CHROMATIC HARMONICA

Chris Hein CHROMATIC HARMONICA

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# Chris Hein CHROMATIC HARMONICA



#### **Credits:**

# **Chromatic Harmonica played by:**

**Berthold Matschat** 

Recording, Editing, Programming, Interface-Design:

Chris Hein

## **Additional Editing:**

Ricarda Hein (Mrs. Melodyne)

# **Script-Programming:**

Günter Hirscher

**Produced For BestService, Munich** 

# **Contents**

04	Introduction / System Specs	15	Articulation Overview		
05	The Interface Small-Page General Controls	16	Settings Fader Settings Release FX		
06	Basics Meters Edit-Tabs	17	Synamic Settings		
07	Basics Articulation select Overview Body & Room Convolutions	10	Pitchbend Ensemble ADSR Micro-Tuner		
08	Articulation-Presets Overview	18	<b>Vibrato</b> LFO-Vibrato Auto-Vibrato		
09	Articulation-Presets Articulations Key-Switch Modes Copy / Paste Main controls Speed-Detection	19	DSP Effects Overview		
		20	DSP Effects Reverb Delay Chorus		
10	Articulation-Presets Volume Control Dynamic Modes	21	DSP Effects Phaser		
11	Articulation-Presets Transient Designer		Flanger Compressor		
	Attack Controls Noise Legato Mode / Glide Mode	22	DSP Effects Solid G Equalizer Filter		
12	Legato Settings Legato Details Hot-Keys	23	Midi-CC list		
		24	The Family of Chris Hein - Horns		
	Hot-Keys Overview	25	Chris Hein - Guitars		
14	Hot-Keys Key-Vibrato Hand-Damping Play Last Note Play Fall Attack Blow Empty	26	Chris Hein - Bass		
		27	The Harmonica Player and his Instrument		
		28	Chris Hein		

# Chris Hein-Harmonica

Thank you for buying Chris Hein - Harmonica

With almost 7,000 samples, 14 articulations, up to eight dynamic layers and a full 4 octave range, CH-Harmonica is definitely the most detailed sampled Chromatic Harmonica on the planet.

The user-interface holds tons of features on several pages to shape the sound the way you want it. However, if you don't feel like editing, just play and explore the 26 pre-programmed Key-Switch presets ranging from A-1 to A#1 on the lower keys on your midi-keyboard.

Thanks to the clever programming and intuative user interface, new and innovative features like "Key-Vibrato" or the "Hot-Keys" are very easy to use.

One of the most unique features in CH-Harmonica are the Phase-Aligned samples.

After 6 months of research, Chris Hein found a solution to phase-synchronize the samples.

This enables an absolutely perfect blending between 6 dynamic layers.

During the development, your much attention was spent on how to work with dynamics to pre-

During the developement, very much attention was spent on how to work with dynamics to provide an extremly realistic and expressive instrument.

During the Phase-Align process, Chris had to separate the noise part of each sample, to synchronize the phase of the pure tone. As a result we get four audio files for each sample:

- The original recorded sample used in the velocity sensitive dynamic mode "Keyboard"
- The processed phase aligned sample used for the "X-Fade", "Key & X-Fade", "Auto X-Fade"
- A pure tone sample
- A pure noise sample

The fader "Noise" lets you can blend between the pure tone and the pure noise part. This is a "never seen before" technique to shape the sound from "clean" to "crisp"

#### **System Specs:**

CH-Harmonica requires the full version of Kontakt 5.2 or better. As this is NOT a Kontakt Player Library, you will not see the Harmonica in the library pane. Simply navigate to the Harmonica.nki via the "File" browser pane.

#### PCs:

Windows7 (latest Service Pack, 32/64 Bit), Intel Core Duo or AMD Athlon 64 X2,

2 GB RAM (4 GB recommended).

#### MACs:

Mac OS X 10.6.8, or better, Intel Core 2 Duo, 2 GB RAM (4 GB recommended).

CH-Harmonica is watermarked with your personal data and IP address using proprietary watermarking techniques.

Do not distribute, resell or torrent.

## **Interface**

# **The Small-Page General Controls**



#### **The Edit-Pages**

After loading an instrument, the first screen you'll see is the Small-Page.

This screen has no edit features.

Click the "Open" button to display some of the major controls.

Start playing right away and use the Key-Switch keys ranging from A-1 to A#1 to enter the 26 pre-programmed Articulation-Presets and Hot-Keys.

The actual selected articulation is diplayed in white at the bottom of the screen.

Enter the different edit-pages by clicking one of the edit-tabs at the bottom of each page.





#### **General Controls**

- 1 Solo/Mute 2 Tune (CC09)
- 3 Panorama (CC10) 4 Volume (CC07)
- 5 Level indicator

#### **Saving Changes**

CH-Harmonica has many features to customize the instrument to fit you demands.

To save the settings you have made, use the Files menu from the Kontakt top-menu.



## **Basics**

## **Meters / Edit-Tabs**

#### **Edit-Tabs**

Five tabs at the bottom of the interface let you enter the edit modes.



Click the "Basics" tab to enter the Basics page.



#### **Meters**

Several meters indicate the status of the following functions:

Dynamic Mode Layer Velocity	Keyboard & X-Fade
X-Fade Vibrato Vib. Speed	

**Dynamic Mode -** Shows the selected dynamic mode. Change it in the articulation preset page **Layer -** Indicates the dynamic layer of the last note played.

