



The Unofficial Vital Documentation Community Edition

For the Vital Synth created and © by Matt Tytel

This is the community documentation created by members of the Vital Community
For more information on Vital and the official Vital documentation and Support pls visit

<https://vital.audio/>

or

<https://forum.vital.audio/>

Disclaimer

This document is in no way connected, sponsored, paid or in any other way part of the official vital.audio product. It is a use at your own risk documentation from friendly people on the internet to get you started.

This document has been created with the blessing from Matt Tytel. However it does not get any official support or has any input from Matt. In other words: Do not approach Matt or the official Support channel for any updates on this document.

USE AT YOUR OWN RISK!

How can I get Support?

Go to the Vital Forums. There you can get official Support to the product if anything within the product does not work and also you can get support from the very helpful community.

The official forum is here:

<https://forum.vital.audio>

How can I help with this documentation?

If you want to contribute, you can ask to get access - right here in the top right corner. However it is recommended you come into this thread and tell us about it:

<https://forum.vital.audio/t/vital-community-documentation/5206>

Also if you like to leave feedback or guide this team on things you like to learn/know - use the same thread above to discuss.

Introduction	3
Key Features	3
About This Manual	3
Vital Synth Editions	3
System Requirements	3
Installation and Startup	3
Gettings Started	3
Screen Overview	3
Settings	3
Browsing Presets	3
Favorites	4
Your own Presets	5
Importing a Preset Bank	6
Adding Presets Files from Other users	7
Initialize Preset	10
Saving Presets	12
Export a Preset	12
Export a Preset Bank	12
Import a Preset Bank	12
Load Tuning Files	12
Vital in Detail	12
Oscillators	12
Sample player	12
Filters	12
Envelopes	12
LFOs	12
Random Generators	12
Modulators	12
Macros	12
Modulation	12
Effects	12
ModMatrix	12
Advanced Section	12
The Wavetable Editor	13
Getting Started	13
Overview	14
Community and Thanks	14

Introduction

Key Features

About This Manual

Vital Synth Editions

Actual Version is 1.0.7 (17. Feb. 2021)

<https://account.vital.audio/> for manual download, click all downloads for older versions.

System Requirements

Vital is supported on the following platforms:

Windows: 10x64 1909 and higher

MacOS: 10.12 and higher

Ubuntu Linux 18.04 and above

System Requirements:

64 bit only

OpenGL 3 or higher

However Vital is also known to run but not supported on older/other systems. Not supported means, please do not ask for support on the official support line if you run it on anything else then the supported systems.

The following systems are known to be able to run it.

Windows 7, Windows 8

Some other Linux Derivates - many with issues. The community may be able to help, but do not expect any official support for those.

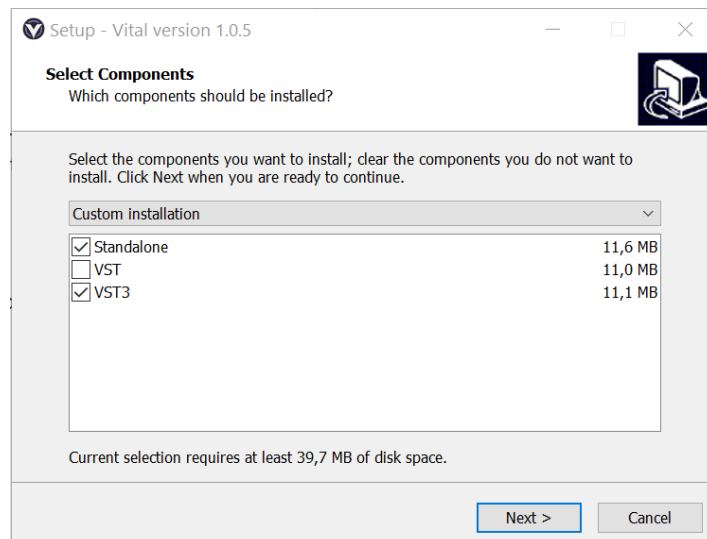
Installation and Startup

Just download the Software and install it via the installer.

Windows:

Run the VitalInstaller.exe and select how you want to install it. It can be installed as VST2, VST3 and/or standalone.

Then click next.



In the next window you can choose the installation path and the VST path. Defaults typically work well.

MacOS

Linux

First Start

On First start of the Vital application, you are asked to enter your credentials. That are the same credentials you used to register on the vital.audio site to download.

After entering the credentials the Vital screen will come up and the downloads for your Edition will start.

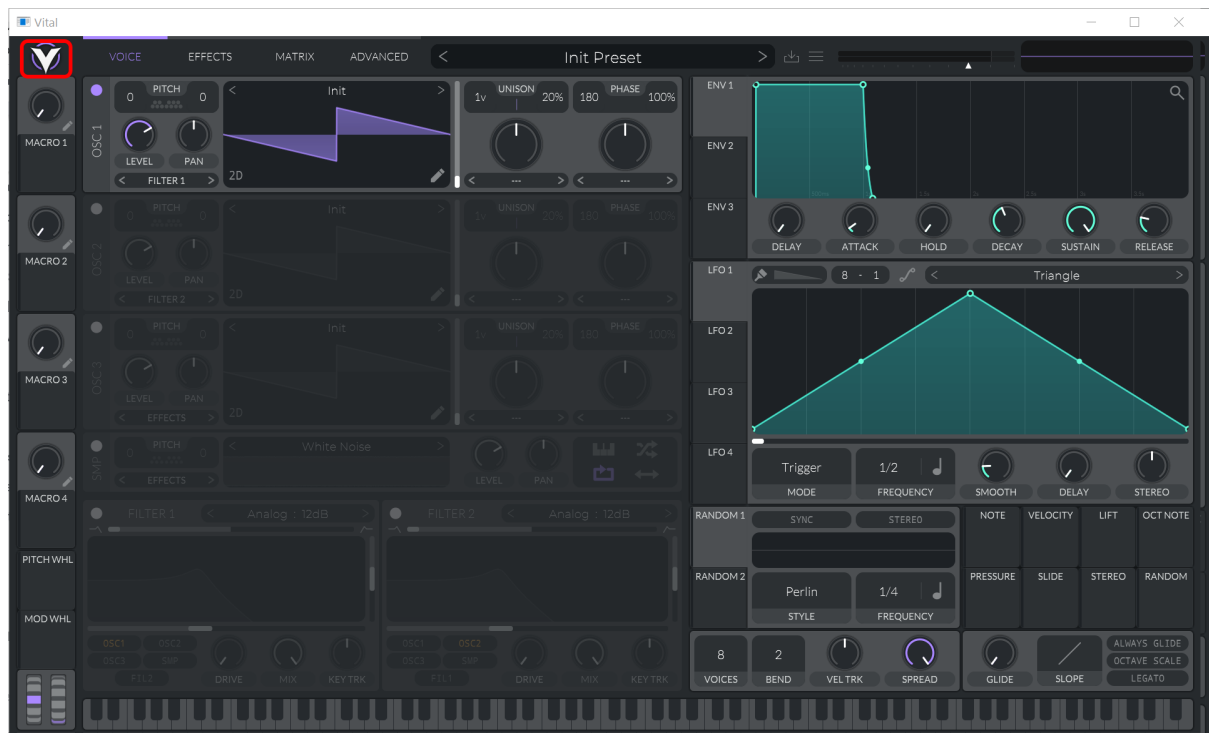
After the downloads are finished click install and the presets and wavetables will get installed.

