Become a glitch master with **Crystal,** a collection of over 600 unique, shatteringly-crystalline, glitchy percussive strikes, stingers, multisamples and effects that will cut right through your mix. Crystal's unique sound comes from glass field recordings, twisted and mangled into an easy "out-of-the-box" solution for glitch percussion. Crystal is perfect for minimalist, EDM, IDM, dubstep, chillwave, glitch, post rock, soundtrack, downtempo, dub and ambient music. It's also fantastic for sci-fi sound design and creating user interface SFX for games and apps.

When developing the concept for Crystal, we were inspired by the piercing and percussive quality of glass jars banging together. At the same time, subtle rustling and clinking-about created a nice background accent that can sit well in a track for added interest. Armed with this knowledge we set out to capture high fidelity recordings of glass, and after many weeks of thoughtful sound design and mastering, we had Crystal.

The idea behind Crystal is that all of the sounds are completely cohesive and pretty much any sound can follow any *other* sound. To this end, you can achieve great results simply by turning on the arpeggiator, tweaking the sequencer dialog and mashing a bunch of keys—the results will surprise you! You can take this idea a step further by using the different sound presets with the sequencer, for example: give your beat a solid groove by sequencing the bass preset on downbeats, and the effects preset on the spaces in-between. This will keep your groove structurally sound while using chaos and randomness to your advantage.

The library comes equipped with flexible control features, like attack, release, transient offset, dynamic swelling, filter type selection, resonant filter sweep and a robust Arpeggiator system that provides a full range of custom dynamic arpeggiation modes and step sequencer pattern creation options. There's also a complete DSP effects rack, including convolution reverb with dozens of unique spaces, such as cathedrals, churches, halls, bunkers, garages, tunnels, chambers, rooms and plenty of otherworldly FX impulses to fully explore and endless variety of strange and unexpected sonic manipulations.

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CRYSTAL

- 8 powerful open-format Kontakt .nki instrument presets
- 692 Samples
- 735 MB Installed
- 24-bit, 48 kHz Stereo PCM Wav Format
- Unique, brutal, easy to use glitch percussion
- Bonus Pads, Leads and Atmospheres
- Convolution reverb with a variety of different room, hall and special effect acoustic environments.

Note: The full version of **Kontakt 5.5** or later is required for all instrument presets in this library. The free Kontakt "Player" and Libraries rack do not support this library. Windows 7 (or later) or OSX 10.8 (or later) is required.

CREDITS

Recording & Sound Design
Spencer Nunamaker

Editing & Programming
Spencer Nunamaker

Additional Sound Design
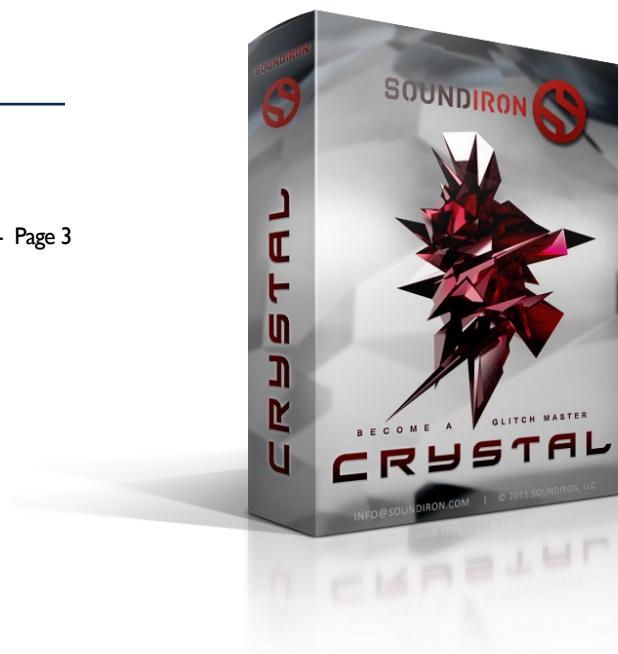Gregg Stephens & Mike Peaslee

Systems Design & Scripting
Chris Marshall

UI Design and Artwork
Chris Marshall, Spencer Nunamaker & Mike Peaslee

Documentation
Mike Peaslee

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Format

All of the sample content is included as standard open PCM wav files to allow you easy access to manipulate, reprogram and customize the sounds however you wish.

If you wish to use the optional Kontakt "nki" instrument presets, you'll need to own the full retail version of Native Instruments **Kontakt 5.5 or later**. Please be aware that the free Kontakt "Player" is not a full retail version of Kontakt and does not support this library. Please read all instrument specs and software requirements before purchasing this or any other Soundiron products to see the full list of software requirements, features and format compatibility for each library. **You must have at least Windows version 7 or later, or Apple OSX 10.8 or later.**

Fidelity

This library was recorded in a number of different indoor and outdoor environments, out in the elements and often in uncontrolled conditions. You may hear ambient noises, such as wind, wildlife, creaks, thuds, cracks and roomtone in the background in some samples, depending on the recording location and subject matter being recorded. Our goal is to preserve and accentuate the natural human qualities in our instruments without overly sterilizing the recordings.