**Velocity -** Shows the velocity of the last note played.

X-Fade - Shows the state of the X-Fade position. This graphic also works as a slider

Vibrato - Adjust the vibrato intensitiy

Vi. Speed - Adjust the vibrato speed

## **Basics**

# **Articulation Select / Overview / Body & Room**



#### **Articulation Display and Selector**

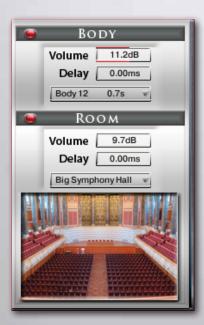
The actual selected articulation is dislayed on top of the virtual keyboard. Click any keyboard key on the graphic to switch to the corresponding articulation-preset



#### **Articulation Overview**

An overview of all actual loaded articulations and Hot-Keys is diplayed here.

The red border marks the selected articulation and Key-Switch key.



#### **Body and Room**

CHH contains 40 fantastic, built-in convolution reverbs, as well as 23 very short impulse responsed to design the body of the instrument. The combination of two convolution reverbs lets you design the body and the room individually.

#### Controls for Body and Room

On/Off - Switches the Convolution Reverb on and off.

Presets - Choose from 21 specially-designed Impulse Responses.

**Volume -** Adjusts the amount of the Convolution Reverb.

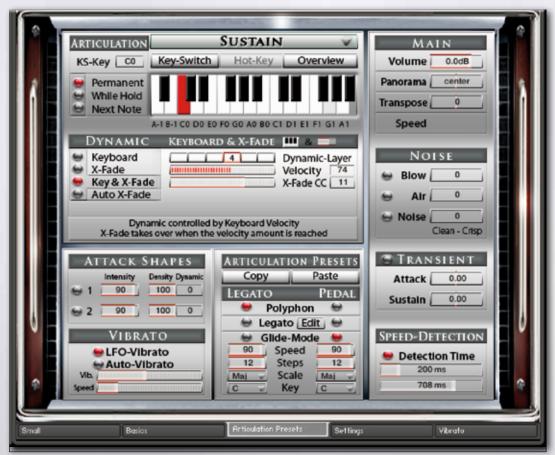
**Delay -** Sets the pre-delay time before the reverb starts.

Recently, sampling (convolution) reverbs have become more and more in demand. With convolution, we have an opportunity to capture the sound of anything in the world that can generate a reverb and use these sound impulses freely in any sonic situation imaginable. This enables us to use the sound of highend reverb units, real-world rooms, halls, cathedrals, synthetic reverbs and other sources, including non-reverb ones, without any hassle and in a uniform way using only a single program or a plug-in module.

## **Articulation-Presets**

#### **Overview**

You will probably spend most of your time with Chris Hein - Harmonica in the Articulation-Presets Page. Everything you see on the Articulation-Presets Page is stored on a single Key-Switch. Each setting of the functions on this page can be different for each of the 22 key switch keys. A key-switch preset can be assigned as a Key-Switch or as a Hot-Key.



The new key-switch concept allows you to customize the instruments in every detail to suit your needs. Let's say you want to play chords with the sustain articulation and then you want to play a solo line using the legato-mode. All you have to do is copy the articulation-preset, paste it to another key-switch preset and change the legato setting from polyphon to legato.

Now, switching from polyphon to legato playing is done by just pressing a key-switch.

The same process works for all other functions on this page. For example, you can assign different articulations to different keys, enabling you to change articulations on the fly. Or you can design a bunch of different settings for only the sustains, enabling you to alter the behavior of the instrument.

It's important to understand that all functions on this page are valid only for the selected key-switch. If you want to make changes for other articulations, you will have to change every articulation you plan to use.

The key-switch presets are allocated to the lower area of your keyboard, from A-1 to A#1.

Key-switches are displayed in red. Hot-keys are displayed in green.

There are several ways to select a key-switch preset:

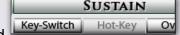
- Hit the keys on your keyboard.
- Click the keys on the keyboard graphic in the interface.
- Right-click on the keyboard graphic and assign any midi-controller to select the key-switches.

## **Articulation-Presets**

# **Articulations, KS-Mode, Copy/Paste, Main controls, Speed-Detection**

Let's start to customize your key-switch presets.

The first step is to assign the KS-preset as a key-switch or as a hot-key. Key-Switches hold different articulations to be played on your keyboard.



Hot-Keys are special keys that don't change the overall articulation, but can add multiple effects, enable playing key-based vibrato, or work as repetition keys. Let's call these guys KS and HK.

#### **Articulations**

Lets start building a key-switch preset.

Select an articulation from the drop down menu on top of the keyboard graphics to be assigned to the selected KS-preset. Click the "Overview" button to see and edit an overview of all loaded articulation-presets and Hot-Keys.





ARTICULATION KS-Key lets you change the key-switch presets via MIDI-CC. Right click to assign any CC and use a hardware fader to control the articulations

#### **Key-Switch Modes**



There are three different key-switch options to choose from, which determine exactly when and how the articulation change takes effect:

**KS-Permanent:** The articulation remains active until another key-switch is pressed.

**KS-While Hold:** The articulation changes only for as long as the key-switch is held and reverts to the previous articulation when the key-switch is released.

**KS-Next Note:** The articulation changes only for the note immediately following the key-switch and then reverts to the previous articulation.

