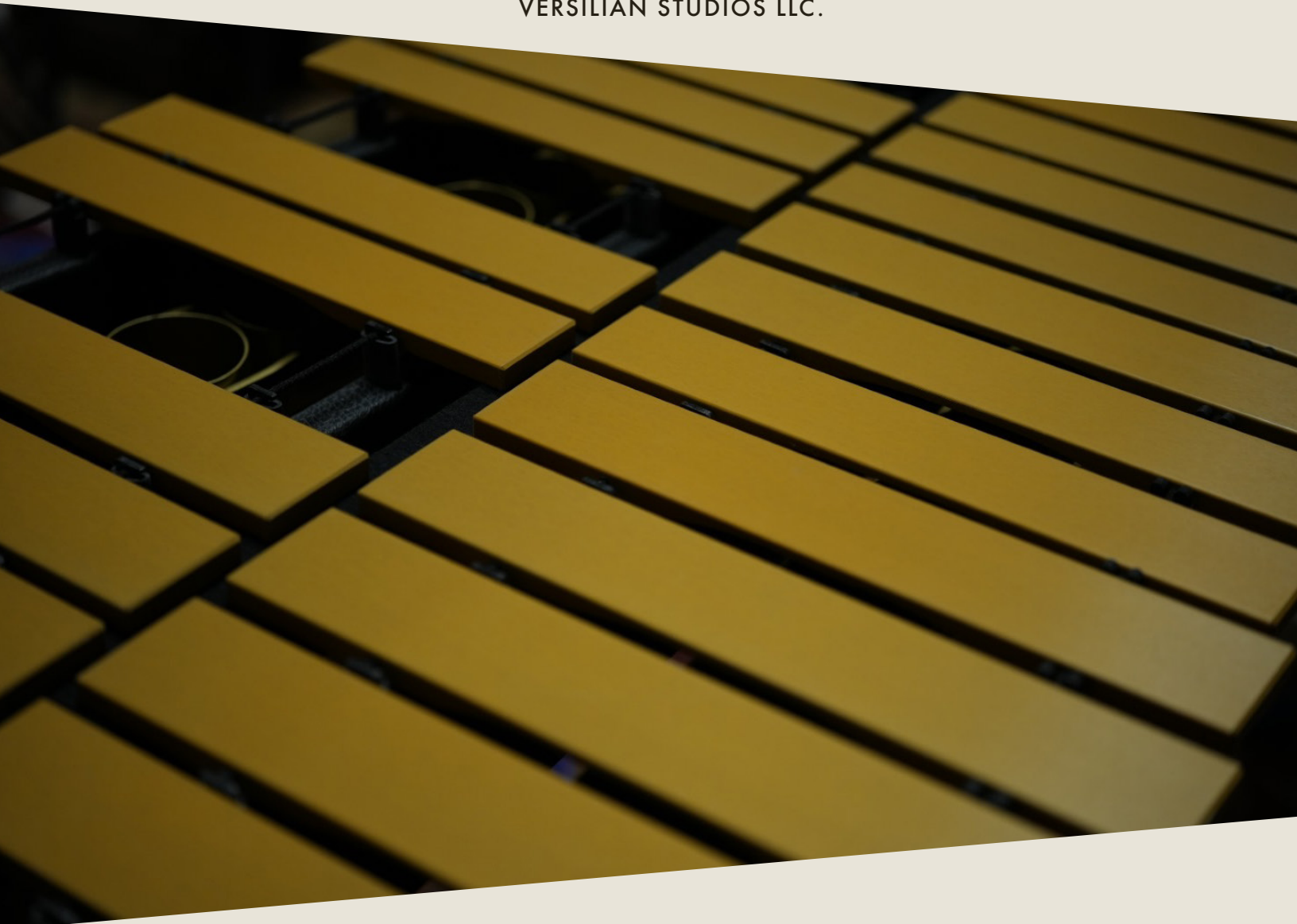




VERSILIAN STUDIOS LLC.



V I R T U O S I T Y

VIBRAPHONE

P R O D U C T M A N U A L



INTRODUCTION

Long ago in an auditorium far away, Versilian Studios started work on a little project called Chamber Orchestra 2 by sampling a range of pitched percussion instruments. Notably absent from this assortment was a vibraphone, despite two summers and hundreds of hours of sampling. Only at the last minute were we able to finally squeeze it into the library, but it never made a solo release.

Eleven years later, I found myself in a rather remarkable position to correct that mistake: I could sample a beautiful new vibraphone... if only we took the time to assemble it first!

The vibraphone is a key instrument not just in Jazz, but in contemporary orchestral and popular music as well. Its sweet, lyrical sound and unique vibrato (achieved through rotating baffles inside the resonators) make it a versatile instrument, as well as a suitable alternative to glockenspiel, marimba, and celeste. It is also now a well-known technique to bow the vibraphone, usually with a bass bow, to achieve a glassy pad-like sound.

Our vibraphone does not feature the mechanism required to produce vibrato, but we were able to accurately recreate the vibrato effect through careful modulation of the audio signal.

DEVELOPMENT

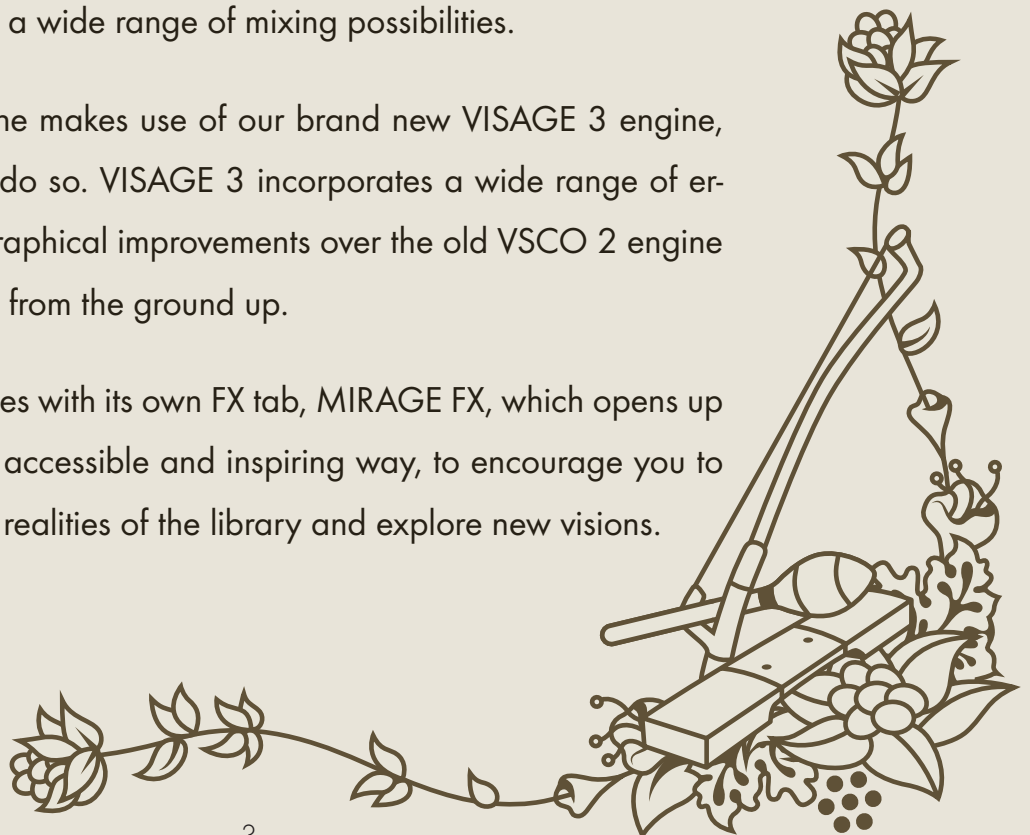
The goal with Virtuosity Vibraphone from the start was flexibility. This library is designed from the beginning in all aspects to support the most flexible and varied use possible, from the recording methods used to the capabilities of the new VISAGE engine powering it.

