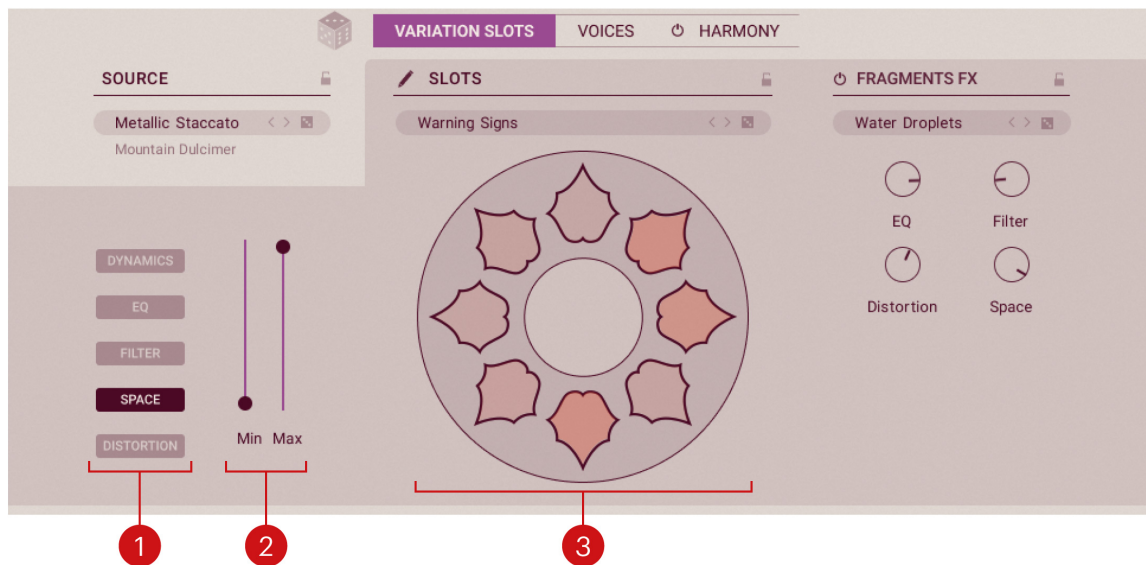
Editing the variation slots

Instead of selecting ready-made presets from the [Pool Preset selector](#) that will replace the entire pool of variations, you can also adjust the settings of each variation slot manually. For this task, the Variation Slots panel provides the Slot Edit mode:

- To activate or deactivate the Slot Edit mode, click the Slot Edit button showing a pen icon at the top left of the Slots section.



When the Slot Edit mode is on, the Variation Slots panel provides a set of additional editing tools:



- Setting selector:** Selects a setting for editing. The selected setting is highlighted and the remaining editing tools let you modify the values for this particular setting on each variation slot. The following settings are available in the variation slots: **DYNAMICS** (velocity), **EQ**, **FILTER**, **SPACE**, and **DISTORTION**.
- Min and Max sliders:** Respectively adjust the minimum and maximum possible values for the selected setting on all variation slots. As you move either slider, the values of all variation slots are adjusted proportionally, which is mirrored in the Variation Pool colors.
- Variation Pool:** In Slot Edit mode the Variation Pool shows only the color of the setting selected on the left. You can adjust the value stored in each slot for that particular setting by clicking the slot and dragging your mouse vertically. As you adjust the value, the color intensity of the slot changes (faded colors for lower values, brighter colors for higher values).

i For the four effect amount settings (**EQ**, **FILTER**, **SPACE**, and **DISTORTION**), the values that you set in the slots will be taken relatively to the maximum value specified for that effect in the [Fragments Effects](#) section.

💡 The **Min** and **Max** sliders for each setting can be modulated using the **Modwheel** slider. For more information on how to assign parameters to the **Modwheel** slider, refer to [Modulating your sound](#).

Fragments effects

The Fragments Effects section lets you configure a collection of effects applied to the fragments.

The section contains the following controls:



- **Fragments Effects On/Off:** Turns the effects on or off.
- **Lock:** If you activate the lock, the effect settings will be preserved when you [randomize the fragment cloud](#) or when you load another [Snapshot](#).
- **Effect Preset selector:** Selects a preset from a list of predefined multi-effect combinations. Each multi-effect includes an equalization, a filter, a distortion, and a reverb, although their type might differ between presets. You can also click the left and right arrows to switch to the previous or next multi-effect preset, or click the little dice icon on the right to randomly select a preset from the list.
- **EQ, Filter, Distortion, and Space:** Respectively adjust the maximum amount of equalization, filtering, distortion, and reverberation that can be applied to the fragments. The actual amount of either effect will differ with each variation slot according to the settings in the [Slots section](#).

i Regardless of these fragment-specific effects, the Fragments layer is also processed together with the other layers by the Character and Mix effects available in the [Effects page](#).

💡 The four effect amount knobs (**EQ, Filter, Distortion, and Space**) can be modulated using the **Modwheel** slider. For more information on how to assign parameters to the **Modwheel** slider, refer to [Modulating your sound](#).