#### Copy - Paste

You can copy and paste a whole KS-Preset. This is useful if you want a variation of an existing preset on another key to instantly switch between them.



#### **Main Controls**



Volume sets the volume for each KS-preset individually. To adjust the global volume, use the volume slider at the top right of the interface.

Pan lets you pan each KS-presets individually from left to right.

Transpose lets you transpose the preset (36 semitones maximum) up or down. **Speed** sets the overall speed of the selected articulation.

Changing the speed of the samples is useful for articulations such as crescendo, fall and doit. But changing the speed for the sustains can also yield some interesting effects. Click the little red dot to activate the speed-change. Since variable speed needs a lot more RAM, you should activate "time" only when you need it. The speed change is only available if the dynamic mode is set to "Keyboard"



Speed Detection automatically selects a different version of the sustain articulation when playing at faster speed. For example when playing the sustain sound, the attack of the sound might be too long when playing faster melodies.

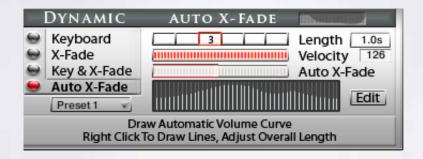
In this case, you can turn on Speed Detection, which triggers special versions of the sustain samples that have faster attacks. Choose from different articulations to see what sounds best to you.

The knob sets the time between two notes required to perform the speed-control articulation switch. The time range is shown in milliseconds. Only notes played within the selected time range are performed with the sustain-speed articulation.

# **Articulation-Presets Volume Control / Dynamic Modes**

**Dynamic:** Usually the dynamic of an instrument is just controlled only by the velocity of your midi keyboard. CH-Harmonica offers different options to control the dynamic. The details on the next page may sound a bit technical, but don't hesitate to just experiment with the settings.

The button at the left side lets you switch between the four different dynamic-modes.



**Keyboard -** The articulation in CH-Harmonica have 3-8 dynamic layers. When set to "Keyboard" these layers are available through the velocity of your midi keyboard. The actual played dynamic layer and the midi velocity are diplayed.

**X-Fade -** When this is selected, the velocity is controlled via midi Control Change (CC11, Expression, by default). You can also use any other controller by changing the X-Fade CC. Setting the controller to zero plays the lowest velocity layer, moving the controller up fades between the velocity layers, while increasing the value crossfades between the velocity layers until the highest value of 127 is reached.

**Key & X-Fade -** This is a combination of Keyboard dynamic and X-Fade. Velocity is controlled via keyboard velocity, but you can also use Expression (CC11) to crossfade between the velocity layers. Key & XFade works in an intelligent way. Let's say you play a note at velocity 100, then you increase Expression (CC11), starting from zero. No change is audible until the Controller reaches value 100. From here, Expression takes control of the velocity and lets you change the dynamic even after the note is pressed. Key & XFade is perfect for playing realistic crescendos and decrescendos.

Auto X-Fade - This performs an automatic volume curve relative to the played velocity.

When Auto X-Fade is selected, the automatic volume curve starts at the velocity played on the midi-keyboard, performing a volume change depending on the settings in the table.

You can draw your own volume curve in the table. To edit the curve in more detail, click the "Edit" button to enter a fairly big table.

The length of the Auto X-Fade curve can be adjusted with the "Length" fader

## **Articulation-Presets**

# Transient Designer, Attack, Noise, Legato, Sustain Pedal



The Transient Designer is a compressor designed to control the attack and sustain of a sound. Instead of following the amplitude of the sound like a traditional compressor, it follows the general envelope and is thus not as susceptible to changes of input gain.

**Attack** controls the scaling of the attack portion of the input signal's volume envelope. Increasing this parameter will add more punch and decreasing it will reduce sharp attacks. **Sustain** controls the scaling of the sustain portion of the input signal's volume envelope. Increasing this parameter will add more body to the sound and decreasing it will reduce the sound's tail.



The Attack Controls can be used to alter the attack of each note. Activate the attack-effect by clicking the little red on/off button. Use the right-click Midi-Learn feature to assign a midi controller to ride the attack effect manually.

To achieve more variation to the sound you can use the density and dynamic controls to perform an automatic variation of the attack.

**Density** varies the amount of notes being played with the attack-effect. 100 means - all notes are played with the attack effect, 20 means - only 20% of the notes are played with the attack. **Dynamic** varies the volume of the attack effect. Set the volume knob to a certain level, then set dynamic to, for example, 50% - The attack volume varies 50% randomly each note you play.

#### **Noise**



**Blow** adds the natural attack sound of blowing hard into the instrument **Air** adds the natural sound of air blowing into the instrument without producing a note, which can be used to increase the 'breathiness' of the sound.

**Noise** This little fader provides a very powerful feature. It lets you blend between the pure tone and the noise part of the sample. Setting the noise fader to -50 results in a pure tone without any noise.

#### Legato Mode / Glide-Mode

When playing a note, holding it and playing another note, the Legato or the Glide Mode performs a smooth transition between the two notes. While Legato performs a smooth crossfade between the notes, Glide-Mode plays the notes within the interval you played. Let's say you play the note C4, hold it and play E4 with Glide-Mode on. First you hear the note C4, and as soon as you press E4, the notes C#4, D4 and D#4 are played and the run ends with a sustained note on E4. Glide-Mode works up to 12 semitones up or down. Legato-Mode works with any interval you play. You can edit the behaviour of the Legato-transition in detail in the Legato-Settings Page.