Sampled here is a brand new 3.0 octave professional vibraphone made by a prominent Dutch manufacturer. The instrument was carefully assembled and set up at Virtuosity Musical Instruments in Boston, MA where we proceeded to sample it in the dead of night with 4 RR and up to 4 velocities.

A very special array of microphones were hand-selected for this purpose. At the center of the 'show' is a novel multi-pattern Overhead (OH) position, blending between an omni and a supercardioid pattern, letting you focus or spread out the sound of the vibes. A range of high-end LDC's and ribbons accompany this to provide a wide range of mixing possibilities.

Virtuosity Vibraphone makes use of our brand new VISAGE 3 engine, in fact our first product to do so. VISAGE 3 incorporates a wide range of ergonomic, technical, and graphical improvements over the old VSCO 2 engine (VISAGE 1), and was built from the ground up.

VISAGE 3 also comes with its own FX tab, MIRAGE FX, which opens up Kontakt's internal FX in an accessible and inspiring way, to encourage you to move beyond the acoustic realities of the library and explore new visions.



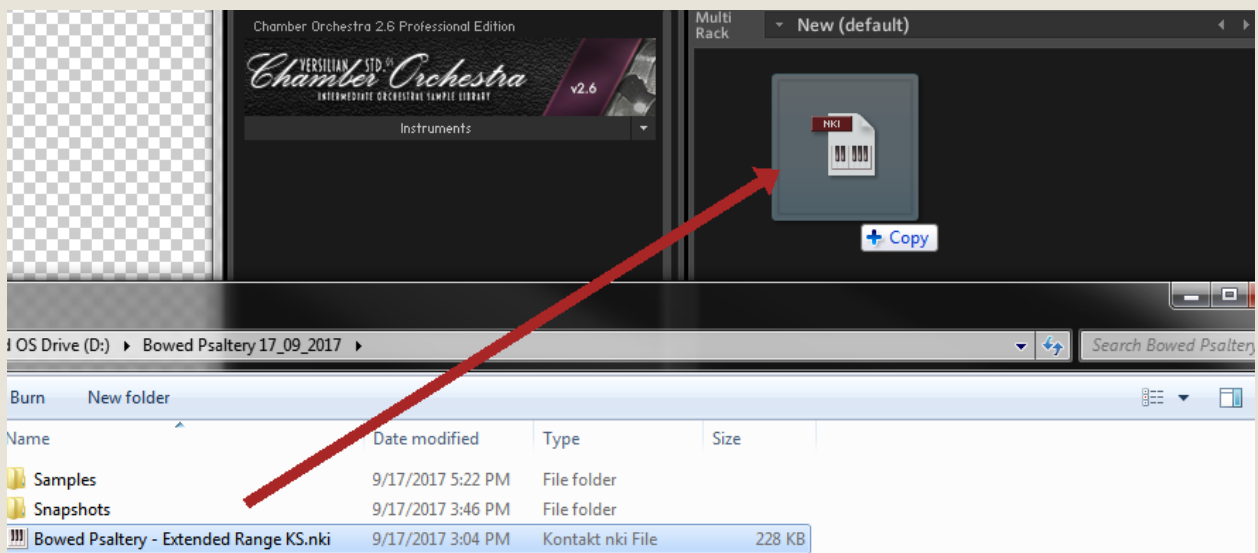


INSTALLATION

Begin installation by downloading the library after completing checkout, using [Pulse Downloader](#). Pulse is a special application designed specifically to distribute, verify, and update sample libraries and is used widely in the industry. Click 'Add a Product' and enter the code given at checkout.

Pulse will prompt you to select an install location— this could be on an external hard drive, an internal SSD, or your main hard drive.

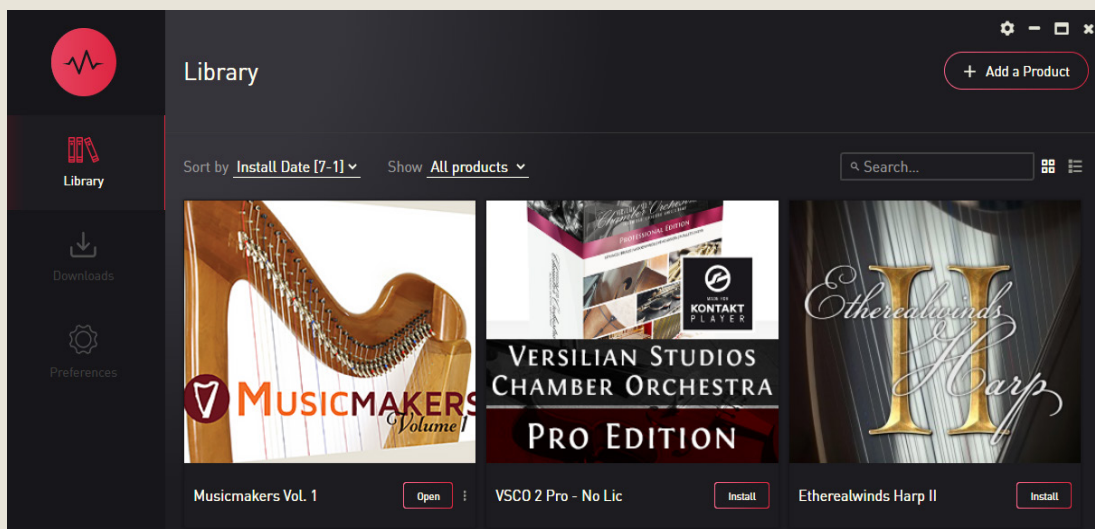
To use the library, drag and drop any of the .nki (Kontakt instruments) into an instance of Kontakt (either standalone or plug-in), as shown below.