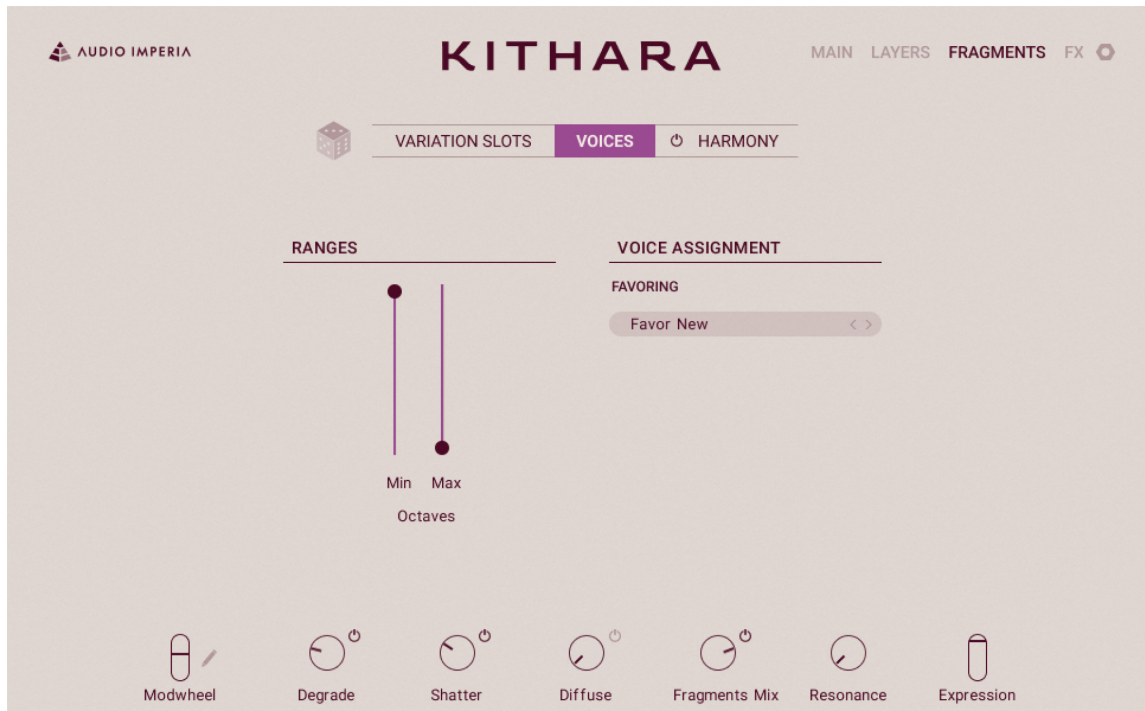
Voices panel

In the Voices panel you can define the key ranges and the voice assignment logic used for generating new fragments.

To display the Voices panel, do the following:

► Click **VOICES** at the top of the Fragments page to display the Voices panel.

→ The Voices panel appears and you can adjust its parameters.



The Voices panel includes two sections: Ranges and Voice Assignment.

The **Ranges section** lets you choose how far the fragment pitches can get in comparison to the original played key. The following controls are available:

- **Octaves Min:** Sets how many octaves below the played key are available for generating fragments. The values range from **0** octave (slider at the top, default value) to **-3** octaves (slider at the bottom).
- **Octaves Max:** Sets how many octaves above the played key are available for generating fragments. The values range from **0** octave (slider at the bottom, default value) to **+3** octaves (slider at the top).

The **Voice Assignment section** lets you specify the logic in use when assigning voices for the new fragments. The following control is available:

- **Favoring selector:** In case you are holding more keys than the **Accepted Notes** value set in the [Voices section](#) of the Variation Slots panel, you can choose here the rule defining which of the held keys should be used to generate fragments. The following rules are available:
 - **Favor New:** Prioritizes the last played keys over the previous ones.
 - **Favor Old:** Prioritizes the oldest played keys over the newer ones.
 - **Low:** Prioritizes the lowest keys over the higher ones.
 - **High:** Prioritizes the highest keys over the lower ones.
 - **Random:** Randomly selects the keys.