#### Legato / Glide-Mode



**Polyphon** lets you play polphonic chords, no legato transition is audible. **Legato** lets you play monophonic lines with a legato transition.

Glide-Mode provides real played runs from one note to another.

Glide Speed sets the speed of the Glide-Mode transition.

**Steps** sets the maximum halftone steps to be played.

**Scale** choose from chromatic, major, different minor or pentatonic scales.

Key sets the key of the scale

**Pedal** If you have a sustain pedal connected to your midi keyboard, the legato settings allow you to change the function of the pedal. If set to "Polyphon" the pedal acts as a regular hold pedal If no pedal is connected, you can use CC 64 to switch between Poly-, Legato- or Glide-Mode.

# **Legato Settings Legato Mode, Legato Details**



#### **Legato Mode**

When playing a note, holding it and playing another note, the Legato performs a smooth transition between the two notes. You can edit the behavior of the Legato transition in detail in the Legato-Settings Page. by clicking the "Edit" button. Playing in Legato Mode is always monophonic.

Activate legato playing in the Articulation Preset page.

Clicking the little Legato Edit icon brings you to the Legato Settings page to edit the details. You can also enter the Legato Settings page through the tab on the left side of the interface.



#### **Legato Details**

The legato transition consists of four elements:

- Fade Out for volume
- Fade Out for tuning
- Fade In for volume
- Fade In for tuning

There are separate controls for volume-fade in/out and for tune-fade in/out:

Fade Out Offset (ms) Sets the time before the fade starts.

**Fade Out Length (ms)** Sets the length of the fade out.

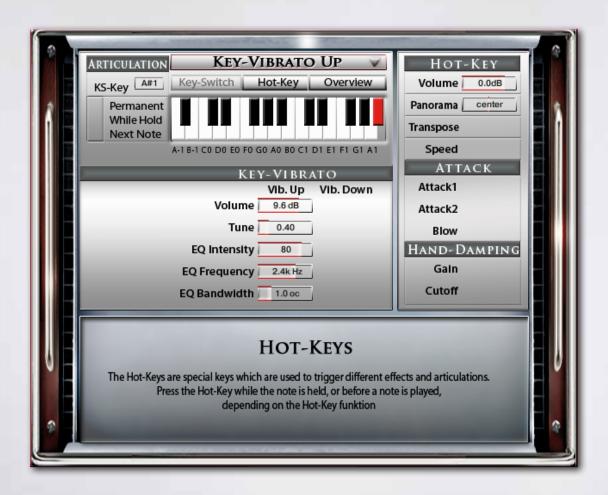
**Tune Out Offset (ms)** Sets the time before the detuning starts.

**Tune Out Length (ms)** Sets the length of the detuning.

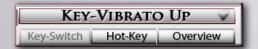
**Tune (c)** Sets the amount of detuning in cents.

**Slope** Spreads the amount of legato. A higher value results in a lower amount of legato when playing small intervals, like a semitone, and a higher amount when playing larger intervals, like an octave.

# **Articulation-Presets Hot-Keys**



The Hot-Keys are special keys which are used to trigger different effects and articulations. Each of the 26 keys from A-1 to A#1 can be assigned as a Key-Switch or as a Hot-Key Preset.



To assign a Hot-Key to a key on your midi keyboard, switch from Key-Switch to Hot-Key and select one of the Hot-Key function from the drop down menu.

You can also set a Hot-Key to 'Play Last Note', which will literally retrigger the last note you played. This is particularly useful for playing legato repetitions which would otherwise not be possible by simply re-playing the same note repeatedly.

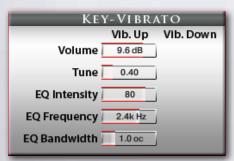
In addition to repeating or retriggering the previous note played, hotkeys can also be used to modify the note currently playing. For example, a hotkey can be assigned to trigger a fall, which will stop the note and play a realistic "fall".

# **Articulation-Presets**

# **Hot-Keys**

#### The following functions are available through the Hot-Keys:





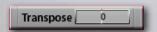
**Key-Vibrato Up/Down:** Rather than playing a static vibrato with the modwheel, this enables you to perform the vibrato manually on a key of your midi keyboard. You can choose between Vibrato Up or Vibrato Down, which affects volume, pitch and EQ of the note being heard.

A real vibrato, performed by a harmonica instrumentalist, consists of a change in volume and pitch and a frequency change. You can edit all these parameters separately.



**Hand-Damping:** Simulates a harmonica players hand being used to change the color of the sound. Its actually a filter which lets you edit volume and cutoff frequency.

Play last note: This Hot-Key simply repeates the last note you have played. This is great for fast repititions. No special controls are needed for this effect.