Gettings Started

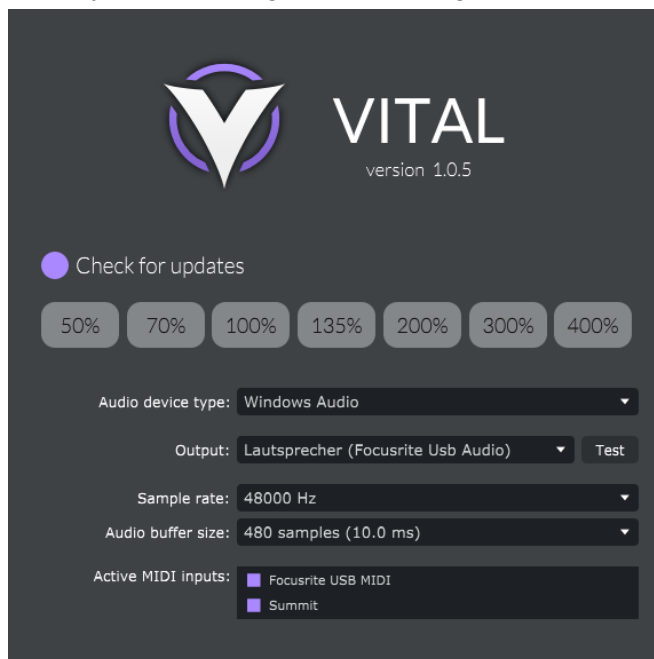
Screen Overview

Settings

Click on the Vital sign at the top left corner to enter settings.



Inside you can change the following parameters:



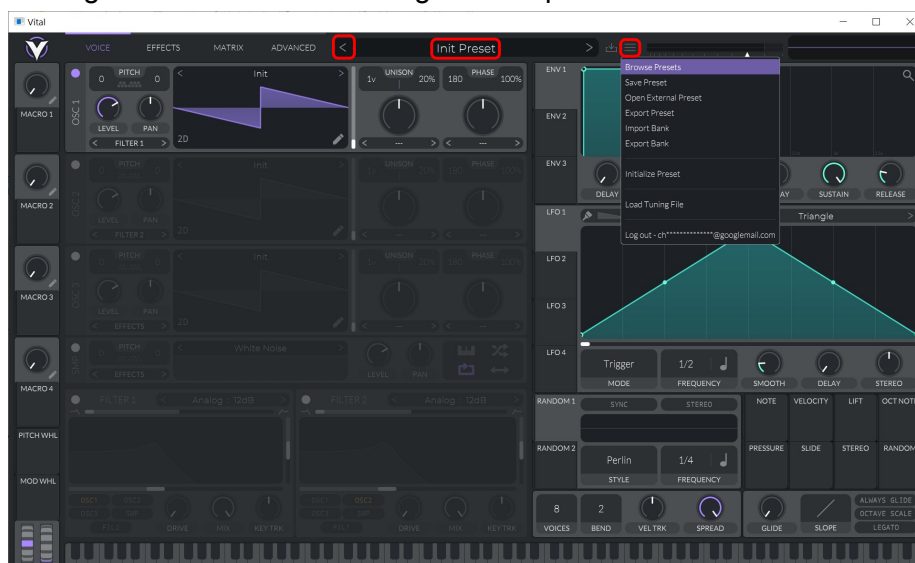
- see Version Number
- set automatic update flags
This checks for updates automatically on the next start of Vital
- set UI size
Here you can adjust the screen scaling for hiDPI screen

- select Audio Device
Currently you cannot select ASIO devices specifically. But Windows Audio works best on Windows.
- select Output
Select the Output channel of the Audio Device here, if you have multiple.
- Click Test to check if Audio Setup is working
- select Sample Rate
This defaults to the system audio rate and should stay that way. If it is different than your system audio rate, change it to the same setting, (e.g. 44.1khz)
- select Audio Buffer Size
As for every VST smaller buffers mean lower latency, but also increase the chance of crackling or disruption in the sound stream and also results in higher CPU load. A good mixture between both settings is advised.
- select MIDI Inputs
Vital responds to all 16 Channels

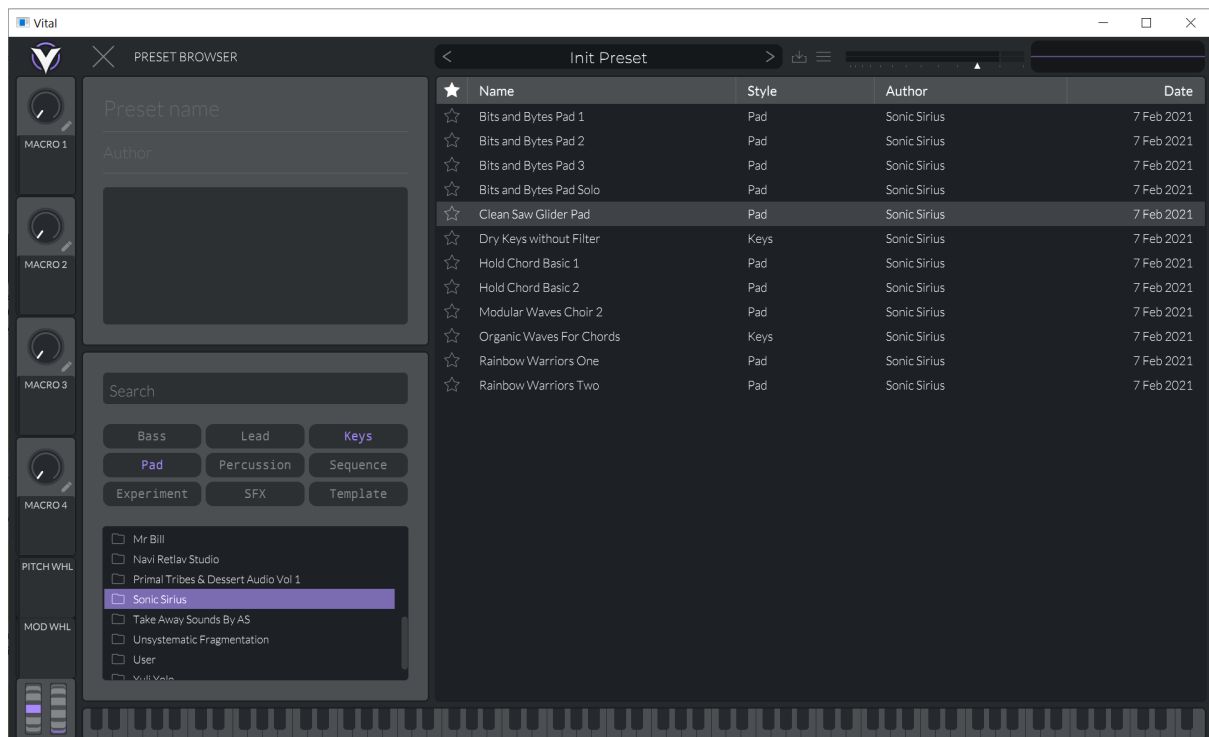
There is currently a bug in the 1.05 release that does not save this setting. On the next start everything is back to default.

Browsing Presets

To browse the presets, just click on the preset name (“Init Preset” in the picture) or click the three lines and select “Browse Presets”. You can also just move through the presets by clicking on the arrows left and right of the preset name.



After you open up the preset browser you can filter and browse via folders. It is pretty much self explanatory.



You can filter by selecting the Preset category (such as Pad, Lead Keys or others). You can add multiple categories which shows all of the categories.