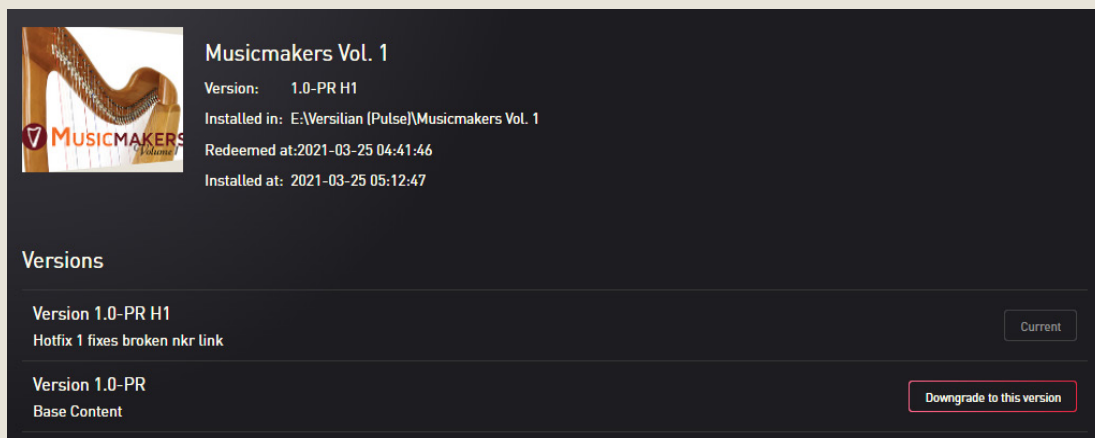
MANAGING YOUR INSTALLATION

Pulse Downloader not only manages the download process, it also allows you to maintain and update your installation in the event updates are provided for the library.

Once you have installed Vibraphone, it will appear in your Pulse Library. You can click 'Open' to jump to the files, or use the '...' to reinstall:



If an update is available, Pulse will prompt you to install it. Consider checking back every few months in case an update is provided. If you experience problems with an update or simply wish to learn more about what was changed, select the product and you will be able to see patch notes and select an earlier version to downgrade, as shown here on our internal test branch:



REVERB

Reverb On/Off

Space Type Selection

Reverb Pre-Delay

Reverb Amount (mix -dB)

Reverb Time (T60)

Mix Preset/Default Mix:

SAVE the mixer as Default

RECALL the saved mix

AUTO load saved mix on init (!)

Microphone Position Name

Microphone Model

Microphone Volume

Microphone Pan

Microphone Stereo Width

Microphone Solo/Mute

Microphone Load/Purge

Microphone Outputs

TONE control tab (active)

TUNING control tab (inactive)

Articulation Name & Info

Keyswitch Mover (drag)

Per-Articulation Settings

Articulation Attack Time

Release Sample Volume

Vibrato Controls

Pedal Mechanical Noise

Active Keyswitch

Advanced Features

Disable Keyswitching (Lock)

MIRAGE FX Page

MIXER



ARTICULATION CONTROLS

These controls apply only to the currently active articulation, so that you might adjust each articulation to taste and need.

VELOCITY CURVE

Something nice to look at

Velocity Curve On/Off

Curve Selection (Linear/Shelf/Fixed)

Curve Editor (drag to alter curve)

Dynamics (Modwheel/CC1)

Dynamic Range (vol. gamut)

Expression (CC11)

Transpose (drag)

Range Limits (drag)

Articulation Name

Articulation Icon

Articulation Keyswitch (KS)

Articulation Load/Purge

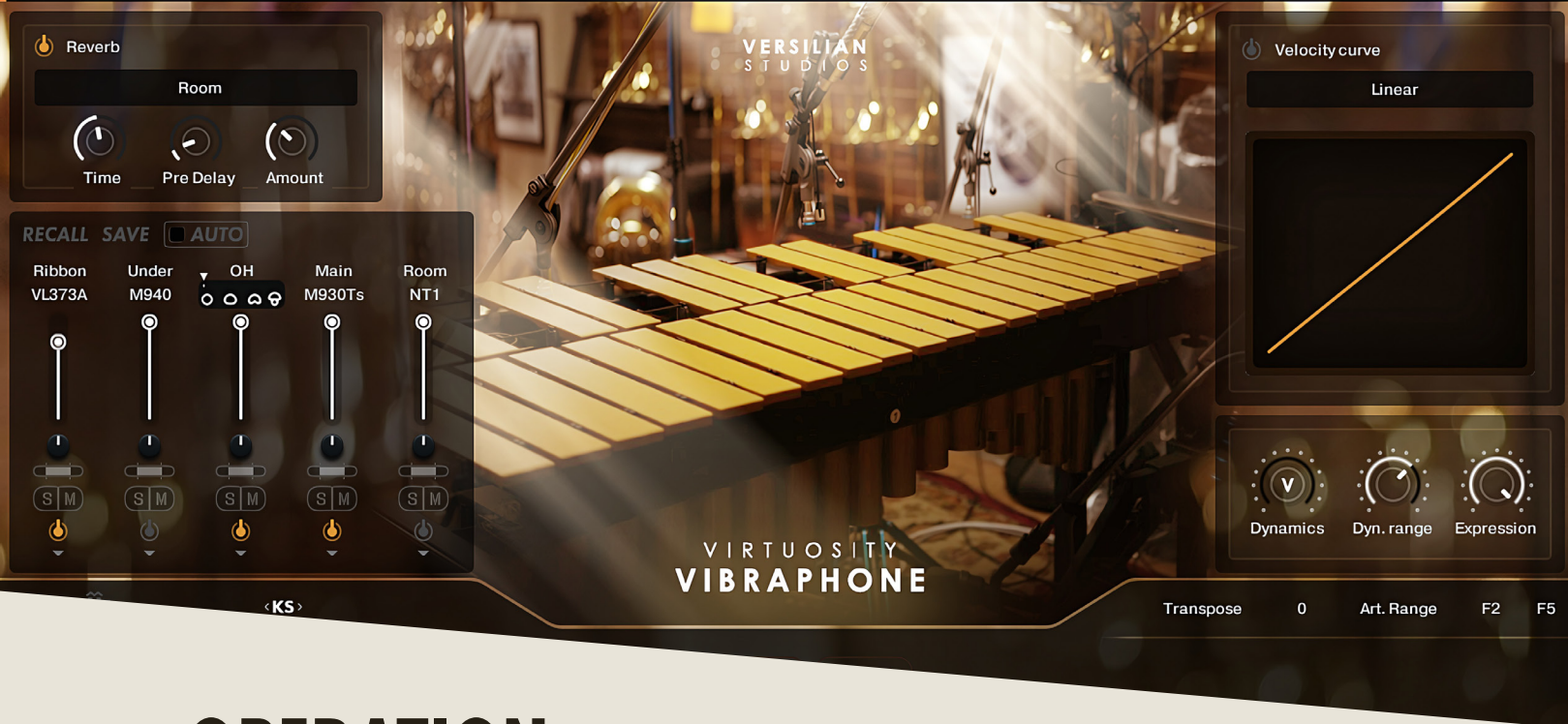
D
Y
N

A
R
T



V I R T U O S I T Y

VIBRAPHONE



OPERATION

Vibraphone makes use of our brand new Kontakt engine, VISAGE, complete with its own effects system, MIRAGE. VISAGE features numerous advanced systems and functions to simplify and speed up usage regardless of your use case or technical level. In this section, I'll go over all functions of the VISAGE engine and share tips on how to get the most out of this library.