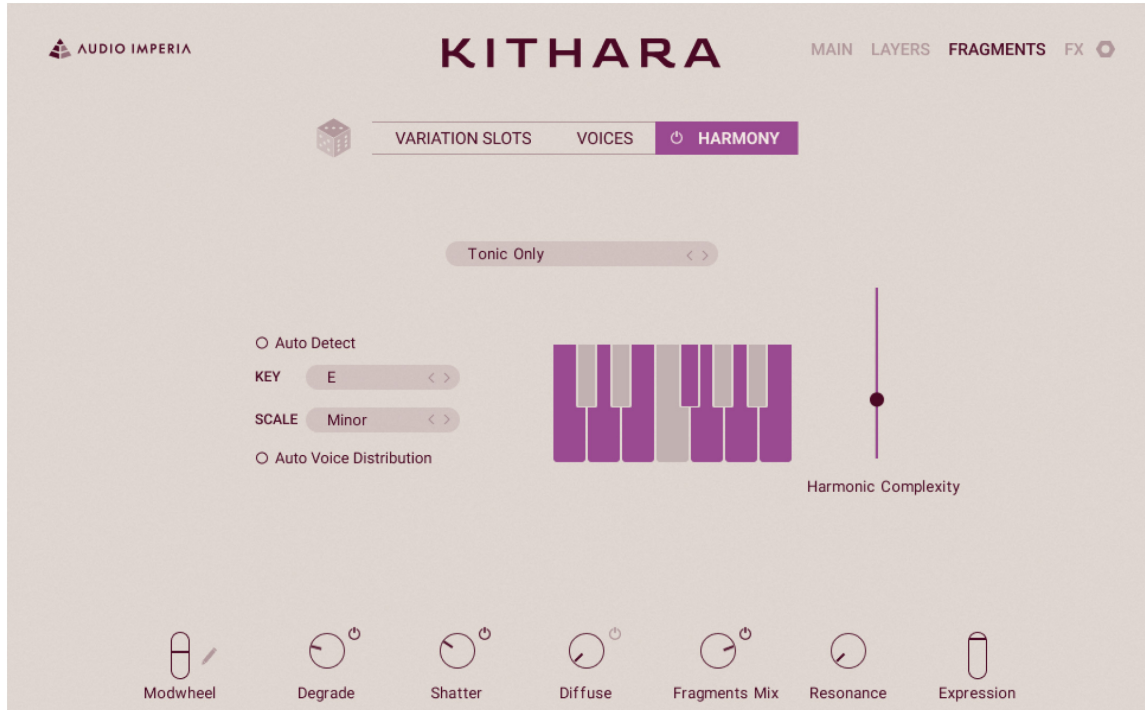
Harmony panel

In the Harmony panel you can specify the pitches of the generated fragments in relation to the notes that you play on the keyboard.

To display the Harmony panel, do the following:

► Click **HARMONY** at the top of the Fragments page to display the Harmony panel.

→ The Harmony panel appears and you can adjust its parameters.



The Harmony panel contains the following controls:

- **Harmony On/Off:** Turns the Harmony feature on or off.
- **Harmony Preset selector:** Selects a preset from a list of custom harmonic modes, which also modify the default Harmonic Complexity level.
- **Keys:** Represent the twelve keys in a keyboard octave and highlights the keys that can be used for the fragment pitches, according to the current settings in the panel. You can click individual keys to add them to, or remove them from the set of pitches available for the fragments.
- **Auto Detect:** Activates or deactivates the automatic detection of the scale based on the notes that you play. When Auto Detect is on, the **KEY** and **SCALE** values are ignored.
- **KEY selector:** Sets the root note for the chosen scale. Click the displayed value to open a menu and select another key as root note, or click the little arrows on the right to select the previous/next key.
- **SCALE selector:** Selects the scale that should be used for the fragment pitches. Click the scale name to open a menu and select another scale, or click the little arrows on the right to select the previous/next scale from the menu.
- **Auto Voice Distribution:** When this control is active, the harmonic complexities are spread across the keyboard. Playing lower keys will tend to generate fragments with a lower harmonic complexity, that is, with pitches closer to the original keys. On the contrary, playing higher keys will allow fragments with a higher harmonic complexity, that is, with pitches further away from the played keys.
- **Harmonic Complexity slider:** Adjusts how far from the original key the fragments' pitches can go. With the slider at the bottom, the fragments will only use the pitches of the notes that you play (or of the root note). As you raise the slider, the fragments will progressively use the next pitches from the scale. With the slider at the top, all the pitches available in the scale will be used.



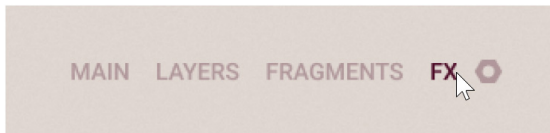
The **Harmonic Complexity** slider can be modulated using the **Modwheel** slider. For more information on how to assign parameters to the **Modwheel** slider, refer to [Modulating your sound](#).

9. Effects page

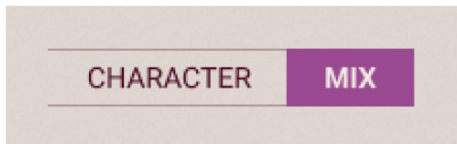
The Effects page lets you configure and apply various effects to the sound of your instrument.

To display the Effects page, do the following:

- ▶ Click **FX** at the top right of the instrument to display the Effects page.



The Effects page includes two panels, each providing a different type of effects. You can display either panel by clicking the **CHARACTER** or **MIX** tab at the top of the page:



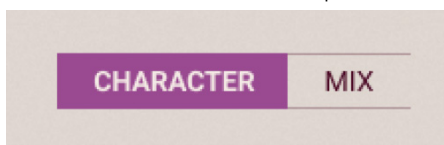
- **CHARACTER:** Opens the Character panel, which lets you adjust the [Character effects](#).
- **MIX:** Opens the Mix panel, which lets you adjust the [Mix effects](#).