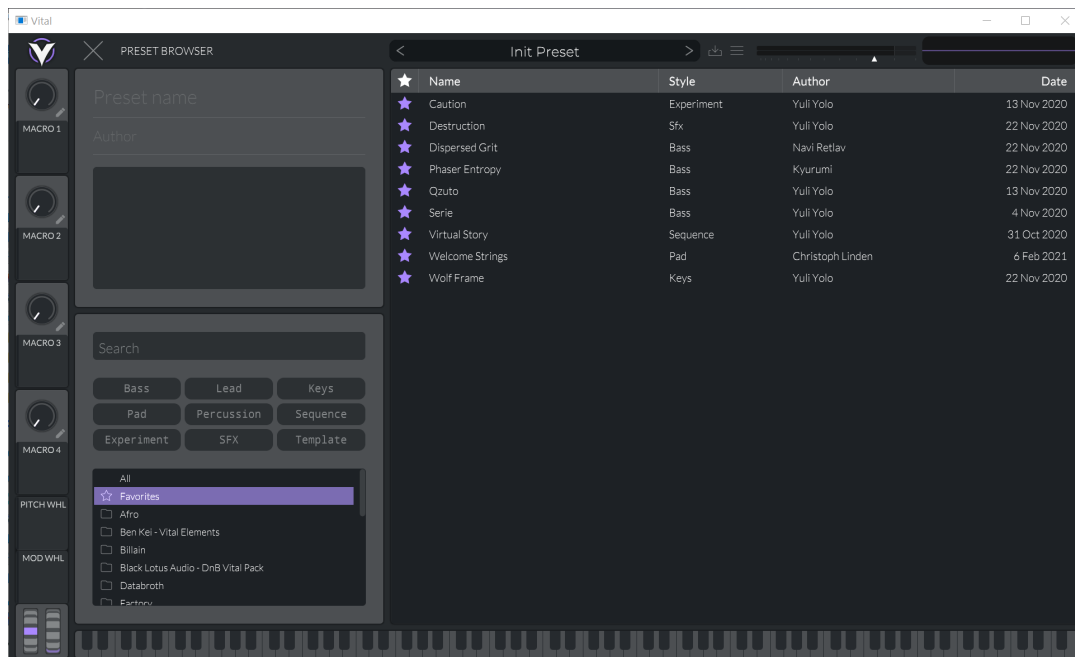
You can also select a specific Preset Set (e.g. Folder on your computer) and filter in there, or you can select ALL or Favorites.

In addition you can search for Presets by entering any string in the Search line. This will filter the Presets that either match the Name of the preset or the Author.

- When a preset is changed by mouse click, stay with the mouse on the arrow and use the return key to change presets. (Works on most clickable items too.)
- When the Preset Browser is open, use arrow keys to change Presets. Stops working when clicked somewhere else.

Favorites

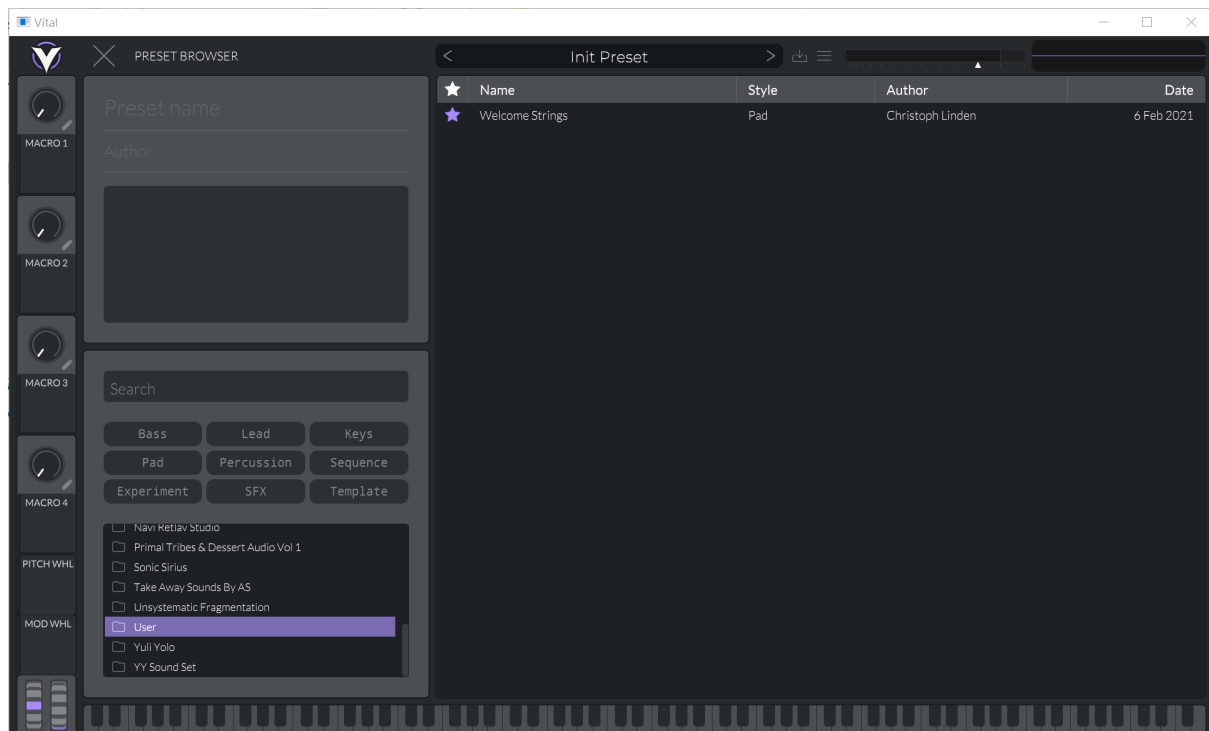
You can add individual Presets to your Favorites list, by activating the star in front of a Patch Name. That will make it easier to find the patches you like.



Your own Presets

If you create presets and save them, they will show up under the “User” folder.

Vital will always fill in the last used name as author when presets are saved. So when the save button is used to see the comments it shows not the real author.



You can actually create a patch bundle and save it under a different name. The simple way is to create a subfolder in the your Vital Documents folder:

- Windows: (C:\Users\YourUserName\Documents\Vital)

- MacOS:
- Linux:

Then copy/move the patches you want to have in that folder to the newly created folder and they will show up after the next restart of Vital.

Importing a Preset Bank

You can find presets in many different forums online from other users for free or for purchase. The community has created some presets, which you can find here and download for free:

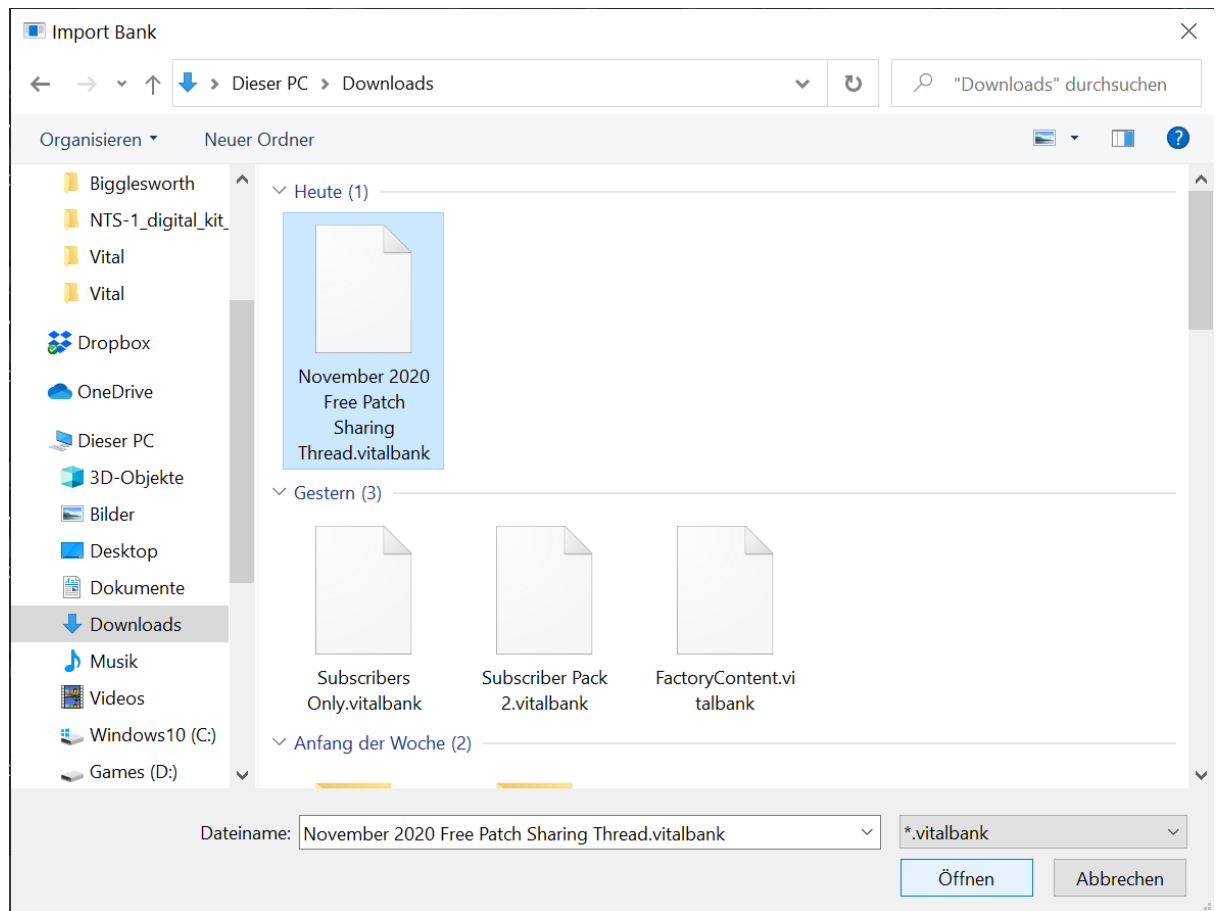
<https://forum.vital.audio/t/february-2021-free-patch-sharing-thread/5074>