Starting with the top of the instrument, we have the default Kontakt header. This area provides basic instrument settings and allows you to shrink or expand the GUI as needed. Note that VISAGE uses a special 'extra wide' mode, allowing for a larger, easier to read interface.

On the left is the wrench icon, which allows access “under the hood” of the instrument. This is best for veteran Kontakt users only, but is worth exploring if you’re new to Kontakt as well.

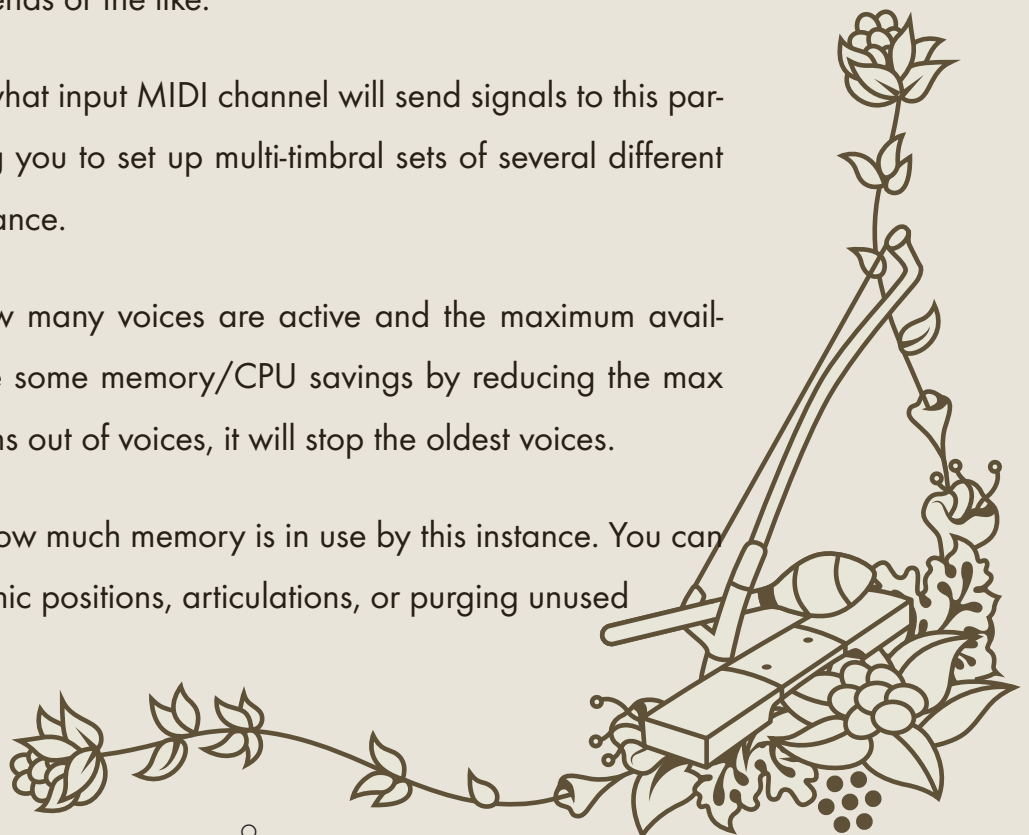
The central gray box displays general information and settings for the instrument. You can swap this display over to show the snapshots menu simply by pressing the camera icon to the right, and vice versa by pressing the ‘i’.

Output will control where the audio data goes to. Typically this should be left untouched unless working with a surround mix or bussing specific instruments to different reverb sends or the like.

MIDI Ch. controls what input MIDI channel will send signals to this particular instrument, allowing you to set up multi-timbral sets of several different instruments in a single instance.

Voices displays how many voices are active and the maximum available. You may experience some memory/CPU savings by reducing the max number. When Kontakt runs out of voices, it will stop the oldest voices.

Memory displays how much memory is in use by this instance. You can reduce this by unloading mic positions, articulations, or purging unused files to the right-hand side.





The central part of the GUI is where you can shape the **Tone** of the instrument.

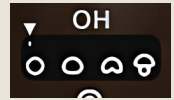
On the left are the controls for Kontakt's new algorithmic **Reverb**, which lets you switch between Room and Hall style reverberances. Time controls the length of the reverb tail. Imagine this as an extra "ambient" pair of mics out in the space, with the 'Amount' as your mixer level. The pre-delay is similar to placing the virtual "mics" farther or closer to the sound source (1 ms = approx. 1'/0.3m).

Below the Reverb you will find the **Mic Mixer**. When we recorded Vibraphone, we used 12 different *microphones*, arranged in 6 stereo pairs/arrays, to capture every single note. Here you can load and mix together each of these microphones, blending them together to get a *brighter* or *darker* sound, or a *closer* or *further* sound.

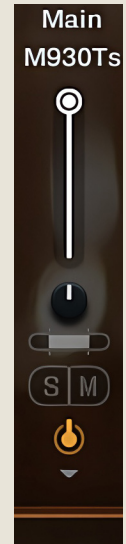
The 6 arrays are organized here in 5 positions: **Ribbon**, **Under**, **OH**, **Main**, and **Room**, each progressively further away. The ribbon, under, and OH mics will provide the driest, cleanest sound, while the room mic will provide the most spacious sound. The mics in between provide various colors and widths of sound for various tastes.

The Overhead (OH) mic has a special feature, where you can *blend* between a more focused pair of mics (supercardioid) and a less focused pair of mics (omnis), as part

of a technique known as a "Straus Packet". A small slider below 'OH' can be moved side to side to accomplish this, with any blend between being possible, functioning much like a *zoom lens* on a camera.



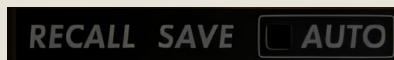
Beneath the positions, round white *sliders* can be moved up or down to change the **Volume** of mics, followed by a small **Pan** knob, a stereo **Width** control (to reduce/enlarge width of a mic), and **Solo/Mute** buttons.



At the bottom, most critically, is a **Load/Purge** button in the shape of an off/on toggle. When loaded, this will show *orange*. When not loaded, it will be *greyed out*, showing that mic position is not loaded.

Note that each microphone position will consume a lot of RAM, around or beyond **200-400 MB**. It also may take Kontakt a while to load all the samples, especially if loading from a slow mechanical hard drive. *By default* Virtuosity Vibraphone only loads up with 3 of 5 mics active for this reason.

If you're working with multiple patches of Vibraphone, rather than manually trying to match your mix settings between each instrument, set your *optimal mix* on one instrument, then double-click **'SAVE'** in the top of the mixer window. This will save your mix for this patch.



Now in each Vibraphone you wish to apply the mix within, simply click **'RECALL'**. The mix settings (excluding *Pan*) will be loaded up. This lets you retain any panning to individual instruments necessary to make an ensemble mix.

'AUTO' is not really used in this product, but is useful in other libraries with multiple instruments, where it allows you to apply mixer changes across all the patches at once after saving and initializing the patches ("!" button).