Character effects

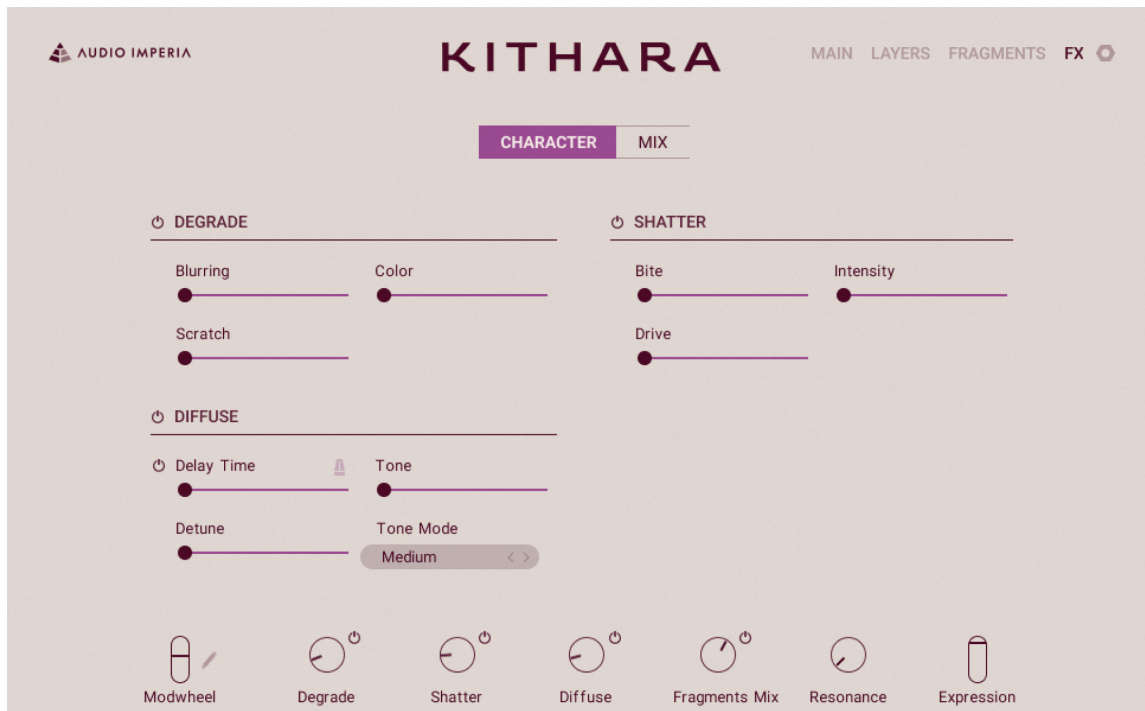
Each Character effect is a custom creation combining multiple effects and automating them to generate an effect that you can use out of the box. It is designed to join the power of an entire effect rack with a reduced set of specially selected controls for an instant effect on the sound, with uncluttered controls and functionality.

To display the parameters of the Character effects, do the following:

- ▶ Click **CHARACTER** at the top of the Effects page to display the Character panel.



- The Character panel appears in the Effects page and you can adjust the parameters of the included effects.



The Character panel contains controls for the three available Character effects: [Degrade](#), [Diffuse](#), and [Shatter](#).

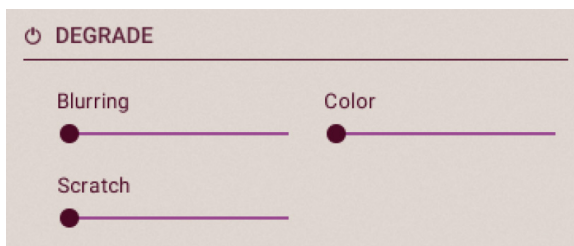


All the continuous parameters of the Character effects can be modulated using the **Modwheel** control. For more information on how to assign parameters to the **Modwheel** control, refer to [Modulating your sound](#).

Degrade

The Degrade effect combines a ladder filter with an aging tape emulation to create a rustic, dated sound.

The Degrade effect contains the following controls:



- **Degrade On/Off:** Turns the Degrade effect on or off.
- **Blurring:** Affects the stereo width, the tape age, and the amount of saturation.
- **Color:** Changes the color of the sound by modifying the filter's cutoff frequency while subtly adjusting the wow effect of the magnetic tape.
- **Scratch:** Adjusts the scraping and the speed of the magnetic tape.

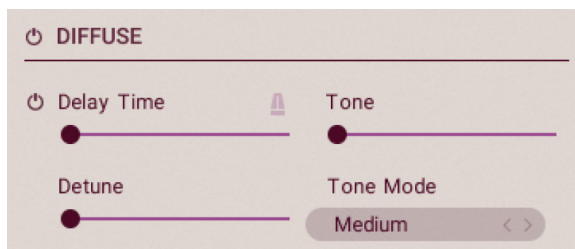


At the bottom of the page, the [Performance controls](#) provide an additional **Degrade** control adjusting the overall amount of Degrade effect applied to the sound. Next to it, the little **on/off switch** mirrors the Degrade On/Off switch described above. The Performance controls are always visible except when the Settings page is displayed.

Diffuse

The Diffuse effect combines an advanced reverberation with a vintage delay unit to create an almost blurred, smudging effect.

The Diffuse effect contains the following controls:



- **Diffuse On/Off:** Turns the Diffuse effect on or off.
- **Delay Time On/Off:** Turns the delay unit on or off. When the delay unit is off, only the reverberation can be heard.
- **Delay Time:** Changes the delay time while introducing a movement in the reverb sound.
- **Sync** (metronome icon): Synchronizes the Diffuse effect with the global tempo of Kontakt.
- **Tone:** Opens the high-cut filter within the reverberation while decreasing the feedback of the delay.
- **Detune:** Detunes the delayed audio while increasing the damping factor of the reverberation.
- **Tone Mode:** Selects from three reverberation modes (**Short**, **Medium**, and **Long**) emulating rooms of different sizes.

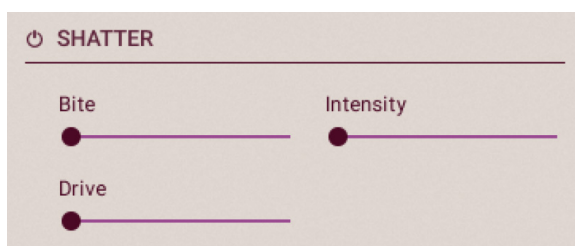


At the bottom of the page, the [Performance controls](#) provide an additional **Diffuse** control adjusting the overall amount of Diffuse effect applied to the sound. Next to it, the little **on/off switch** mirrors the Diffuse On/Off switch described above. The Performance controls are always visible except when the Settings page is displayed.