**Harmonize:** Adds a second note with a different pitch. The interval depends on the setting of the Transpose fader.

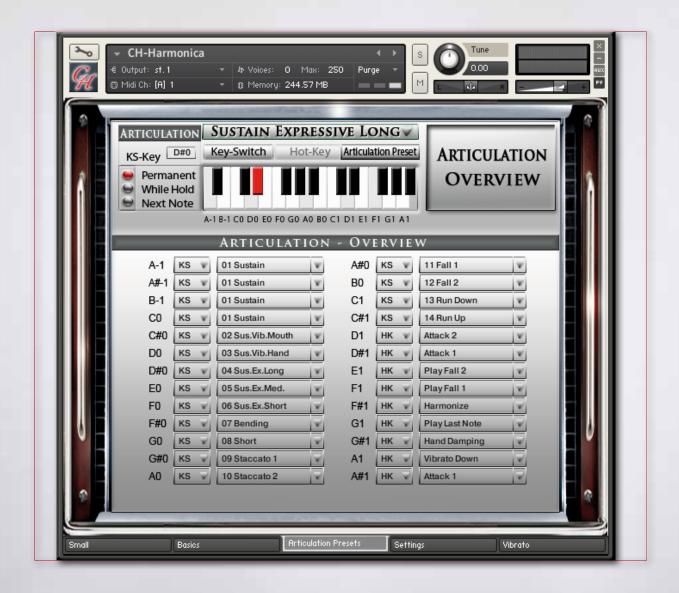
Play Fall 1,2: Pressing this Hot-Key while a note is being played, stops the sustain note and adds a real played fall down of the note.

Attack 1.2: Adds a short and hard attack note to the sound.

**Blow:** Same as Attack, but add a natural sound of blowing into the instrument. The volume of the attack and blow sounds can be adjusted but is also velocity sensitive.

**Empty:** Selecting the empty Hot-Key clears the key-switch preset to save memory.

## **Articulation Overview**



A list of all selected articulations and Hot-Keys is available through the Articulation Overview tab. You can select from different articulations in the drop down menu and you can define if the preset should be a Key-Switch (KS) or a Hot-Key (HK).

However, define the details of the selected articulation in the Articulation-Presets page.

The Articulation Overview page is also handy to unload articulations which you don't need. If you only need one or a few articulations, setting the unneeded preset to "Empty" saves a lot of RAM.

All features in the CH-Harmonica which require RAM have an on/off switch. Switching features you don't need to off can save you a lot of worthy computer memory.

# **Settings / DSP FX**

# **Fader Setting, Release-EFX, Dynamic**

The functions on the Sound-EFX page work as global parameters for all articulation presets.

Use the upper right buttons to switch between general settings and DSP-FX





#### **Fader Setting:**

Adjust the behavior of your mouse with these controls Most faders in CH-Harmonica are horizontally, but if you prefer to control them with a vertical movement of your mouse, you can switch to "Vertical". You can also adjust the length of the mouse movement. Check which settings works best for you.



#### **Release EFX:**

The Release EFX work on the release of a note. Play a note, raise the knob and release the note at any time to hear the selected effect.

Release1 - Adds a natural release sound.

**Release2** - Adds a very short fall when releasing the note.

Fall 1 - Adds a fall sound when releasing the key.

Fall2 - Same as fall short but with a longer fall.



#### **Dynamic:**

Lets you control the Velocity Response of your midi keyboard.

Curve - Sets the curve for the Velocity Response.

Setting the curve to 0 results in a linear response.

Min - Sets the Minimum velocity.

Max - Sets the Maximum velocity.

## **Sound EFX**

# Pitchbend, Ensemble, ADSR, Micro-Tuner



#### Pitchbend:

You can assign the Pitchbend range separately for Bend Up and Bend Down from 1 to 12 semitones. You can also assign the Fall1 or Fall2 articulation to Bend Up or Bend Down by using the dropdown menus.



#### **Ensemble:**

You can setup a group of Harmonica players here.

Voices: Select 1-5 instruments to play.

Spread: Sets the Stereo-Spread of the harmonized Sound

**Detune:** Detunes the harmonized sounds in cents.



#### **ADSR:**

Attack - Sets the Fade In time for the sound.

**Decay -** Sets the time until the Sustain level is reached.

**Sustain -** Sets the level maintained from the end of the Decay stage to the start of the Release stage.

Release - Sets the Fade Out time after releasing the key.

#### **Micro-Tuner:**



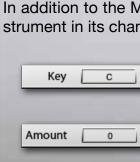
All samples in CH-Harmonica are perfectly tuned to the standard chromatic scale with A at 440Hz. However, real players usually don't play perfectly in tune. You can edit the tuning in precise detail using the Micro-Tuner. You can create your own tuning scales by shifting the tuning of each note up or down, or you can use one of the pre-programmed tuning scales based on some of the most famous historical scales.



#### Tuning Presets:

12 Micro-Tuning preset scales are available. You can build your own tuning scales or use the pre-programmed scales and edit them in order to create your own scales.

In addition to the Micro-Tuning scales, you can fine tune each instrument in its channel strip in the Mixer Page.



#### Key:

Sets the root key of the scale.

#### **Amount:**

Scales the overall amount of detuning.

#### **Other Tuning Methods:**

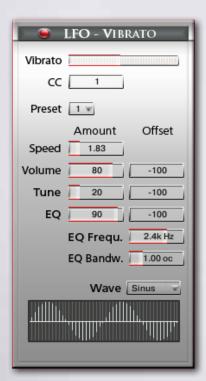
A Master tuning knob for all instruments is available in the header of the virtual instrument on the Play-Page. Hold down the shift key (of your computer keyboard) while turning the on-screen knob for fine-tuning.

-17-

# **Vibrato**

# LFO-Vibrato / Auto-Vibrato

Two types of Vibrato are available in CH-Harmonia. Choose between manual LFO-Vibrato, and Auto-Vibrato. The vibrato type can be set individually for each articulation preset.



#### Vibrato:

These are the controls for the intelligent LFO-based Vibrato available through CC01 (Modwheel).