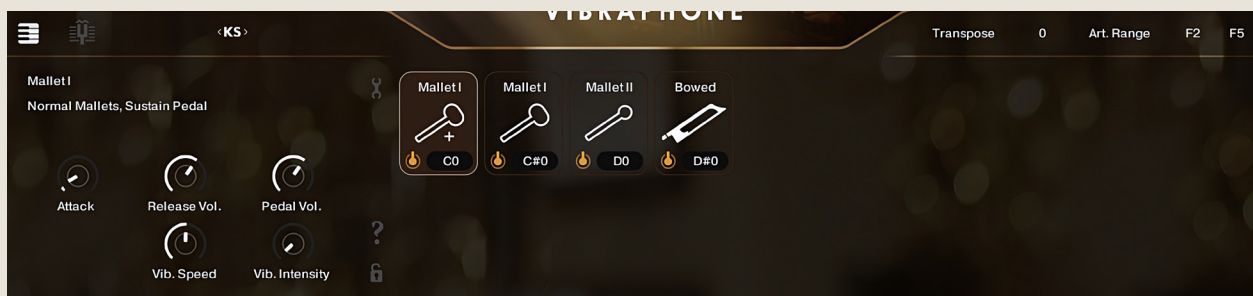


The **Velocity Curve** panel in the top right side allows you to adjust how the instrument responds to the velocity input of your keyboard. Select a curve type, then drag the curve around in the box below to change the behavior.

This is very helpful when you want to play more softly or more aggressively with greater consistency, such as in a soft ballad or to stick out in a full orchestration, as it will ease your input towards the direction you curve the line. S and fixed type curves are also present for further tweaking to handle inconsistent or limited keyboards.

The three controls below the velocity curve shape the volume of the instrument:

- **Dynamics** controls the volume of sound within the gamut of *Dynamic Range*.
- **Dynamic Range** is the total gamut between the highest and lowest velocity.
- **Expression** is an additional volume control for balancing/mixing use.



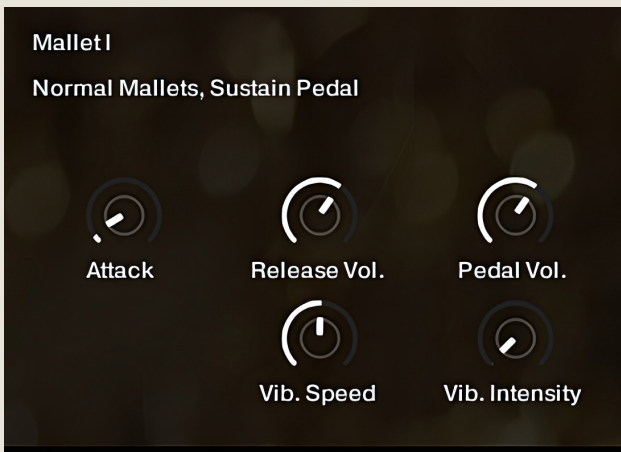
The bottom third of the user interface controls the articulation, pitch, and performance parameters of the instrument. Here you will find a range of different sampled articulations to choose from, controls for those articulations and their keyswitch triggers, as well as options for transposing and limiting the range of the instrument.

In the upper left of this area, you can toggle the middle of the interface between the Tone controls and Tuning controls. The adjacent **<KS>** slider will allow you to move the keyswitches to a more optimal spot. Tuning falls outside the scope of this product.

Transpose can be useful in situations where you need to transpose the vibraphone up or down an octave or two in order to line up with an incorrect MIDI part/keyboard. Double-click and type the desired halfsteps (12, -12).

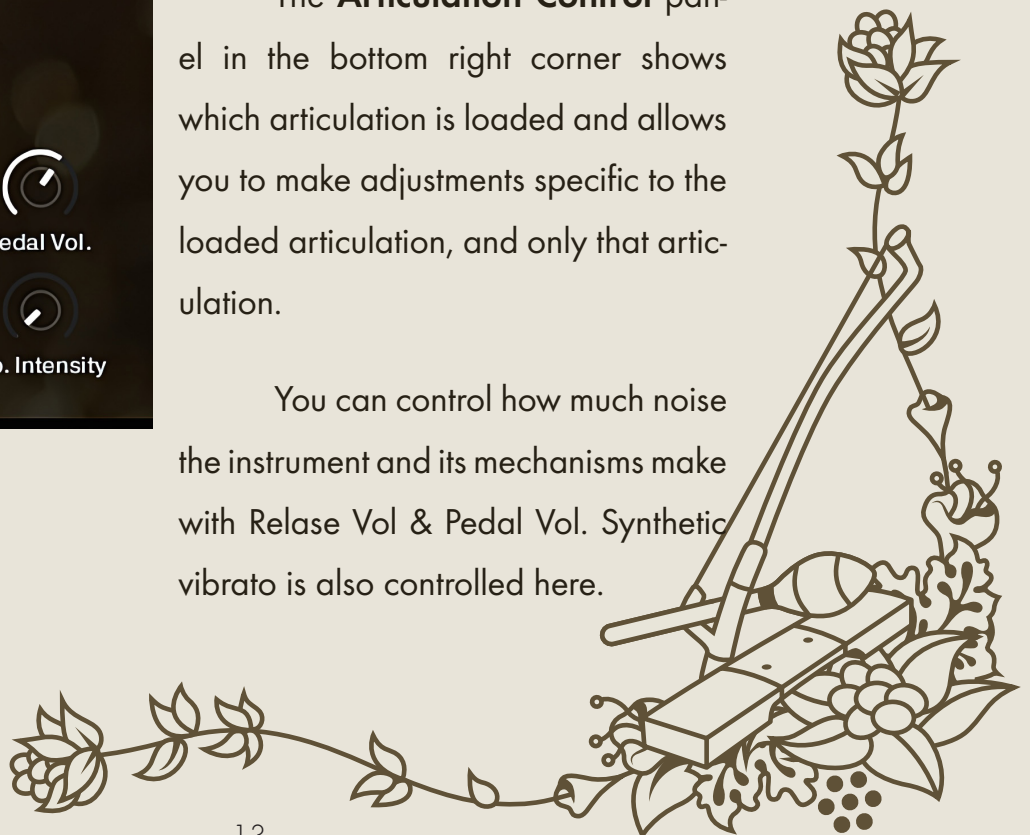
The **Articulation Range** control is also useful if you are building a unison ensemble effect by layering multiple instruments of different ranges together. You can limit the high or low range in order to "transition" to other instruments (e.g. glockenspiel) to make handy 'ensemble' patches for sketching and quick mockups.

