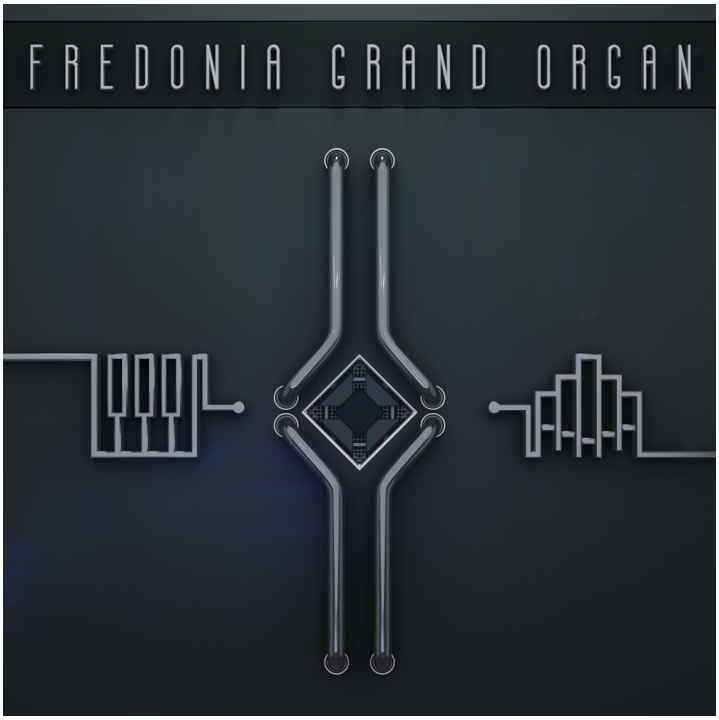


Fredonia Grand Organ

An Impact Soundworks Instrument for Kontakt 6.5

INTRODUCTION

The pipe organ is the oldest keyboard instrument and one of the most iconic instruments ever made.
Going back hundreds of years, it was widely used by famous composers, from the virtuoso Johann Sebastian Bach, to the experimentalist Hans Zimmer.

Usually found in churches, due to their complexity and scale, large pipe organs are built to specifications dependent on the space and acoustic properties of the room.
The amount of combinations achieved by layering different pipe combinations leads to a versatility only surpassed by contemporary synthesizers, with the pipe organ itself being considered the precursor of modern synthesis.

Our authorized, virtual version of this incredible instrument features the sound of a Schlicker Pipe Organ, originally located in the village of Fredonia, now a centerpiece of the King Concert Hall (State University of New York at Fredonia). The **Fredonia Grand Organ** is a re-imagining of the original instrument, pushing it beyond its physical constraints and adding features only possible in a virtual environment.

With 42 individually controlled organ stops and a complex Crescendo functionality, the sound can go from light and airy to earth-shaking with ease. Recorded with a wide array of mics, and with over 40 FX modules available, Fredonia Grand Organ comes with everything you need for any mix.

Thanks to its versatile sound and Kontakt engine, **Fredonia Grand Organ** works for a huge range of styles and genres - and it's simply a blast to play. We hope you'll enjoy it in your own music productions!

INSTALLATION

1. Install the **Pulse** application if you don't already have it. **Pulse** is a cross-platform desktop app that lets you download and install your libraries with blazing speed! You'll need to create an account here, but once you do, you can access your purchases from ***any*** developers using **Pulse**, anytime, from any computer.

https://pulsedownloader.com/

2. Once **Pulse** is installed, open it and enter your **Fredonia Grand Organ** product code. Follow the instructions to download and install the library.

3. Open Native Access, click "Add a Serial", and input the same product code to **activate** the library.

4. Once activated, click "View Products Not Installed". Find **Fredonia Grand Organ** in this list. Click the "Add Library" button to the right, and select the folder where Pulse downloaded the library. This completes the installation process.

SNAPSHOTS & SCRIPT TABS

Fredonia Grand Organ uses Kontakt's native "**snapshots**" feature to handle various types of presets. We've extended this feature allowing you to save and load **specific types of snapshots** without overwriting your entire patch.

To support this, **Fredonia Grand Organ** uses **two** separate scripts: one for instrument editing, the other for mixing and effects.

Each of these tabs can save or load its data **independently**! For example, you can load a mixer setup from **Console** without affecting your mapping, or load a specific performance preset without affecting your FX.

At the bottom of each tab's UI, you'll see two icons in the lower left and lower right: a **Lock**, and a **Camera**.

When the **Lock** icon is **enabled** (white), the contents of that tab **will not be overwritten** when you ***load*** a new Snapshot. When the **Camera** icon is **enabled** (white), the contents of that tab will be ***saved*** when you save a snapshot.

You can save *your own* snapshots using whatever combination of tabs you'd like. Make sure to check your Lock/Camera settings when saving and loading.