So let's assume we want to import the first free preset bank [November 2020 Free Patch Sharing Thread.vitalbank](#)

1. Download the bank. It will save a file "November 2020 Free Patch Sharing Thread.vitalbank" to your download folder.
2. Now open Vital and click the three lines next to the patch name (options) and select "Import Preset Bank"



3. A browser Windows opens. Go to your Downloads folder and select the downloaded .vitalbank file and click "open"



4. After you imported the bank, a new folder will show up in your preset library with the name of the import bank file "November 2020 Free Patch Sharing Thread". You can now browse the patches as usual. For more information go -> [Browsing Presets](#)

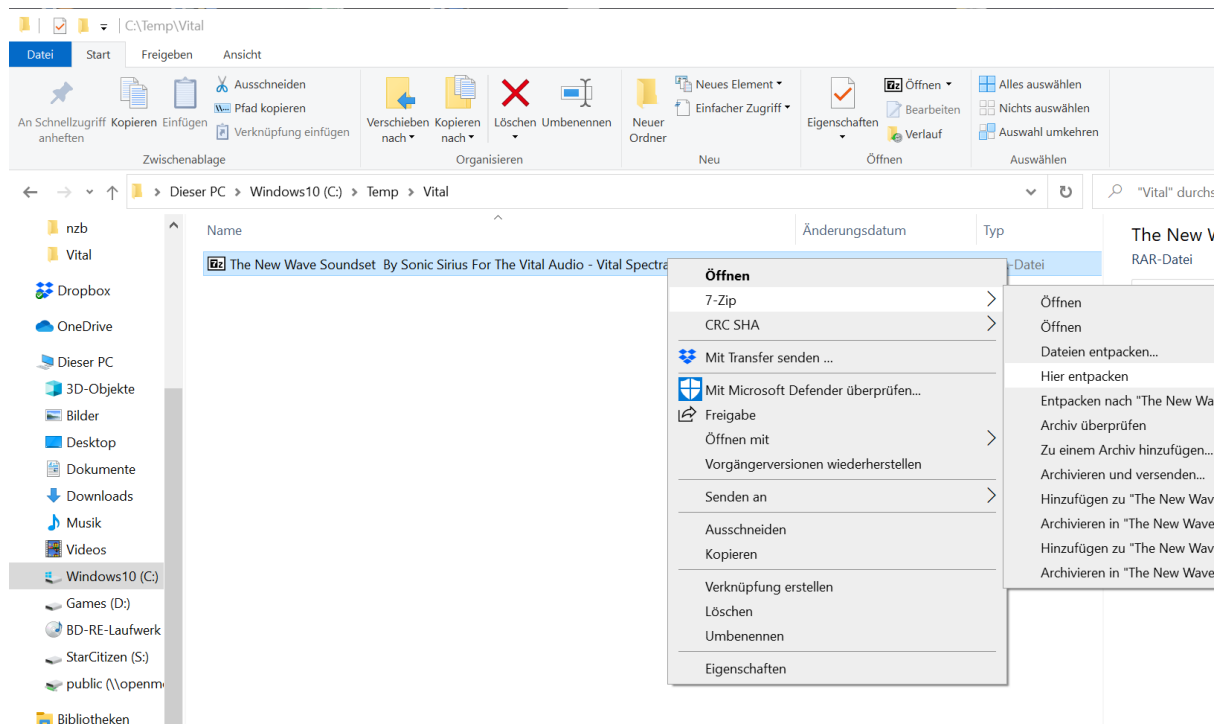
Adding Presets Files from Other users

Even if Preset sharing is preferred as Banks, there is another way to import Presets into your library.

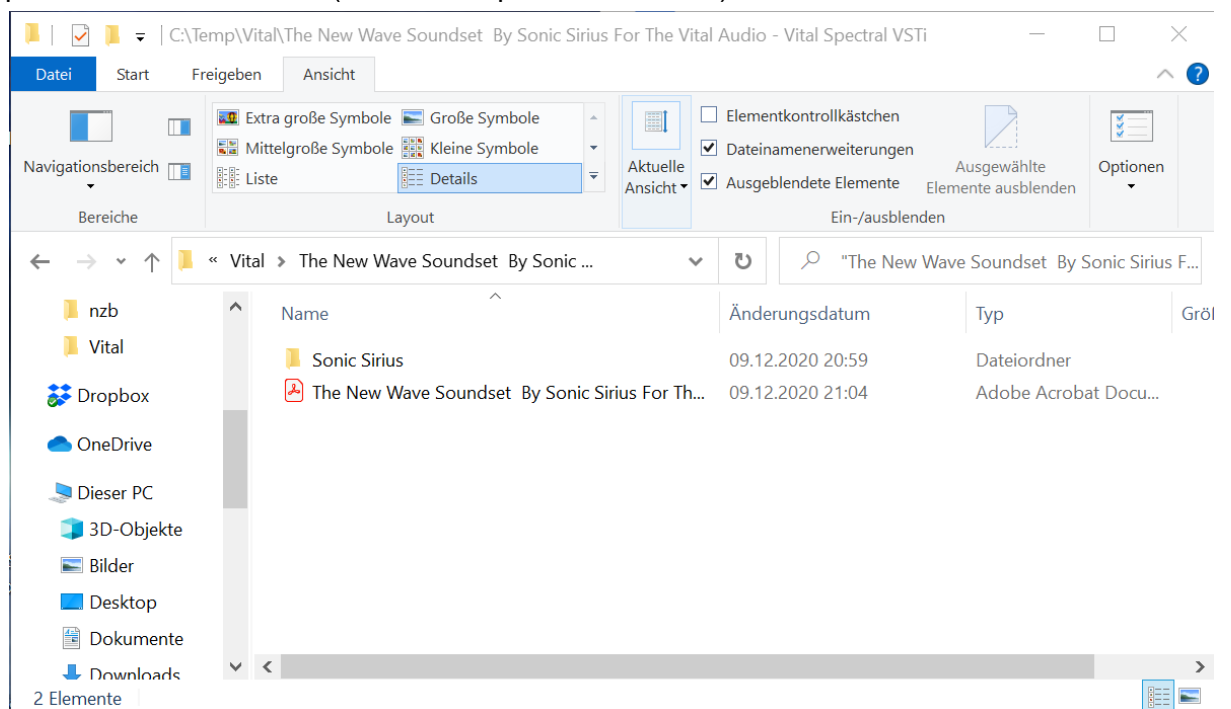
They are organized as a file structure packed in a .zip or .rar file. These Preset bundles require a different way of installation.