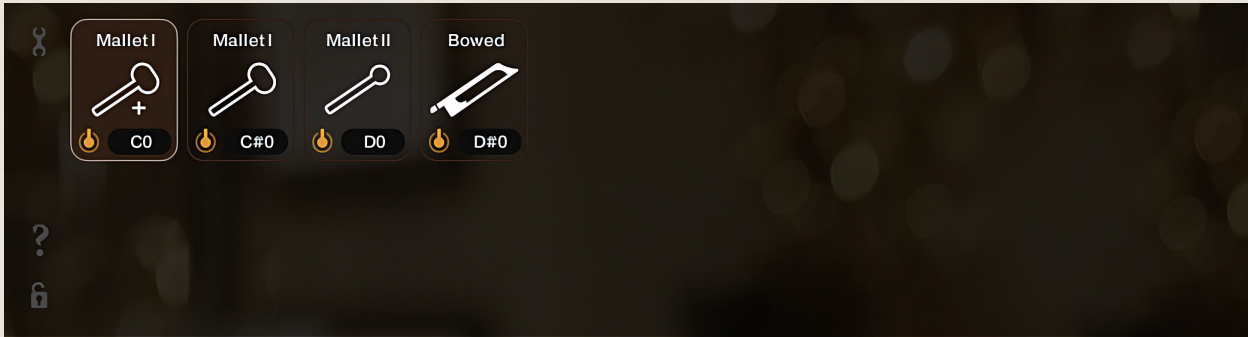
If the stock vibraphone has too limited of a range, consider using the extended range patch. However, please note that most typical vibraphones do not extend beyond 4 octaves (C2 to C6). If you are writing a piece for performance, please work with a vibraphone player to ensure the range and music you write will fit on their instrument and be physically achievable.



The **Articulation Control** panel in the bottom right corner shows which articulation is loaded and allows you to make adjustments specific to the loaded articulation, and only that articulation.

You can control how much noise the instrument and its mechanisms make with Release Vol & Pedal Vol. Synthetic vibrato is also controlled here.





The **Articulation Palette** shows all available articulations in the instrument, as well as what *Keyswitch* each articulation is tied to. As noted earlier, the keyswitch range can be adjusted by dragging the **<KS>** control.

Articulations can be *selected* either by clicking, or, for changes during a piece, by entering keyswitch notes in the piano roll or recorded during your performance. A gold frame will appear around the active articulation.

If you know you won't be using an articulation, you can disable it by pressing the *on/off toggle*. If the samples are not used elsewhere, they will be purged, saving memory.

If you plan on using only one articulation in your project and do not want to accidentally press a keyswitch, click the **Lock** in the bottom left corner to prevent the chance of changing articulations via any method.

The **Wrench** icon in the top left corner allows access to some extra features, namely neighbor-borrowing round robin (which increases the number of round robins by repitching samples from neighboring notes) and using aftertouch to stop notes.

Vibraphone features 4 round robins minimum, so the neighbor-borrowing is not usually needed, but can come in handy in some extreme cases.

The aftertouch releases can be useful if you want to use aftertouch to stop all the present notes instead of releasing the pedal.



The **MIRAGE FX** system provides easy access to Kontakt's internal suite of FX. VISAGE lets you shape the vision of the sound as it exists, MIRAGE lets you twist and shift those sounds into something mix ready or even surreal.

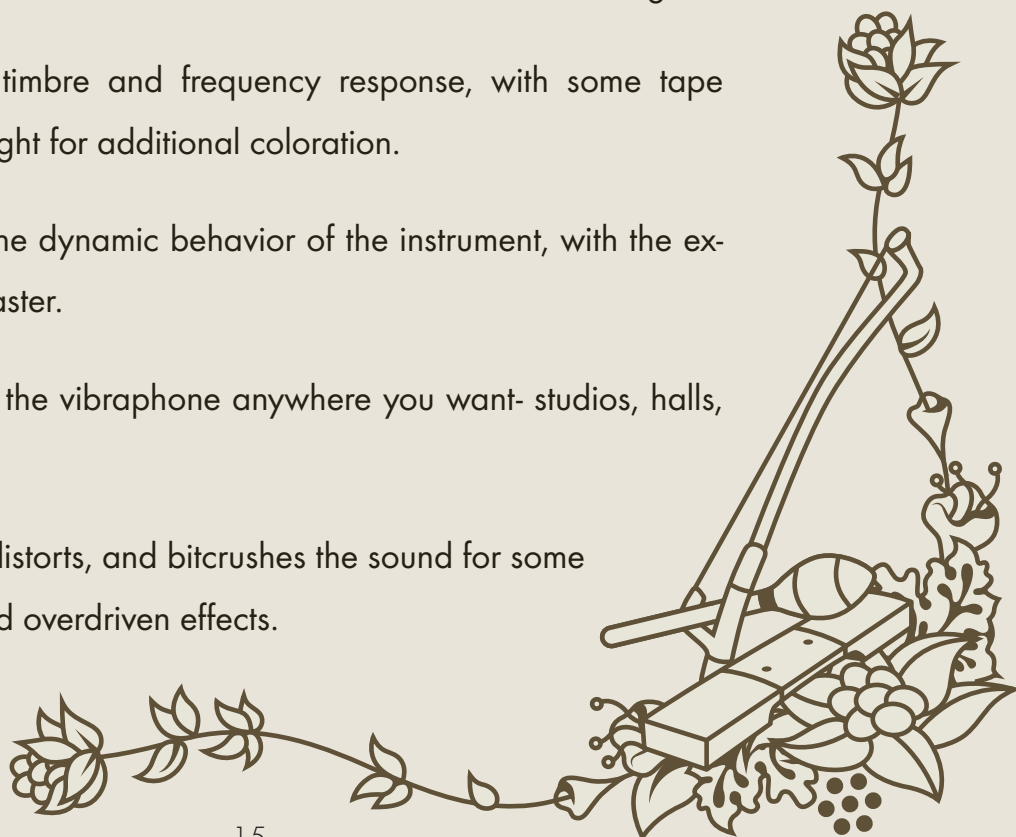
MIRAGE is divided into four sections: Tone, Dynamics, Space, and Crunch. Each row moves from calmest effect to most severe from left to right.

Tone controls the timbre and frequency response, with some tape warmth available on the right for additional coloration.

Dynamics shape the dynamic behavior of the instrument, with the extremely handy transient master.

Space lets you put the vibraphone anywhere you want- studios, halls, even surreal landscapes.

Crunch saturates, distorts, and bitcrushes the sound for some scintillating resonances and overdriven effects.





PATCHES & ARTICULATIONS

Within the main folder, you will find two .nki patches, **Virtuosity Vibraphone - Extended Range.nki** and **Virtuosity Vibraphone - Normal Range.nki**. The Normal range file has the exact 3.0 octave range of the real vibraphone sampled, while the Extended range file extends the maximum range by 1.5 octaves on each side (a whopping 6 octaves!).

Note that most vibraphones max out at about 4.0 octaves of range, so it is recommended to keep within the range of C2 - C6 if you even slightly intend to have your part playable on a real instrument. The extended range really comes into its own with the bowed vibes, offering a rich pad texture.

Two sets of mallets were used, a conventional yarn mallet ("Mallet I") and a harder rubber mallet ("Mallet II"). The yarn mallet is responsible for the typical and usually favored sound of the vibraphone, and so we have sampled it more thoroughly here. The hard mallet, we only sampled the staccato "closed" sound with the pedal left up, which is practical for poking through dense orchestration.