CPU USAGE & PERFORMANCE

Fredonia Grand Organ is a very powerful instrument. The sound is completely dynamic and customizable based on the stops used. To make this possible, every stop uses a "voice" in Kontakt. This means that the instrument **can use a large amount of processing power**. In this section, we'll discuss ways to minimize and optimize the instrument's CPU usage, as well as talk about features that are particularly CPU-intensive.

- We strongly recommend using the **Master Mix** channel in Console (this is the default). While it is possible to create your own mic mix, every mic channel enabled will multiply the voices used. If you plan on using multiple channels, we recommend doing this **at render time, not while working on the project.**

- The number of stops enabled will also multiply the voice count and CPU usage. For example, 30 stops enabled will mean 30 voices generated per 1 note played. If you are having issues with real-time playback, you can **disable stops** until render time, when you can re-enable them again.

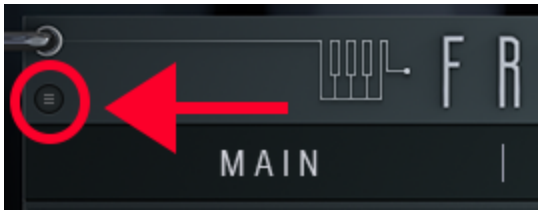
- When **release noises** are enabled, the CPU usage will also increase proportionally to the number of stops and notes played. To conserve CPU, you can **disable release noises**, and then enable a reverb such as the included **Galois** reverb in Console (or your external reverb of choice.) This will ensure you still have a nice hall sound with proper release tails.

MAIN CONTROLS

IMPORTANT: Virtually every slider and button on the interface can be MIDI learned! Simply right click and then move the desired MIDI CC to create a link.

Also, you can **hover** over any control to see help text at the bottom of the Kontakt UI. Try it!

Instrument Options



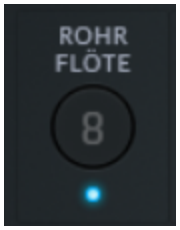
This menu option can be accessed to toggle **Velocity-Sensitive Keyswitches**, and whether each **Swell Starts from Silence.**

Stop Buttons and Divisions

Every circular button on the UI represents an **organ "stop"**. A stop enables or disables pipes on the organ, which changes the overall sound. We sampled every stop individually, so you can **create your own combination of stops**: even in real-time, while holding a chord!

The stops are split across four **divisions**: Swell, Positiv, Pedal, and Great. These correspond with the pipe divisions on the actual organ.

To **enable** or **disable** a stop, simply click on it. If the stop is WHITE, it is enabled. If it is BLACK, it is disabled. If it is GREY, it is controlled by the Crescendo slider (more on this later).
Click the glowing LED below each stop to unload it from RAM.



The **numbers** within each stop represent the relative pitch of those pipes. In total there are 6 possible octaves. From lowest to highest, they are:

32 - 16 - 8 - 4 - 2 -1

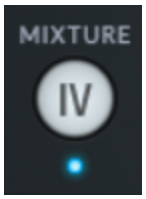
Example: A stop labeled **32** is two octaves lower than one labeled **8**.

Stops such as "Nazard 2 ⅔" are octaves with harmonics.

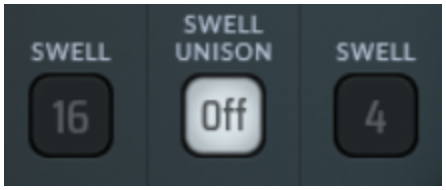
Note that you can quickly **disable all stops** in a division by clicking on the division name (Swell, Positiv, Pedal, Great.)

Special Stops

Tremulant stops will enable a subtle tremolo effect for all stops in that division.



Mixture stops are a combination of pipes across multiple stops and octaves. They can actually be layered with other stops and will not phase cancel.

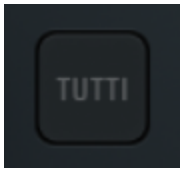


The Swell and Positiv divisions have several **Coupler** controls. The stops labeled “16” and “4” will add a **lower octave** or **upper octave** (respectively) to your sound, based on the other stops you have selected.

For example, if you have the Swell Viola 8 stop enabled, and you turn on Swell 16 and Swell 4, you will hear 3 octaves with the tone of Viola 8.

When **Swell Unison** is enabled, you will **only** hear the added octave(s) and not the base octave.