System Requirements

Please be aware that many instrument and multi-instrument programs in this library are extremely ram/cpu and hard disk-streaming resource intensive. We highly recommend that you have a 64-bit operating system (Windows or OSX) with *at least* 3GB of system ram, a multi-core cpu and a 7200 rpm SATA or SSD hard disk before purchasing this particular Soundiron library. Large sample sets like those found in this library may load slowly and may cause system instability on some machines.

Download

We provide the Continuata Connect download manager to offer high-speed, reliable and fully automated library downloading and installation. Download and run the latest version for your OS (PC or Mac) before proceeding. You may also need to add special permissions to your security software for the downloader, if it blocks applications from accessing the web.

Next, copy-paste your download code from your download email into the Code box in the downloader window. Press the download button and select the location you'd like to download and install the library.

It will automatically start downloading the file(s) and then error-check, extract and install the finished library. Once installation is fully complete, you can remove the .rar download files and store them in a safe place as a back-up copy. We always recommend downloading the latest version of our downloader before you begin. The link in your email will always take you to the latest version.

Don't move, rename, delete or modify any of the files or folders created during the download until after you see the status message for all files in your download queue display the word "**INSTALLED**". Please don't close the downloader while it's actively downloading, unless you press the pause button first. To resume downloading, press the Resume button. If you need to resume downloading after closing the downloader, run it again and enter your code and press Download again. Then select the same download/installation location on your computer that you chose originally.

If the downloader reports a DL Error or Install Error, it will automatically try to download the file again until it successfully downloads and verifies all the data it needs. It's best to allow it to finish the process before trying to move or access the library data. Please see your download email for more detailed instructions.

If you have any trouble with our Downloader utility or prefer to use your browser or another download manager, log into your personal manual download page on our website, by using the direct link in your download email. Log in using your download code. Or, if you used the downloader originally, but you need to re-install the library manually for any reason at a later time you can always re-use the original rar files. To do that, you'll need Winrar, UnrarX or another full-featured Rar extraction utility to extract and install the library. Please note that Stuffit Expander and Winzip do not support many types of common rar files.

Kontakt Preset Loading

Once installation is complete, you can browse and load the included .nki presets using the Files, Quick Load or Database tabs in the Kontakt Browser, or through the main File load/save menu. Launch Kontakt as a virtual instrument plugin inside your host sequencer or in stand-alone mode.

Please allow any current preset to finish loading completely before loading a new one. You can't use the Libraries view to load standard open-format Kontakt Instruments like this library. Only locked "Powered-By-Kontakt" Libraries are visible to that propriety browser view. The "Add-Library" function does not support this product or any other open-format Kontakt library. This library doesn't require any additional activation or unlocking process.

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KONTAKT INTERFACE (PERCUSSION & SUSTAINS)

The Kontakt presets contain a variety of customizable control settings. To view the playable key range of the currently loaded set of samples, click Kontakt's keyboard display button at the top of the main Kontakt program window. The playable range is colored Blue on the keyboard. Key-switches are colored red. To assign any knob, button or menu to a midi CC, right-click on the knob or on the menu's label and select "Learn MIDI CC# Automation". Then move your desired midi control-ler to assign it. To assign the control to a host automation ID, use the "Auto" automation routing window in the left side Kontakt browser area to drag-drop an automation routing number onto the control you wish to assign it to.

Attack - (CC 74)
This controls the attack envelope shape, allowing you to soften note transients.

Release - (CC76)
This controls the release fade-out time. Low settings shorten the sound. High settings let notes ring out.

Edge - (CC78)
This sets the amount of start time offset, allowing you to move the sample start position later into the sound. Use it to sharpen transients or create glitchy sounds, in conjunction with different Attack settings.

Filter - (CC71)
This smoothly adjusts the low-pass filter cut-off frequency and resonance.

Filter Selector Menu
Click on the "Filter" label below the knob to select from a variety of resonant filter types. Once you have made a selection, he filter name will briefly appear under the knob.

Jitter - (CC72)
This knob adds and LFO effect that ranges from mild vibrato pulsing to harsh, distorted ring modulation.

Swell - (CC73)
This knob controls dynamics, allowing you to smoothly crescendo and decrescendo note playback volume.

SOUND Menu
This menu lets you select from the available kits or sounds included in each preset. When a kit or sound set is selected from the menu, you can see the active sample trigger keys displayed in **Blue** in Kontakt's internal keyboard display window.

You can also change the currently selected kit or sound bank by using the **Red** keyswitches, located at the very bottom of the midi key range. The colored keys are visible while Kontakt's keyboard window is open or when using Native Instruments' Komplete Kontrol "Lightguide" enabled keyboards. You can also use midi or host automation assignments to automate menu item selection in real-time, by right-clicking the "Sound" label or dragging a host automation ID onto it from the "Auto" browser window on the left side of Kontakt.