You can Change the CC from 1 to any other CC.

#### The following controls are available for LFO-Vibrato:

Vibrato - Sets the amount of vibrato.

**CC** - Sets the midi controller to control the vibrato.

(CC1 - Modwheel by default)

**Speed** - Sets the speed of the volume and pitch change.

Volume - Sets the volume of the vibrato.

Tune - Sets the degree of pitch change.

Setting tune to 0 performs a tremolo.

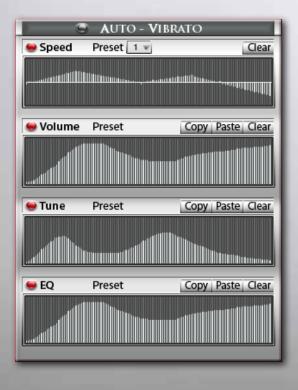
**EQ** - Activates a filter to simulate a realistic hand-damping.

Works best in combination with Volume and Tune.

**EQ Frequency -** Sets the frequency for the filter.

**EQ Bandwidth -** Sets the bandwidth of the filter frequency.

Wave - choose from different waveforms to set the vibrato curve.



#### **Auto - Vibrato:**

performes an automatic vibrato curve.

Instead of using the Modwheel, you can draw different curves to set the development of the vibrato over time.

#### The following controls are available for Auto-Vibrato:

**Preset** - Choose from different pre-programmed curves

**Speed** - Sets the speed over time.

Volume - Sets the volume curve over time.

**Tune -** Sets the amount of detuning over time.

**EQ** - Sets the amount of filtering over time.

**Copy -** Copy the curve to paste it into another table

Paste - inserts a copied curve

Clear - Resets the curve to a clear table

Vibrato can also be controlled via the innovative Hot-Key Vibrato (See page 13)

# **DSP Effects**

DSP-FX CHORUS REVERB DELAY Stage Doubler Slow Deep Volume Volume Volume 0.3dB 0.3dB 0.3dB Size Time Depth 70.1 100.0 44.7ms Pre-Delay Feedback Speed 67.8ms 27.6% 0.29Hz Damping 51.2 Damping Phase 37.0 90.0 PHASER FLANGER COMPRESSOR 70s Funk Warmer Volume -0.2dB Volume Volume Threshold 6.2dB 0.3dB 3.3dB Depth Depth Ratio 42.5 40.2 3 Speed 0.40Hz Speed 0.65Hz Attack 0.1ms Feedback Release Feedback 50.4% 40.2% 400ms € E Q FILT Gain Frequency Bandwith High HF Bell Gain 0.0dB 0.00dB 5.7kHz High Mid Cut Off 640.5Hz 0.00dB 2.0kHz 1.6oc Low Mid 0.00dB 707.0Hz 1.6oc Resonance 50.0% Low 0.00dB 155.0Hz Type 0.5 LF Bell Settings Basics Vibrato Articulation Presets

# **DSP Effects**

# **Reverb, Delay, Chorus**



#### Reverb

**Preset:** Different pre-programmed effects.

Volume: Level of the reverb effect.

**Pre-Delay:** Introduces a short delay between the direct signal and the reverb trail build-up. This corresponds to the natural reverberation behavior of large rooms, where a short time elapses before the first reflection of a sound wave returns from a wall.

**Size:** Adjusts the size of the simulated room. This affects the duration of the reverb trail.

**Damping:** Sets the amount of simulated absorption that takes place in rooms due to furnishings, people, or acoustic treatments affecting the reflection behavior.



#### **Delay**

Preset: Different pre-programmed effects.

**Volume:** Level of the delay effect.

**Time:** The delay time in milliseconds. To synchronize the time to your host or Master Editor tempo, click on the Speed parameter's unit display and choose a note length value from the drop-down list.

**Feedback:** Controls the amount of the output signal that's being fed back into the input of the delay line, thereby creating a series of echoes that gradually fade into silence.

**Damping:** Attenuates high frequencies in the delayed signal. Turning this control clockwise will increase the damping effect. If you have set a feedback level, the signal will gradually lose more high frequency content with each repetition.



#### **Chorus**

**Preset -** Different pre-programmed effects.

Volume - Level of the chorus effect.

**Depth:** Adjusts the range of modulated detuning. Higher values give a more pronounced chorusing effect.

**Speed:** Adjusts the LFO speed. To synchronize the speed to your host or Master Editor tempo, click on the Speed parameter's unit display and choose a note length value from the drop-down list.

**Phase:** Imparts an LFO phase difference between the left and the right stereo channel. This can considerably increase the width of the output signal's stereo base.

# **DSP Effects**

# **Phaser, Flanger, Compressor**



#### **Phaser**

**Preset:** Different pre-programmed effects.

Volume: Level of the phaser effect.

Depth: The amount of LFO modulation. Higher values cause the pha-

ser effect to sweep over a wider frequency range.

**Speed:** The LFO modulation speed. To synchronize the speed to your host or Master Editor tempo, click on the Speed control's unit display

and choose a note length value from the drop-down list.

Feedback: This control adjusts the emphasis of the peaks and not-

ches that the comb filter effect imparts on the signal.



#### **Flanger**

Preset: Different pre-programmed effects.

**Volume:** Level of the flanger effect

Depth: The amount of LFO modulation. Higher values cause the flan-

ging effect to sweep over a wider range.

**Speed:** The LFO speed. To synchronize the speed to your host or Master Editor tempo, click on the Speed parameter's unit display and

choose a note length value from the drop-down list.