After you downloaded the pack, you will typically have a .zip or .rar file. Use the following steps to import the pack into Vital:

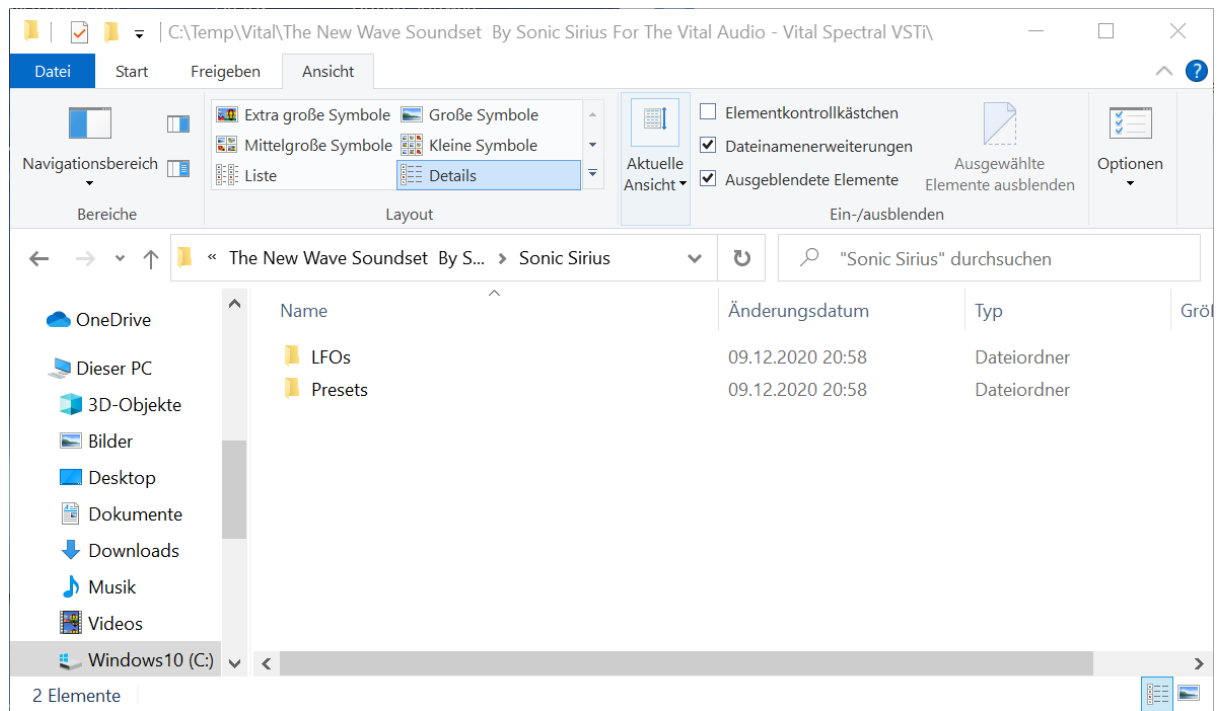
1. Unrar / Unzip (you can use the free 7-Zip or WinRar) the Soundbank Files (Use - Right-click unpack here)



2. Within the unpacked directory, you will find a directory with the name of the preset/wavetable bundle (in this example “Sonic Sirius”).

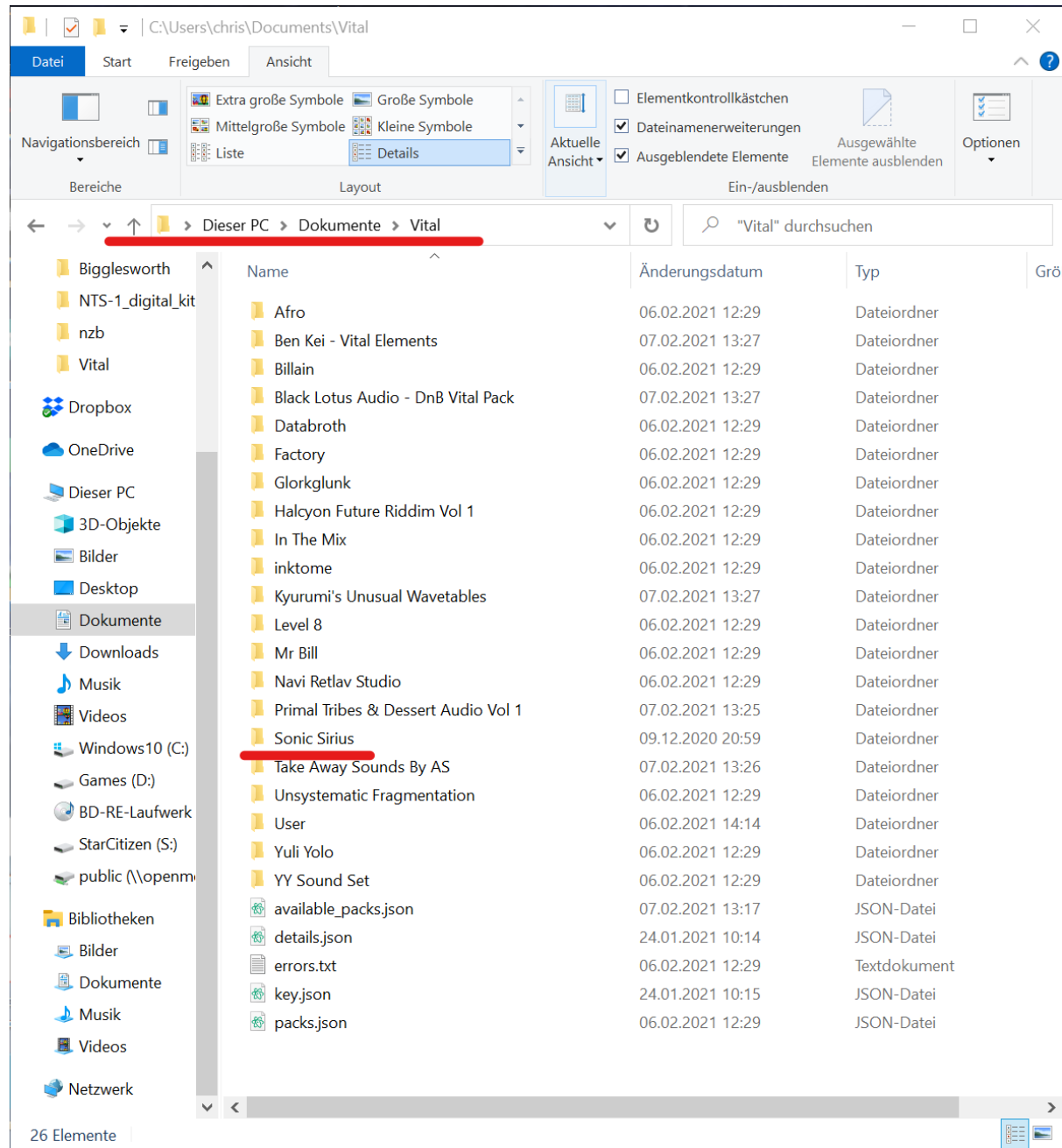


3. This folder typically contains a “preset” subfolder but also main contain a “LFO” or “wavetables” folders.



Copy & Paste the top level folder that contains the preset ... subfolders into:

- (Windows Example) C:\Users\YourName\Documents\Vital

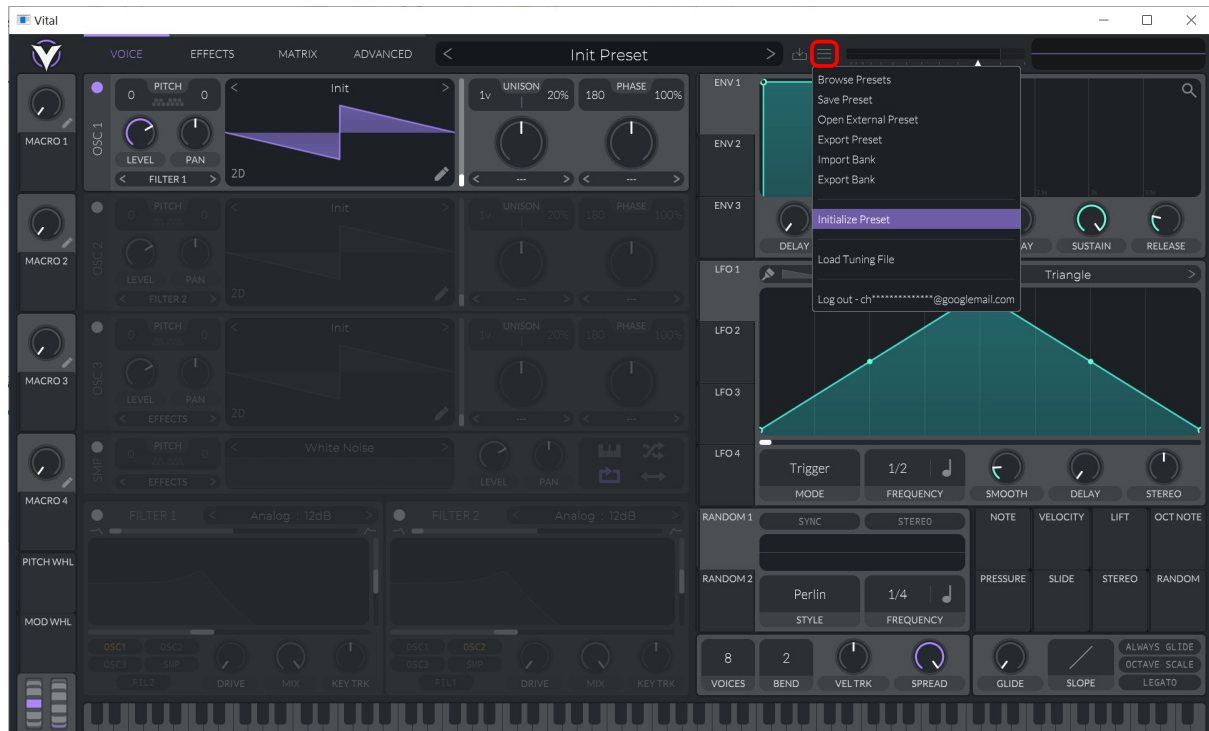


- (MacOS Example)
 - (Linux Example)
4. Load the Vital Spectral Instrument in your Digital Audio Workstation (DAW) or load the standalone Vital Version - for detailed instruction go -> [Browsing Presets](#)

Initialize Preset

WARNING: THIS WILL ERASE ALL UNSAVED CHANGES YOU MAY HAVE MADE BEFORE WITHOUT ASKING. SAVE YOUR WORK BEFORE INITIALIZING THE PRESET.

This is a special function to start from scratch with your Preset creation. Just go to the top of the Vital window and click the three lines (options). Then select “Initialize Preset”. Now you have a fresh, clean new Preset.



Saving Presets

Export a Preset

Export a Preset Bank

Import a Preset Bank

Load Tuning Files

Vital in Detail

The Oscillator Section

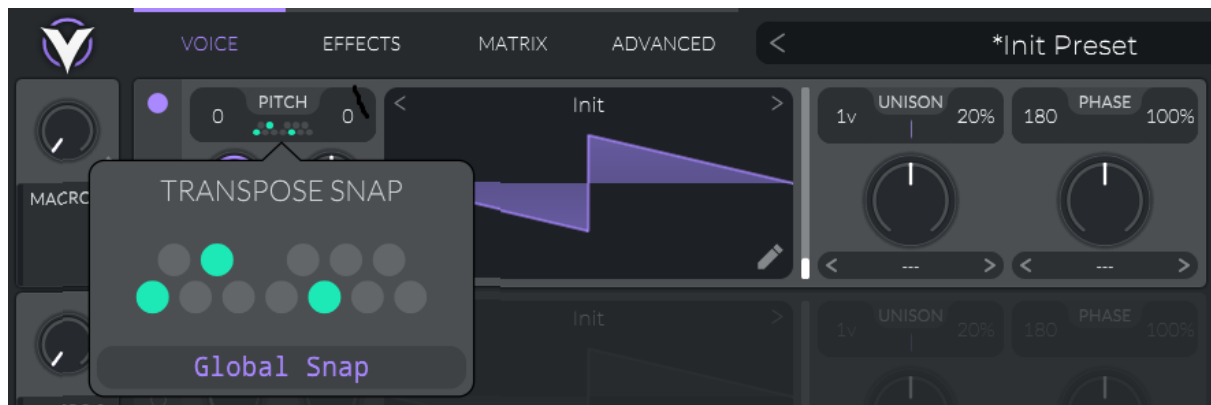
Pitch



The left Pitch control is calibrated to semitones 0 being middle C equivalent to C4. Minus 12 is 12 semitones below i.e C3 Plus 24 would be equivalent to C5

The right Pitch control is calibrated to cents. There are 100 cents in a semitone

Transpose snap and Global snap functions

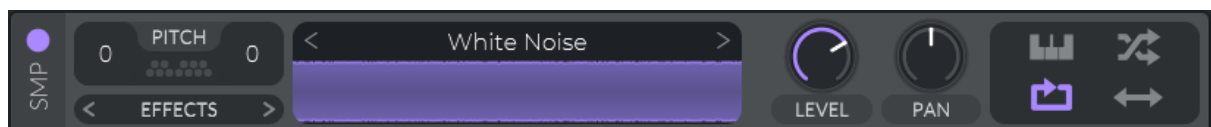


Global Snap will snap the midi keyboard outputs to the nearest note mapped in the global snap mapping,

Transpose Snap will map sounds generated by the Vital Synth to the keys you have mapped. Modulate this with an LFO to create arpeggio like sequences.

Oscillators

Sample player



Select Samples by right clicking. You can select your own files or drag and drop them into the Sample Player.

.Mp3 and .Wav files are supported they should be less than 2 minutes long



Keyboard Trigger: Plays sample at pitch of midi controller keyboard by altering sample tempo (slowing the sample up or down to achieve the pitch)



Random Trigger: Randomly triggers sample anywhere within the sample



Forward Loop: will retrigger the sample loop from the beginning of the loop once the loop reaches the end



Reverse Loop: Will retrigger the sample loop and play in reverse (backwards) from the end of the loop.

Sample Player combinations

Keyboard Trigger	Random	Forward Loop	Backwards Loop	Plays sample at original pitch & tempo	Plays Sample at pitch of key pressed	Alters Sample tempo to change pitch	Randomly triggers Sample	Loops sample from the start once it reaches the end	Loops sample in reverse once it reaches the end	Pitch of sample based on current Midi controller pitch range
OFF	OFF	OFF	OFF	x						
ON	OFF	OFF	OFF	x	x	x				
OFF	ON	OFF	OFF	x			x			
OFF	OFF	ON	OFF	x				x		
OFF	OFF	OFF	ON	x					x	
ON	ON	ON	ON			x	x	x	x	x
ON	ON	OFF	OFF			x	x			x
ON	ON	ON	OFF			x	x	x		x
ON	ON	OFF	ON			x	x		x	x
ON	OFF	ON	OFF		x	x		x		
ON	OFF	ON	ON		x	x		x	x	
ON	OFF	OFF	ON		x	x			x	
OFF	ON	ON	ON	x			x	x	x	
OFF	ON	ON	OFF	x			x	x		
OFF	ON	OFF	ON	x			x		x	
OFF	OFF	ON	ON	x				x	x	

Filters

Envelopes

The Vital Synths comes with 6 Envelopes. ENV1 is controlling the Amplifier (or the VCA), ENV2 to ENV6 are general purpose Envelopes. (Additional Envelopes, LFO and Random show up when the last in the row is connected.)