Shatter

The Shatter effect is a combination of compression, saturation, distortion and vibrato/chorus, allowing the sound of your instrument to become more aggressive.

The Shatter effect contains the following controls:



- **Shatter On/Off:** Turns the Shatter effect on or off.
- **Bite:** Decreases the damping of the high frequencies within the distortion. As a result, it accentuates the brightness caused by the artificial harmonics.
- **Intensity:** Adjusts the intensity of the underlying vibrato/chorus effect.
- **Drive:** Acts as an input gain by reducing the compressor's threshold while increasing its output level.



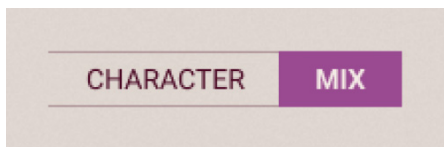
At the bottom of the page, the [Performance controls](#) provide an additional **Shatter** control adjusting the overall amount of Shatter effect applied to the sound. Next to it, the little **on/off switch** mirrors the Shatter On/Off switch described above. The Performance controls are always visible except when the Settings page is displayed.

Mix effects

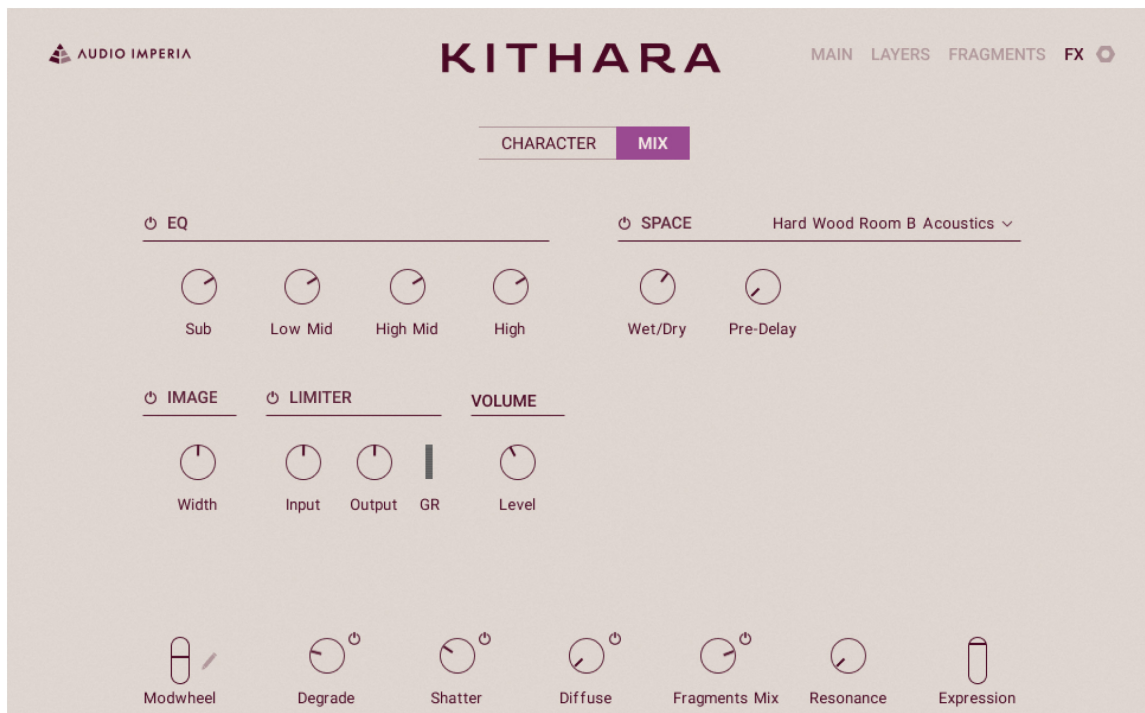
The Mix effects are a set of classic, proven effects that will help you bring out your instrument in the mix.

To display the parameters of the Mix effects, do the following:

- ▶ Click **MIX** at the top of the Effects page to display the Mix panel.



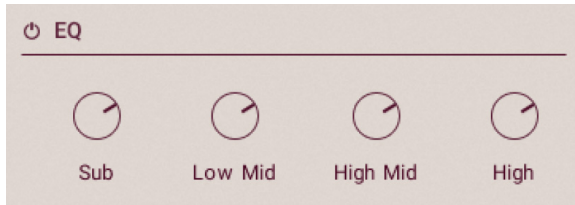
- The Mix panel appears in the Effects page, and you can adjust the parameters of the included effects.



The Mix panel contains controls for the four available Mix effects: [EQ](#), [Image](#), [Limiter](#), and [Space](#), as well as a [Volume](#) level control at the end of the effect chain.

EQ

The Equalizer (or EQ) lets you amplify or attenuate specific frequency ranges of your instrument. It contains the following controls:



- **EQ On/Off:** Turns the Equalizer on or off.
- **Sub:** Adjusts the amount of boost or cut at the low frequencies.
- **Lower Mid:** Adjusts the amount of boost or cut at the low-mid frequencies.
- **High Mid:** Adjusts the amount of boost or cut at the high-mid frequencies.
- **High:** Adjusts the amount of boost or cut at the high frequencies.