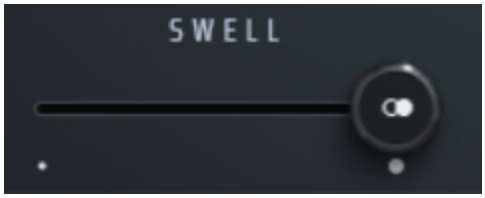
Tutti and Randomize Buttons



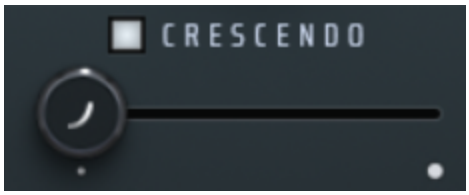
The **Tutti** button in the lower left corner of the UI will enable ALL stops for the instrument, a truly massive and floor-shaking sound! You can always **disable** this button, and your previous stop setup will be restored.


The **Randomizer** in the middle of the UI, as the name suggests, completely randomizes all stops giving you a unique tone combination with each press. It can be quite fun and inspiring!

Dynamic Sliders



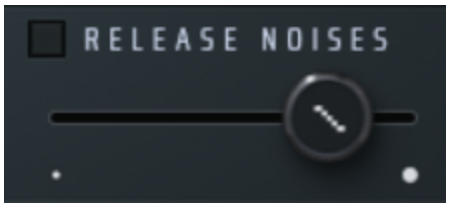
The **Swell** slider controls the relative brightness and volume of the **Swell** division. The default value is 100%, so turning this down will make the Swell section relatively quieter and darker.



The **Crescendo** slider will dynamically enable or disable stops based on its position. The stops affected (controlled) by this system can be set on the **Crescendo Editor** page. This can be used for dramatic effect, enabling lots of new stops by slowly increasing the slider position.

If you manually enable a stop by clicking on it, the Crescendo slider position is overwritten: the stop will always sound.

Release Noises



Authentic release noises can be turned on or off, and their volume controlled with this slider. As we noted in the **CPU Usage** section, these release noises can be more CPU-intensive. If you disable them however, the hall sound will be noticeably missing when you let go of a note.

Therefore, it's important to **enable external reverb OR Console reverb** when release noises are OFF!

Perform Tab

Here, you can adjust basic controls such as volume, panning, tuning, and amplitude envelope (ADSR) for each division individually.

The more unique feature here is the **MIDI Channel** selector. By default, the **Fredonia Grand Organ** NKI instrument accepts MIDI from all channels simultaneously. Since all divisions in the above screenshot are set to MIDI Channel 1, playing a note will trigger all divisions at once, as expected.

However, for more authentic organ writing and performance, it is more desirable to control each division independently (as a real organist would.)

To achieve this, the MIDI channel can be set independently for each division. If Positiv is set to MIDI channel 2 for example, you MUST send MIDI channel 2 to Kontakt in order to control that channel. It will not sound otherwise.

Crescendo Editor Tab

This page is used to edit which stops are controlled by the Crescendo slider. Although intimidating at a glance, it's actually very simple to use.

To enable a stop for Crescendo control, just click on it and it will light up in white. (**Reminder: If that stop is already enabled on the main page, it will ALWAYS sound. Make sure to DISABLE the stop on the main page first.)**

The slider to the right of that stop sets the **slider range** where it will sound. In the above example, Positiv Sharff IV is set with a range of about 97 - 127. In other words, it will only sound when the Crescendo slider is between the values of 97 - 127.

Key Editor Tab

Vel > Vol Knob: Sets the degree to which MIDI velocity affects volume. On a real pipe organ, how hard you press the keys does not impact the output volume, so this defaults to 0. Of course, with our virtual version, you can use whatever setting you'd like!

Dynamic Filter Knob: As this knob value is **increased**, lower-velocity notes will be **darkened**. Again, this is not typical to actual organ playing, but is more similar to other traditional keyboard instruments.

Velocity Curve Knob: Adjusts curving of input MIDI velocity. Higher values curve input velocity UP, lower values curve it DOWN. The **Velocity Editor Table** allows you to draw your own custom curve.

Tuning / Temperament Menu: Click the menu labeled in the above screenshot as "Equal Temperament" to set the organ tuning differently. Here you can also save/load custom tunings.

To create a custom tuning, use the table to the right of the **Key** knob. Each vertical column is a note in a chromatic scale, and each note can be adjusted up to +/- 100 cents. The **Key Knob** sets the root note. For example, when set to "C", the first column is "C", the second column is "C#", etc.

CONSOLE & TACT

The second tab at the bottom of the GUI is where you can find Console, our extensive mixer and effects rack. Since this is deep in scope and features we've created a separate manual for it.

Console Manual

CREDITS

Lead Producer: Andrew Aversa
Recording & Performance: Brandon Lee Brinkerhoff
Programming: Mario Kruselj, Nabeel Ansari
Editing: Kiril Georgiev
UI Design: Paulo Nunes

TROUBLESHOOTING

Having trouble with **Fredonia Grand Organ**? Use it in a project you want to tell us about? Drop us a line via our **Contact page** (but be sure to **read the FAQ** first!)

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