Feedback: Feeds a certain amount of the delayed signal back into the

module's input, thereby creating a more pronounced effect.



#### Compressor

**Preset -** Different pre-programmed effects.

Volume - Gain of the compressed signal.

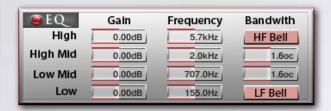
**Threshold -** Sets a level threshold above which the Compressor starts working. Only levels that rise above this threshold will be reduced by the compression; signals that stay below it will be left unprocessed.

**Attack -** Adjusts the time the Compressor will take to reach the full Ratio value after an input signal exceeds the Threshold level.

**Ratio** - Controls the amount of compression, expressed as a ratio of "input level change" against "output level change". A Ratio of 1:1 means that no compression will be happening. For example, a setting of 4 represents the ratio 4:1, which means for every 4 decibel increase of amplitude above the threshold, the output will increase by only 1 decibel.

**Release -** Adjusts the time the compressor will take to fall back to non-compression after the input signal falls below the threshold.

# **DSP-Effects Solid G Equalizer, Filter**



#### Solid G Equalizer

The Solid G-EQ is a 4-band parametric EQ and offers the choice of bell or shelf style control of the low and high frequency bands.

**LF Gain:** Adjusts the amount of boost or cut at the LF Frequency.

**LF Freq:** Adjusts the center frequency of the low frequency band at which the boost or cut will occur.

**LF Bell:** Toggles the bell shape of the low frequency band. If turned off, the band becomes a shelf.

**LMF Gain:** Adjusts the amount of boost or cut at the LMF Frequency.

**LMF Freq:** Adjusts the center frequency of the low-mid frequency band at which the boost or cut will occur.

**LMF Q:** Controls the Quality (or Q) of the low-mid frequency band. For most EQs, the higher the quality, the narrower the frequency band, but with this EQ the control is reversed to match the hardware it emulates and becomes a bandwidth control.

**HMF Gain:** Adjusts the amount of boost or cut at the HMF Frequency.

**HMF Freq:** Adjusts the center frequency of the high-mid frequency band at which the boost or cut will occur.

**HMF Q:** Controls the Quality (or Q) of the high-mid frequency band. For most EQs, the higher the quality, the narrower the frequency band, but with this EQ the control is reversed to match the hardware it emulates and becomes a bandwidth control.

**HF Gain:** Adjusts the amount of boost or cut at the HF Frequency.

**HF Freq:** Adjusts the center frequency of the high frequency band at which the boost or cut will occur.

**HF Bell:** Toggles the bell shape of the high frequency band. If turned off the band becomes a shelf.



#### **Filter**

A high class filter can be used to limit the frequency of the sound. when a harmonica player uses his hand to shape the sound, its actually the same effect. The high frequencies are lowered in volume. To achieve this effects you can use the Hand-Damping Hot-Key or use the filter.

The following controls are avalable:

Gain: Adjusts the volume of the filter effect.

**Cutoff:** Sets the frequency.

**Resonace:** Sets the bandwidth of the filter effect. **Type:** Choose from different colors of the filter.

# MIDI-CC List of pre-programmed midi controller

Global controls		Sound EFX		
07	Global Volume	99	Release1 On/Off	
10	Global Pan	100	Release1 Volume	
09	Global tune	95	Release1 Density	
70	ArticulationVolume	96	Release1 Dynamic	
71	Articulation Pan			
72	Articulation Transpose	101	Release2 On/Off	
73	Articulation Speed On/Off	102	Release2 Volume	
74	Articulation Speed	97	Release2 Density	
		98	Release2 Dynamic	
75	Pitch			
		103	Fall1 On/Off	
	controls	104	Fall1 Volume	
11	X-Fade Amount	68	Fall1 Density	
		69	Fall1 Dynamic	
80	Transient Designer On/Off	405	E 110 0 /0"	
81	Transient Designer Attack	105	Fall2 On/Off	
82	Transient Designer Sustain	106	Fall2 Volume	
0.5	A: 0 /05	107	Fall2 Density	
85	Air On/Off	108	Fall2 Dynamic	
86	Air Volume	ADSF	,	
87	Noise On/Off	109	Attack	
88	Noise Clean - Crisp	110		
00	Noise Clean - Crisp	111	Decay Sustain	
89	Attack1 On/Off	112	Release	
90	Attack1 Volume	112	ricicase	
91	Attack2 On/Off	Section Maker		
92	Attack2 Volume	113	Section Maker Voices	
Ŭ	, maoni volanio	114	Section Maker Spread	
93	Blow On/Off	115	Section Maker Detune	
94	Blow Volume			
		LFO Vibrato		
		117	Vibrato Speed	
		118	Vibrato Volume	
		119	Vibrato Tune	
		120	Vibrato EQ	
		121	Vibrato EQ Frequency	
		122	Vibrato EQ Bandwidth	

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3 x Trumpet Section, 3 x Trombone Section



# CHH VOL.3 - MUTED BRASS

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# Chris Hein-Guitars

ULTRA REALISTIC VIRTUAL INSTRUMENTS



E-GUITAR

JAZZ-GUITAR

STEEL-GUITAR NYLON-GUITAR

BANIO

MANDOLINE

CHRIS HEIN - GUITAR IS AN OUTSTANDING, SAMPLED VIRTUAL GUITAR LIBRARY. THOUSENDS OF SAMPLES, MANY ARTICULATIONS AND DYNAMICS ALL IN ONE PRESET PER INSTRUMENT THANKS TO NATIVE INSTRUMENTS GENIUS SCRIPT FEATURE, CHRIS HEIN - GUITAR IS EASY TO CONTROL