Image

The Image effect lets you adjust the stereo width of your instrument. It contains the following controls:

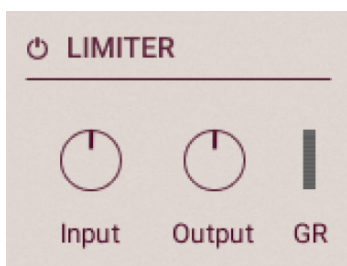


- **Image On/Off:** Turns the Image effect on or off.
- **Width:** Reduces or expands the instrument's stereo width. With the knob at full left, the sound is mono. In the default middle position, the original stereo width is left untouched. Turning the knob further to the right will widen the original stereo image.

Limiter

The Limiter prevents your instrument from getting too loud. It acts as a "safety net" by attenuating short signal peaks to keep them from overloading the output of your instrument, which would result in audio clipping and unwanted distortion artifacts.

The Limiter contains the following controls:



- **Limiter On/Off:** Turns the Limiter on or off.

- **Input:** Sets the gain of the input signal. You can use this control to adjust the input gain until you see the **GR** meter responding only to occasional level peaks.
- **Output:** Adjusts the output level.
- **GR meter:** Shows the amount of gain reduction that the Limiter imposes on the signal. Limiting works best if this meter responds only to occasional level peaks; if it indicates permanent action, it's a sure sign that your **Input** level is set too high, which can degrade the quality of your signal.

Volume

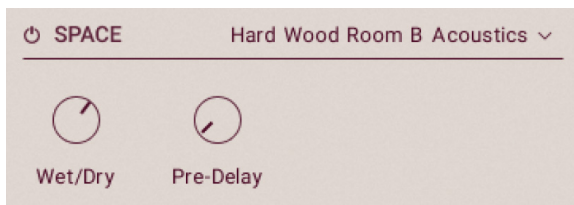
The Volume section contains one control:



- **Level:** Adjusts the output level of the signal after the effect chain.

Space

The Space effect simulates various types of reverberation. It contains the following controls:



- **Space On/Off:** Turns the Space effect on or off.
- **Response menu:** Selects from a list of available room and reverb simulations.
- **Wet/Dry:** Adjusts the ratio between the processed (“wet”) and unprocessed (“dry”) signals.
- **Pre-Delay:** Adjusts a short amount of delay between the direct signal and the reverberated signal. Increasing the **Pre-Delay** value is useful when simulating the reverberation of big rooms, where a short delay occurs between the direct sound and the first reflections from distant walls.

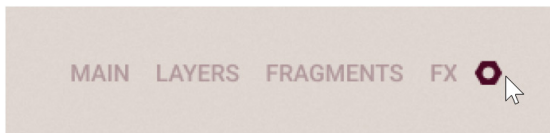
i In addition to processing the overall sound of the instrument, the Space effect can also serve as send effect to process the sound of the individual Attack, Sustain 1, Sustain 2, and Release layers. This is done by using their **Reverb Send** sliders in the [Sound panel](#) of the Layers page. The individual layers are processed according to the simulation selected in the Space effects’s Response menu, but independently of the effect’s on/off state, **Wet/Dry** ratio and **Pre-Delay** value: These only affect the reverberation on the overall sound of the instrument.

10. Settings page

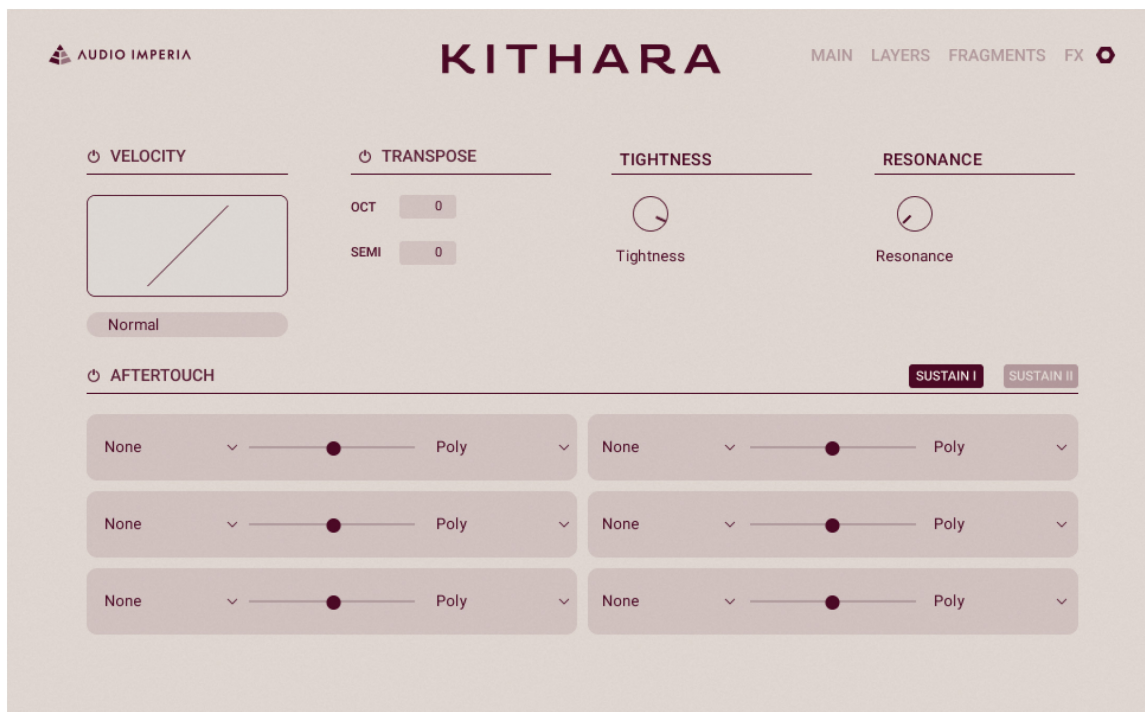
The Settings page lets you adjust how Kithara reacts to your playing.