The Envelopes are DAHDSR Envelopes. That is Delay, Attack, Hold, Decay, Sustain, Release. Delay, Attack, Hold, Decay and Release are times, where Sustain is a percentage (0-100%).



As soon as you trigger the Envelope (e.g. pressing a key), the cycle below starts and is executed.

The phases in detail:

- Delay
This time parameter defines how long the envelope will do nothing before it kicks in the Attack phase.

- **Attack**
This time parameter defines how quick the Envelope reaches 100%.
- **Hold**
This time parameter defines another “wait” phase for the Envelope after it reached the end of the Attack phase and before it starts the Decay phase.
- **Decay**
This time parameter defines the time that it takes to get from the 100% value down to the Sustain value.
- **Sustain**
This parameter defines the value of the Sustain level. The Sustain also has a phase that takes as long as you hold down the key. You can see in the live view of the Envelope, that it stops at the Sustain point as long as you press the key. As soon as you release the key the Envelope continues with the Release phase. It is also worth to mention, that the Envelope always jumps to the Release phase, even if it was in an earlier stage of its cycle (e.g. from attack directly to Release).
- **Release**
This is the final phase and defines the time the Envelope will take to get down to 0 level.

Editing the curve

You can edit the curve via click and hold one of the edge points, for example the Attack phase end point and dragging to left or right to decrease or increase the Attack time.

Within the grid you can see the time in seconds to give you an orientation on how long each phase and how long the full cycle will be.



That is possible for all the hollow control points (see picture above).

You can also use the knobs to define each value with a knob.

The last thing you can do is click and hold one of the solid control points, this will change the curve of the phase you are controlling. With this simple option you can select different curves, from concave to linear to convex curves with selectable steepness.



Tips and Tricks:

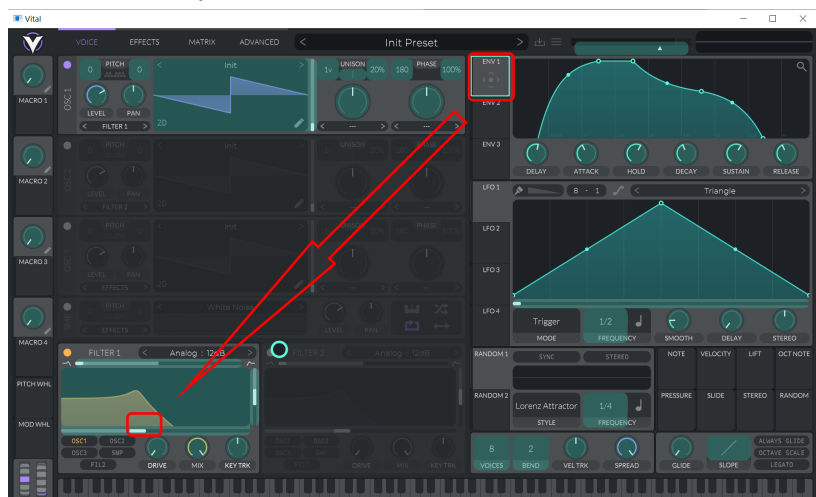
Envelope 1 acts as a “Master Envelope”, if it’s Release Time runs out every Sound, LFO and Random movement will stop. Use Envelope 2-6 or an LFO in Envelope Mode and turn up Decay and Sustain at Envelope 1 to avoid this.

Modulation

You can modulate the Envelope parameters with other modulators (e.g. LFOs, Envelopes, ModWheel) and you can use the Envelope to control other parameters.

To use ENV1 as a modulator click in the field next to ENV1 and drag it to the parameter you want to control.

For example you want to modulate the Filter cutoff, click on the field and drag into the Filter1 cutoff frequency.



To modulate the Envelope Parameters just select any other modulator and drag it onto the parameter in question. In the next picture you find an example for modulating the Attack time with an LFO. That results in every key you play in a variation of the attack time.



You can see from the above, that the LFO is bringing the original form out of shape and the screen is showing that effect in real time.

Find more in general about Modulation in the section -> [Modulation](#)

LFO

LFO Modes:

Trigger: Starts every time a key is pressed. Loops as long as the key is held. When a key is held and another key is pressed, it starts at the beginning again. Set starting Point with LFO Phase slider.

Sync: Starts with first key pressed and loops as long as you hold the key. On Standalone Mode it is synced to 120 BPM. When used with a DAW it syncs to DAW BPM. Sync Mode responds to LFO Phase Slider while running.

Envelope:	Starts every time a key is pressed. Runs one time to the end or until key is released. Keeps the value of end point when key is held, restarts if another key is pressed. Set Start Point with LFO Phase Slider.
Sustain Envelope:	Starts when a key is released and runs until release time is over. If LFO Phase Slider is moved it starts with key press, stops at Slider position and restarts at release to end point or time out.
Loop Point:	Starts when a key is pressed. Runs as long as key is held or release time runs out. LFO Phase Slider set start point for second and later cycles.
Loop Hold:	Starts when key is released, keeps last value until release time out. When LFO Phase Slider is moved it loops from start to Slider position when key is held and on release one cycle from start to end runs through.

In the “Note” modes LFO frequency can be set to freeze, then connected and started with another modulator.

In Standalone Version Vital is set to 120 BPM. When LFO Frequency is set to 1/1 one cycle is 2 seconds long. One $\frac{1}{8}$ bar up $\frac{1}{8}$ bar down alternated results in 120 BPM with 8 x 0,25 sec beat and pause.

Random Generators

Modulators

Note: sends a value to the modulator destination depending on what note is played. Turn the circle clockwise to send higher value on higher notes and lower value on lower notes. Turn counterclockwise for the opposite direction.

Velocity: sends a value to the modulator destination depending on how hard/fast a key is pressed. Change the circle direction for the opposite direction.

Lift: sends a value to the modulator destination depending on how hard/fast a key is released. Change the circle direction for the opposite direction.
Connect it to something to check if your MIDI device supports this, if it sends a note on velocity it probably sends a note off velocity too.

Oct Note: sends a low value for the first note of an octave to the modulator destination. Value send is increased on higher notes until the next octave. Change the circle direction for the opposite direction.

Pressure: sends a value to the modulator destination depending on how hard a key is pressed. Key with the highest pressure is active. Change the circle direction for the opposite direction.

Slide: for MPE Controllers

Stereo: sends a different value to destinations left and right channel.

Random: sends a random value with each key pressed.

Macros

Macro knobs can be connected to Envelopes, LFOs, Random and Modulators by drag and drop or through the Matrix view.

Macros can be modulated like other controls by dragging and dropping a control onto the Macro

Modulation

Effects

Matrix



Matrix List View

#	SOURCE	BIPOLAR	STEREO	MORPH	AMOUNT	DESTINATION
1	Lfo 1	↔↔↔	L/R	↗		Filter 1 Cutoff
2	Lfo 1	↔↔↔	L/R	↗		Filter 1 Resonance
3	Env 2	↔↔↔	L/R	↗		Filter 2 Cutoff
4	Env 3	↔↔↔	L/R	↗		Filter 2 Resonance
X	Env 4	↔↔↔	L/R	↗		Osc 1 Wave Frame

The Matrix shows all the modulations and mapping set. Additional mappings can be entered into it.