Bowing was also sampled, accomplished by rubbing a bass bow vertically along the end of each key.

At the bottom of the GUI, you'll find the four selectable articulations. The first two articulations use Mallet I, while the third articulation uses Mallet II, and the final one uses the bow.



The first Mallet I patch is the most realistic, natural behavior. In this articulation, you'll need to use your sustain pedal to physically open and close the dampers. If you play without the sus pedal down, then you will get a staccato sound as the dampers remain in place while striking.

If you don't have a sustain pedal or need a simpler control method, the second articulation sustains without needing the sus pedal.

SNAPSHOTS

Designed by library co-creator Simon Autenrieth, Snapshots provide a curated range of colors and emotions designed to help you alter the instrument to meet your sound concept or needs with minimal adjustment. Accessible with the camera icon in the top center area of the interface.

Hits

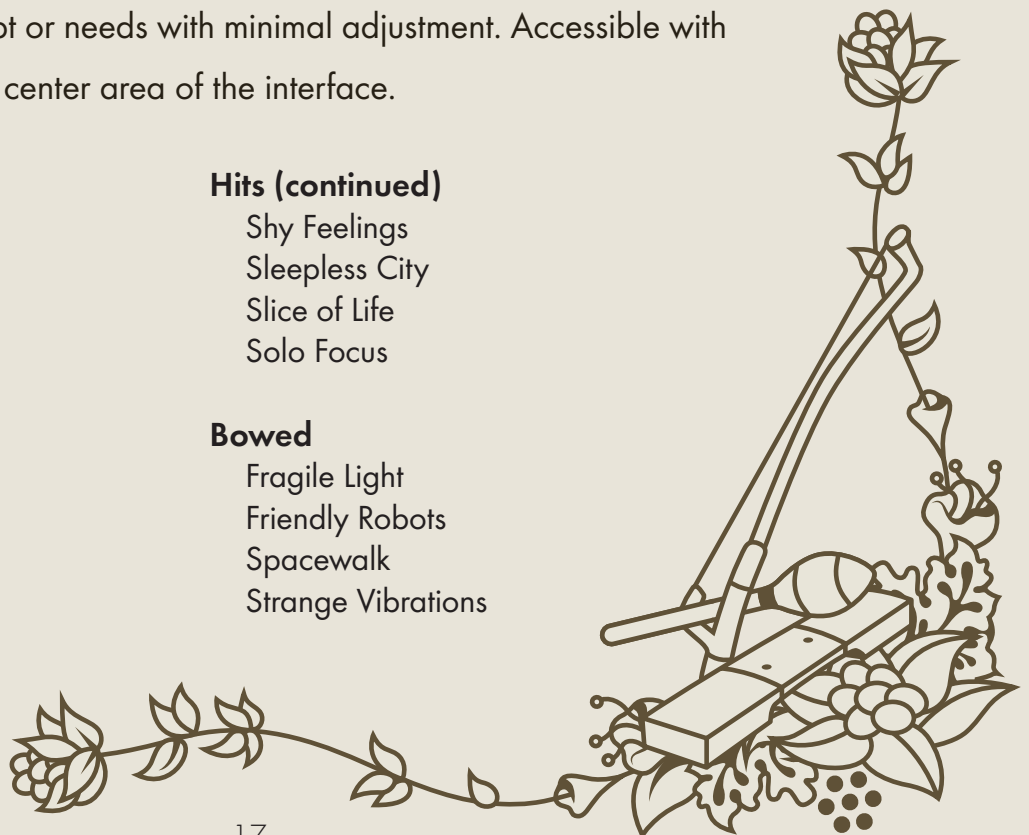
- Bonding Moment
- Brilliant Reverb
- Conflicting Emotions
- Distortion Detective
- Droplets
- Early Bird
- Fuzzy Secrets
- Happy Resolution
- Profiling the Suspect
- Retrospective Memory

Hits (continued)

- Shy Feelings
- Sleepless City
- Slice of Life
- Solo Focus

Bowed

- Fragile Light
- Friendly Robots
- Spacewalk
- Strange Vibrations





MICROPHONES

Contrary to popular belief, there is no such thing as a "perfect" or "best" microphone. Each microphone presents us with a specific sound concept, sense of space/focus, and character, be it neutral, bright, dark, open, focused, or any number of endless adjectives people who probably have better things to do like to throw around late at night on internet forums.

Six different pairs or arrays of microphones from around the world were used:



VL373A



SAMAR AUDIO DESIGN

An active stereo ribbon microphone, the VL373A is as glamorous as it is technically impressive. Capable of extended frequency response well beyond that of most ribbon mics, the VL373A nonetheless has a warm, forgiving sound which gently smooths out glare and attacks.



M940



MICROTECH GEFELL GmbH

Small and unassuming, the supercardioid M940 is a single-diaphragm LDC with an unusually low noise floor of just 6 dBA. Located beneath the vibes, these provide a warm, round sound to blend in with the other mics.



RN17 (Sup. C) // sE ELECTRONICS

sE Electronics worked with Rupert Neve to design this high-end SDC with its distinctive massive transformer. The rare supercardioid capsule provides a focused, natural sound with a gentle easing of transients and harshness thanks to the large transformer.



M221 // MICROTECH GEFELL GmbH

One of the flattest, purest microphones in existence, the omni directional M221 is quite literally the microphone by which all other microphones are measured. Its 12.5mm diameter ultra-thin nickel diaphragm captures transients with incredible accuracy.