To display the Settings page, do the following:

- ▶ Click the nut icon at the top right of the instrument to display the Settings page.

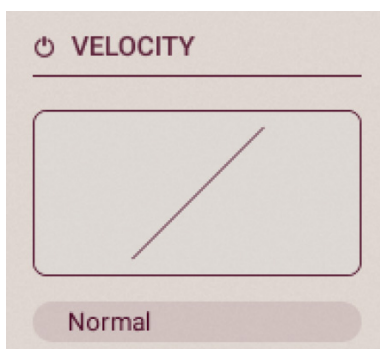


The Settings page contains the following sections: [Velocity](#), [Transpose](#), [Tightness](#), [Resonance](#), and [Aftertouch](#).



Velocity settings

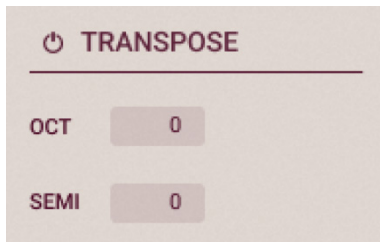
The Velocity section contains the following controls:



- **Velocity On/Off:** Activates or deactivates the velocity setting globally. When the setting is inactive, the velocity response is linear.
- **Velocity menu:** Selects from a list of velocity curves in order to customize the instrument's response to your keyboard and way of playing.

Transpose settings

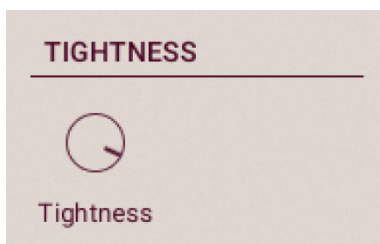
The Transpose section contains the following controls:



- **Transpose On/Off:** Activates or deactivates the transpose settings globally. When the settings are inactive, no transposition is applied.
- **OCT:** Transposes the incoming notes in octaves. To modify the value, you can click the little up/down arrows on its right, or click the displayed value and drag your mouse vertically, or double-click the displayed value and enter a new value with your computer keyboard.
- **SEMI:** Transposes the incoming notes in semitones. To modify the value, you can click the little up/down arrows on its right, or click the value and drag your mouse vertically, or double-click the value and enter a new value with your computer keyboard.

Tightness setting

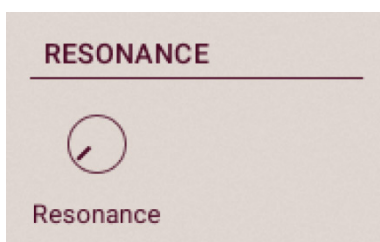
The Tightness section contains the following control:



- **Tightness:** Adjusts the sample start position to set the tightness (or responsiveness) of the sound.

Resonance setting

The Resonance section contains the following control:



- **Resonance:** Adjusts the amount of sympathetic resonances between the strings. Increasing these resonances creates a fuller and deeper sound.



This setting is also available in the [Performance controls](#). Notably, you can assign it to the **Modwheel** slider from there.

Aftertouch settings

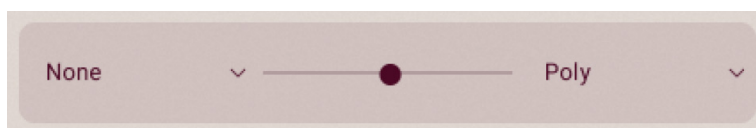
The Aftertouch section lets you modulate up to six parameters in each of the Sustain 1 and Sustain 2 layers using the aftertouch (or pressure sensitivity) of your MIDI keyboard, that is, the pressure at which you hold the keys depressed.

The Aftertouch section contains the following controls:




- **Aftertouch On/Off:** Activates or deactivates the aftertouch modulation globally. When inactive, the MIDI aftertouch information is ignored.
- **SUSTAIN 1 / SUSTAIN 2** selector: Shows the modulation targets for the Sustain 1 or Sustain 2 layer.
- **Modulation slots:** The six modulation slots let you configure up to six targets that will be affected by the aftertouch. The slot details are described below.

Each modulation slot defines an aftertouch modulation for one parameter in the selected layer. Each slot contains the following controls:



- **Target menu:** Selects the target parameter to be modulated. The available parameters are **Pan**, **Tune**, **Stereo Spread**, and **Reverb Send** from the Layers page's [Sound panel](#), as well as **LP Filter Cutoff** and **HP Filter Cutoff** from the Layers page's [Shape panel](#). You can deactivate this target by selecting **None** (selected by default).
- **Modulation Amount slider:** Adjusts how much the aftertouch will affect the target parameter. The slider is bipolar: In the default middle position, no modulation takes place; if you drag it to the right or to the left, the aftertouch will modulate the target parameter positively or negatively.
- **Aftertouch Mode menu:** Selects which kind of aftertouch should be considered. If **Mono** is selected, monophonic aftertouch is used and your pressure on the oldest held note will also affect the following notes. If **Poly** is selected, your pressure on each note will affect that individual note.