#### INSTRUMENTS:

- E-GUITAR CLEAN
- E-GUITAR BLUES
- E- GUITAR METAL
- JAZZ GUITAR PLECTRUM
- JAZZ GUITAR FINGER
- STEEL GUITAR PLECTRUM
- NYLON GUITAR FINGER
- BANJO
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- NEW KONTAKT PLAYER 2 INCLUDED
- 36.000 SAMPLES, 18 GB CONTENT
- 3.000 6.000 SAMPLES PER INSTRUMENT
- OVER 30 ARTICULATIONS IN ONE PRESET
- UP TO 13 VELOCITIES
- 50 INTELLIGENT MIDICONTROLLER
- REVERB, DELAY, CHORUS & 3-BAND EQ

#### CONTROLS & SCRIPTS:

- CHORD MODE,
- DIFFERENT SLIDE MODES.
- SOLO MODE (HAMMER ON/PULL OFF)
- HARMONIZER
- ELECTRIC/ACOUSTIC BLENDING
- DIFFERENT RELEASE-CONTROLS...
- DIFFERENT ATTACK -CONTROLS.
- FALL CONTROL
- RATTLE CONTROL
- AUTOMATIC UP- AND DOWNSTROKE,
- BRIDGE- AND CENTER PLAYING

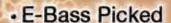


RECORDING AND PROGRAMMING BY CHRIS HEIN

MORE INFORMATIONS: WWW. BESTSERVICE.DE WWW.CHRISHEIN.NET



ULTRA REALISTIC VIRTUAL INSTRUMENTS



E-Bass Slap

E-Bass Fretless

Upright-Bass Steel Strings

Upright-Bass Nylon Strings

Upright-Bass Gut Strings

"Chris Hein - Bass" is an outstanding, sampled virtual instrument. Thousands of samples, many articulations and dynamics all in one preset per instrument. With about 20,000 samples and 12,7 GB content, CHB is the largest available bass-library.

Thanks to Native Instrument's genius script feature, "Chris Hein - Bass" is easy to control.

#### INSTRUMENTS:

- E-Bass Pick
- E-Bass Slap
- E-Bass Fretless
- Upright-Bass Steel String
- Upright-Bass Nylon String
- Upright-Bass Gut String

#### MAIN FEATURES:

- Kontakt-Player 2 included
- 20.000 samples, 12,7 GB content
- Up to 4.096 samples per instrument
- Up to 42 articulations in one preset Automatic Variations
- Up to 8 velocities
- 112 intelligent midicontroller
- Reverb, Delay, Chorus & 3-Band EQ Flanger, Phaser, Compressor, Filter.

#### CONTROLS & SCRIPTS:

- Different Slide Modes
- Solo Mode (hammer on/pull off)
- Two Fretpositions
- Harmonizer
- Electric/Acoustic Blending
- Different Release-Controls
- Different Attack-Controls
- Fall Control
- Buzz String Control
- Atmosphere Control
- Bridge and Center playing
- Effect Samples
- Chord Mode

RECORDING & PROGRAMMING BY CHRIS HEIN

More Informations: www.chrishein.net www.bestservice.de



# **The Harmonica Player and his Instrument**

Berthold Matschat - Chromatic Harmonica

We were very happy when BM consented to have his rare harmonica sampled. There are very few chromatic harmonica players worldwide, and he is the leading player in Germany. BM is also an accomplished jazz pianist and composer. Because he works extensively with sample instruments in his own studio, he had a detailed concept of what needs to be played on the harmonica and sampled.

His tone is particularly soulful and emotional. We recorded and old Hohner harmonica, that dates back to those times, when Hohner could impress with the words "Made in Germany".

BM has been touring and recording in Europe extensively. He is also specialized in recording via internet. Feel free to contact him and have him play on your recording:

E-Mail: info@matschat.de Tel.: +491775985011



# **Chris Hein Recording / Programming**



Chris Hein has almost 30 years of experience with sound samples. By 1986 he had already produced the legendary "Studio-Sample" series for Metra-Sound.

In 1985 he was one of the first computer pioneers, to use the Commodore C-64 for computer music. His work for Emagic (the C-Lab application) at the Frankfurt Music Exhibition set the course for his successful work as a sound-arranger. With the SX-64, the world's first laptop, he traveled to various music studios in Europe.

From Atari to Mac, he eventually settled down with the foundation of "Hine-Studio" and created innumerable sounds for CD-Productions, Film & TV music, industrial shows and musicals. The focus of his work has always concentrated on the reproduction of real orchestras with virtual instruments. The contract musicals "A World for Deinhard" (1994) and the great horse-musical productions "The Enchanted Forrest" (1996), "Goa" (2000) and "Sudakan" (2010) consist exclusively of sample sounds. Today his studio contains an impressive collection of 22 samplers of various types.

In 1997 Chris Hein established the Film & Media production company: "Wizard Media GmbH".



Christian Hein
Grosse Brinkgasse 2-4 50672 Köln
Tel 0221-2570156 Fax 0221-2576541
hein@wizardmedia.de www.wizardmedia.de



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