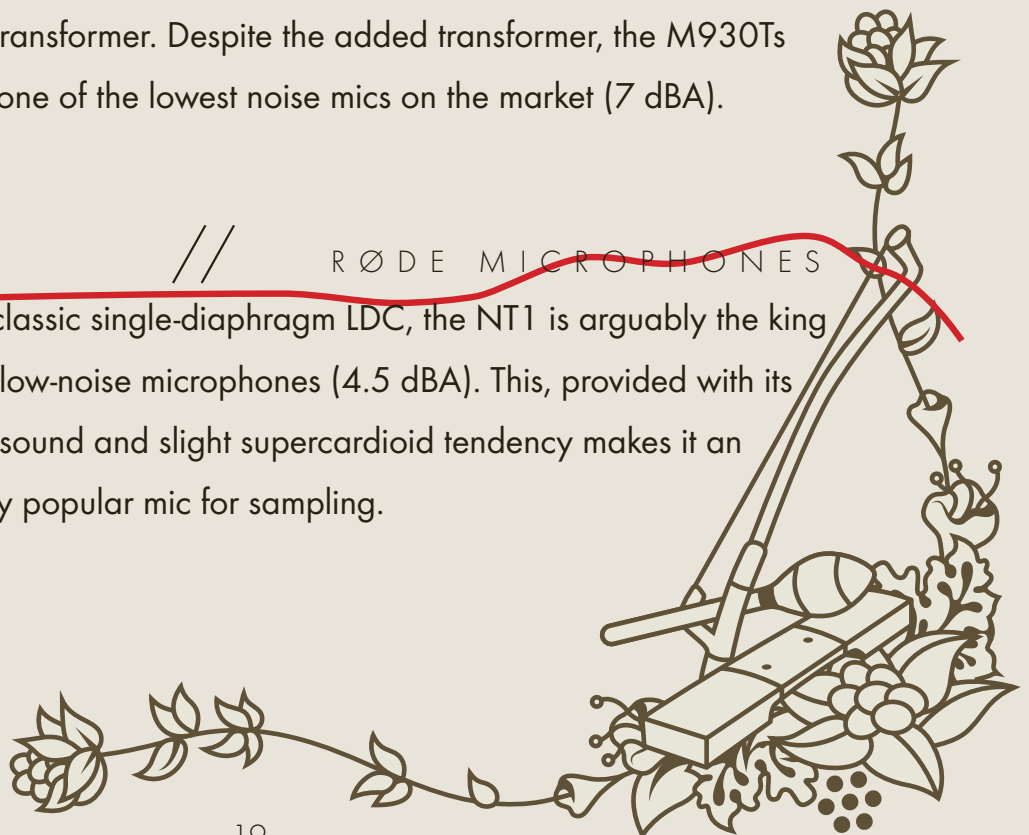
M930Ts // MICROTECH GEFELL GmbH

A single-diaphragm LDC, the diminutive M930Ts provides a sparkly, articulate sound with deep, extended lows thanks to its large Haufe output transformer. Despite the added transformer, the M930Ts remains one of the lowest noise mics on the market (7 dBA).



NT1 // RØDE MICROPHONES

Rode's classic single-diaphragm LDC, the NT1 is arguably the king of ultra-low-noise microphones (4.5 dBA). This, provided with its neutral sound and slight supercardioid tendency makes it an extremely popular mic for sampling.





TROUBLESHOOTING

If you are experiencing issues with the library, there are a few steps you can try to resolve the issues before contacting us. Below is a list of common possible problems and 'home remedies' that will work to fix them.

1. Samples missing dialogue.

If you see this window, it means that the samples were moved or are missing from their original location. It is recommended to re-download the library via Pulse. If you still get the dialogue, do a batch re-save: select the floppy disk icon at the top of the Kontakt window towards the right and select 'Batch Re-save'. Navigate to the 'Virtuosity Vibraphone' folder and select it. When the dialogue pops up, click 'Search for folder' and select the samples folder. After the batch re-save is complete, you should not experience any further samples missing dialogues.

2. Instrument uses up too much memory or CPU.

Use the circles beneath the articulations to purge any you doubt you will typically need, and turn off any effects you don't use (filter/reverb). Save this patch (under the floppy disk/save icon at the top of the Kontakt window itself) so that way it will load this way

by default. Note that snapshots include which articulations and mic positions are selected and enabled/disabled.

3. Instrument is only available in "DEMO" mode.

This is caused by trying to run the instruments in Kontakt Player. Unfortunately there's nothing we can do about this- making libraries for Kontakt Player requires a licensing agreement with Native Instruments, which is not economical for specialty products like this.

However, Kontakt is on sale often around December/January for \$150 USD, and honestly that's not a bad price to pay for the "gateway drug" to literally thousands of free and commercial sample libraries. Regardless, we would be happy to offer you a refund if you are experiencing this issue and aren't interested in upgrading to the full Kontakt.

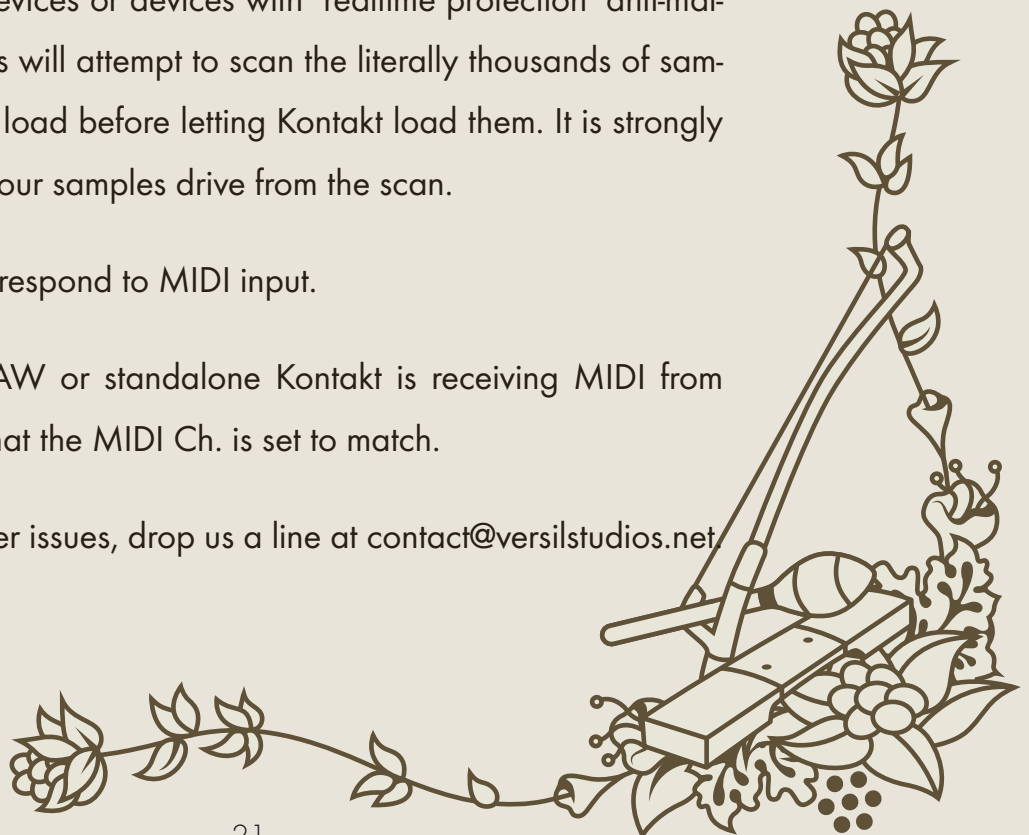
4. Instrument takes a long time to load.

On Windows 10 devices or devices with 'realtime protection' anti-malware systems, such systems will attempt to scan the literally thousands of samples that Kontakt needs to load before letting Kontakt load them. It is strongly advised that you exempt your samples drive from the scan.

5. Instrument won't respond to MIDI input.

Make sure your DAW or standalone Kontakt is receiving MIDI from your device, then ensure that the MIDI Ch. is set to match.

If you have any other issues, drop us a line at contact@versilstudios.net





CREDITS

Samuel A. Gossner

Recording, Performance, Production, Documentation

Simon Autenrieth

UI Design, Mapping, Tweaking, Video Playthroughs

Cassandra Incognito

Sample Editor

Special Thanks to:

Tomàs Lobos Kunstmann - creator of VISAGE 3

Our fantastic testers:

Jose F. Hernandez, Quetzal Marchiori, Babis Trihos, Rikard Berg, & Jim Wolk