 The **Mono** and **Poly** aftertouch modes will only work if your MIDI keyboard is equipped with the corresponding monophonic or polyphonic aftertouch feature.

11. Modulating your sound

At the bottom left of the Kithara interface, the **Modwheel** control is always visible, except when the Settings page is displayed. You can [assign this slider to multiple parameters](#) of Kithara and use it to adjust them all at once.

- ▶ Click and drag the Modwheel slider vertically to adjust all its assigned parameters at once.



As with any knob or slider in Kithara, you can use [Ctrl]-click (Windows) or [command]-click (Mac) to reset the knob to its default value.

The **Modwheel** slider is assigned to MIDI CC1, which corresponds to the modulation wheel on your MIDI keyboard. This allows you to control all the assigned parameters from your MIDI keyboard.

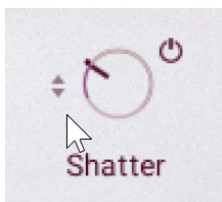
Assigning parameters to the Modwheel slider

To assign a parameter to the **Modwheel** slider, do the following:

1. Open the page and the panel containing the control that you want to assign.
2. Click the pen icon next to the **Modwheel** slider to switch to Assign Edit mode.



- The pen icon lights up, and a **modulation icon** showing two little up and down arrows appears next to each assignable control.
3. Click the modulation icon near the desired control and drag your mouse vertically.



- The parameter is modulated by the **Modwheel** slider. The further you drag your mouse, the stronger the **Modwheel** slider will affect the parameter value.

i Switching to another panel or to another page deactivates the Assign Edit mode. You can assign parameters located elsewhere in the instrument by opening the corresponding page or panel and re-activating the Assign Edit mode by clicking the pen icon next to the Modwheel slider.

The **Modwheel** slider affects the parameter values relatively to their original position, in other words, adjusting the **Modwheel** slider will modulate the parameter value in a range based on its original value. The modulation is bipolar: If you drag the modulation icon upwards, the modulation range will extend above the slider or knob position; if you drag the icon downwards, the modulation range will extend below the slider or knob position.

You can quickly see which parameters are assigned to the **Modwheel** slider:

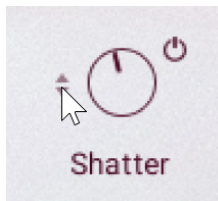
- Sliders: When modulated, the brighter part of the slider's span shows the modulation range.
- Knobs: If not modulated, knobs have a bright ring. When modulated, the ring becomes darker, with the brighter part showing the modulation range.

In addition, on each assigned control a small dot shows the current position set by the **Modwheel** slider.

Removing parameter assignments

To stop modulating a parameter via the **Modwheel** slider, you need to remove the parameter assignment:

1. Open the page and the panel containing the control that you want to unassign.
 2. Click the pen icon next to the **Modwheel** slider to switch to Assign Edit mode.
- The pen icon lights up, and a **modulation icon** showing two little up and down arrows appears next to each assignable control.
3. [Ctrl]-click (Windows) or [command]-click (Mac) the modulation icon near the desired control.



- The modulation amount is reset to its median zero default value. The control is released from the modulation and the visual indication of the modulation disappears.

Which parameters can be modulated?

Most continuous controls (sliders or knobs) of Kithara can be assigned to the Modwheel slider, including:

- The four Layer Volume sliders in the [Layer Inspector](#).
- All the [Performance controls](#) except the **Expression** slider.
- All the continuous controls in the [Layers page](#), with the exception of the **Decay** and **Sustain** controls located in the Shape panel for the Sustain 1 and Sustain 2 layers.
- All the continuous controls in the [Fragments page](#).
- All the continuous controls of the [Character effects](#) in the Effects page.

i The continuous controls of the [Mix effects](#) and those in the [Settings page](#) cannot be assigned to the **Modwheel** slider. Non-continuous controls (switches, selectors, etc.) cannot be assigned either.

12. Credits

Concept: Jonathan DGLISH

Product Design: Jonathan DGLISH, Francesco Sabatini, Jan Hoeglund

Kontakt Development: Jonathan DGLISH, Derik Thomas

User Interface Design: Kate Lindsay

Product Management: Jonathan DGLISH, Grant Smith, Konstantin Hess

Instrumentalists: Ewan Macpherson, Conor Smith, Innes White, Samuel Brierley-Rimmer, Andrew Robinson, Roberto Kuhn Versluys, Galvarino Ceron Carrasco, Jenny Clark, Innes White, Rufus Huggan, Zygmund de Somogyi, Chris Montague

Studio Producers: Kobus Frick, Adam Robinson

Recording Engineer: David Donaldson

Studio: Clockwork Studios – Glasgow

Sample Post Production: Oliver Trigg, Jonathan DGLISH, David Donaldson

Sound Design: Tom Hawk, Adam Harvey, Jan Hoeglund, Jonathan DGLISH, Oliver Trigg, Bryan Leach, Andreas Rogge, Jamil Samad, Andreas Koslik, The Solos, Sebastian Müller, Dimitris Kordis

Quality Assurance and Finalization: Elad Twito, Matteo Melchiori

Documentation: Nicolas Sidi, Jan Ola Korte

Marketing: Andre Bajorat, Maxime Donnet, Guillermo Frapolli, Lucy Crouch, Oliver Trigg