Select a column title to sort the field.

Select a # number to temporarily turn a modulation off 'X' Click it again to toggle it on.

SOURCE Select a source of the modulation or control event (e.g. Macro, Effect, Global Setting etc).

BIPOLAR sets a multi directional modulation rather a unipolar one.

STEREO will apply a STEREO setting where applicable to the modulation.

MORPH by default is linear but can be shaped into a 'S' curve for a variable sloped value.

AMOUNT can be either positive or negative. 0 is in the middle of the slider control.

DESTINATION is the target of the SOURCE modulation.

ModMatrix

The MOD REMAP



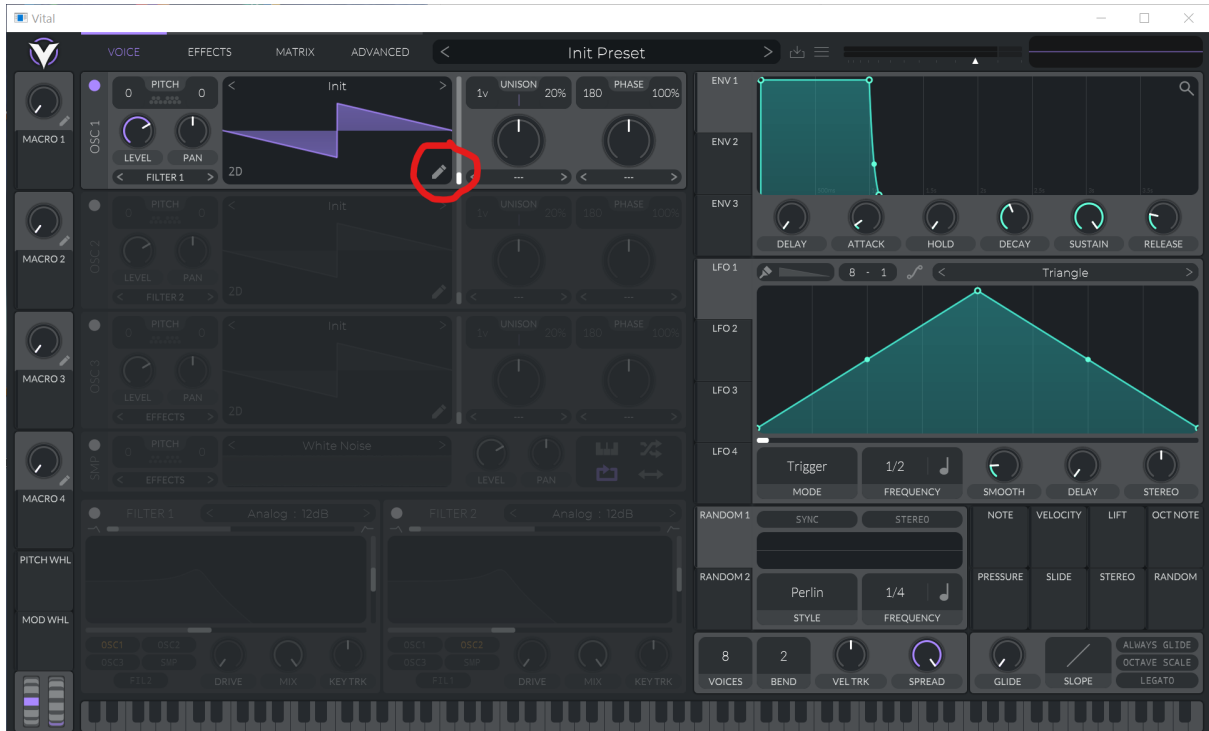
The Mod Remap is used to further adjust a selected modulation in the Matrix View. Modulation shapes can be selected or drawn in a similar way as described in the LFO and Envelope Sections.

Advanced Section

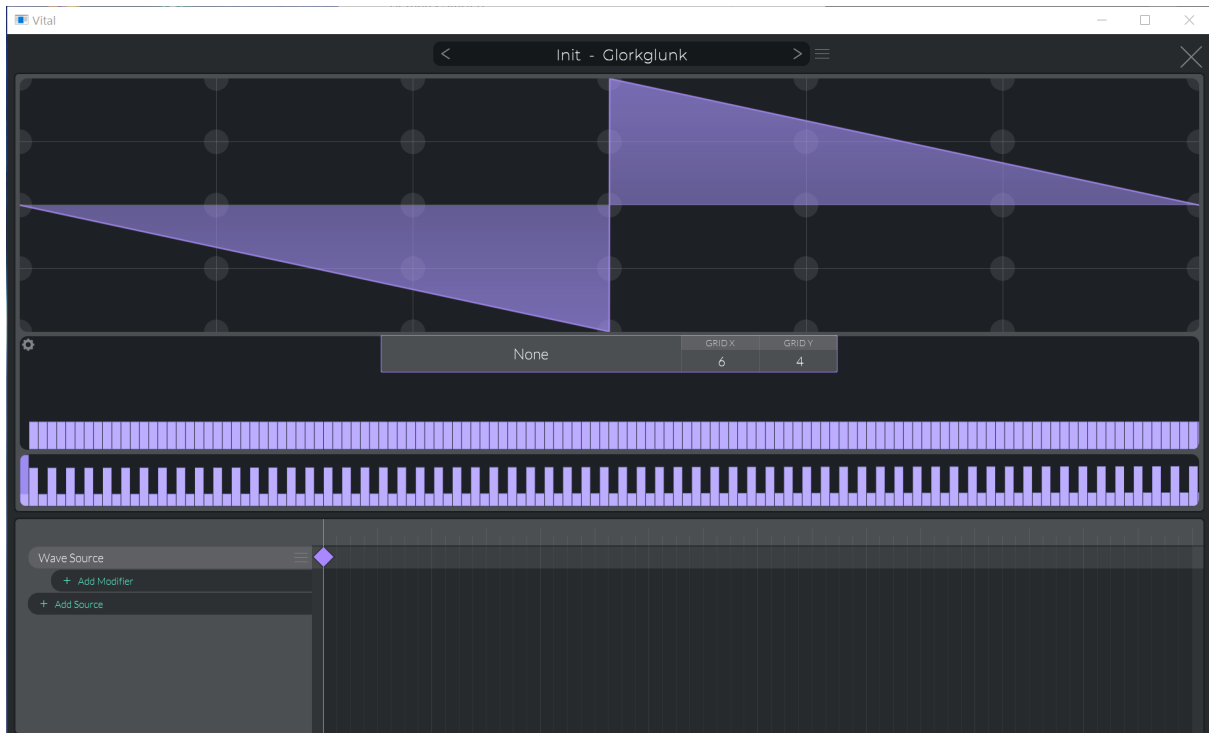
The Wavetable Editor

Getting Started

Vital comes with a powerful Wavetable Editor. To access it, go to the Oscillator Section and press on the little pencil in the lower right corner of the Wavetable view.



Overview



Add a Wave Source and set X or Y grid to zero to draw waves freely.

MIDI

Right click on Items to learn MIDI Assignment. Use Knob/Slider/Button to connect. Right click to clear assignments.

Community and Thanks

First of all let us Thank Matt Tytel for the great release of Vital Synth. Releasing different editions with a heart for the typical bedroom producer is just great. Having it also on GNU/Linux was a great supporting factor for a larger part of the community.

If you like the product, please consider purchasing one of the options that suits you best. Find out more about the different options here:

<https://vital.audio/#getvital>

This document has been created by the following members of the Vital Community:

SerErris - <https://forum.vital.audio/u/sererris/>

vcvr - <https://forum.vital.audio/u/vcvr/>

Andy Pettitt <https://forum.vital.audio/u/andypettitt70>