ARP (Arpeggiator System)
The Arp function menu, Velocity Table Pop-Up button, Mode and Note Length menus all control the integrated arpeggiation system. You'll find more info about the ARP system on the next page. **(Continued on page 5)**

ARPEGGIATOR

The Kontakt presets include a dynamic arpeggiation system with a number of different playback options.

ARP Direction Selector Menu

This menu turns on the Arpeggiator and selects the pattern you want the Arpeggiator to cycle through. When a pattern is selected, the instrument with cycle through all notes that are held down according to the chosen pattern. This menu can be assigned to midi CC automation by right-clicking on the menu's label.

- **Off** - Turns off arpeggiation completely.
- **Up** - Cycles up through the notes, from lowest to highest.
- **Down** - Cycles down from highest to lowest.
- **Up-Down** - Cycles up and down, from lowest to highest and back down again.
- **Down-Up** - Cycles down and up, from highest to lowest and back up again.
- **EZ-Roll** - Repeats all held notes together simultaneously.
- **Random** - Randomizes note selection between any currently held notes.
- **As-Played** - Plays through the notes in the order they were originally played.

Off	Up	Down
Up-Down	Down-Up	EZ Roll
Random	As Played	

Note Length Selector Menu

This menu sets the duration of each arpeggiated note. Each new note in the arpeggiation will begin after the previous one ends, so smaller note lengths equal faster arpeggiations. This menu can be assigned to midi CC automation by right-clicking on the menu's label.

- Quarter Note
- Triplet
- 8th Note
- 8th Note Triplet
- 16th Note
- 16th Note Triplet

Quarter	Triplet	8th
8th Triplet	16th	16th Triplet

Velocity Graph On/Off Button

Pressing this button will enable the Velocity Step Sequencer and display the Sequencer window on the left side of the GUI. When turned on, the velocity/volume of each arpeggiated note will follow the step sequence drawn on the graph. When turned off, arpeggiated notes will use your originally played velocities.

Velocity Graph On/Off

Mode

This knob controls the Arpeggiator mode. Choosing **Off** disables the Arp system entirely.

- **Normal** sets it to run the arpeggiation only while a note is being held down, cycling through all held notes.

- **Hold** this mode will continuously sustain the arpeggiation pattern until a new key or chord is played, at which point the arpeggiation will switch to the new notes you've pressed.

- **Hold +-** this mode will continuously sustain the arpeggiation, with the ability to add and remove notes from the pattern. To add a note, play any key. To remove that note from the pattern, simply press that same note again.
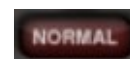
Normal
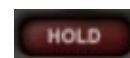
Hold
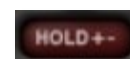
Hold + -

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Step Sequencer Table

Use this graph to draw midi note velocities for the arpeggiation being played. Each note played will advance the step sequencer by one and it will loop back around when it reaches the end. Use the Number field to the left of it to add or subtract the number of steps.
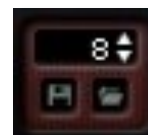

Velocity Graph

Number Of Steps

Use the Up or Down arrow buttons or type in the number of steps you want the Step Sequencer Table to cycle through.

Number Of Steps

Save Table Sequence

Save your custom sequences as nkp presets by pressing this disk icon button. Then use the browser window to select the location you wish to save your preset to. We recommend using the "Data" folder.

Save   Load

Load Table Sequence

Load your previously saved custom step sequences (nkp presets) by pressing this folder icon button. Then use the browser window to locate your previously saved presets

KEYSWITCHES

You can change the Sound menu selection by using midi key-switches. Simply play the lowest midi keys to switch between different Sound menu items. One key is assigned to each menu item. Open Kontakt's keyboard display window to see the active key-range of each Sound menu item (**BLUE keys)** and the Sound menu item selection key-switches (**RED keys)**.

To open the keyboard window, press the "**Keyb**" button in the main Kontakt header bar.

KONTAKT INSTRUMENT PRESETS

Crystal All Kits.nki

This master preset provides a variety of custom kit combinations, with sound-designed kicks, snares, toms, cymbals and effects arranged together in sets.

Crystal Bass.nki

This preset includes all of the Kick-like sounds in this library in one easy-to-play percussion bank, with a unique percussion sound for each key and menu items for each main sample style category.

Crystal Cymbals.nki

This preset includes all of the Cymbal-like sounds in this library in one easy-to-play percussion bank, with a unique percussion sound for each key and menu items for each main sample style category.

Crystal FX.nki

This preset includes all of the special FX and stinger sounds, as well as a collection of glass impact, rattle, clink and clank sound effects, with a unique effect for each key and menu items for each main category.

Crystal Glass.nki

This preset provides multi-sampled glass tapping, striking, palm-slapping and clinking percussion instruments. Each sound set is spread over the entire key range chromatically to play as tuned percussion instruments. The last Sound menu selection arranges all of the glass percussion multi-sample banks into a single combined untuned glass ensemble.

Crystal Snares.nki

This preset includes all of the Snare-like sounds in this library in one easy-to-play percussion bank, with a unique percussion sound for each key and menu items for each main sample style category.

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Crystal Toms.nki

This preset includes all of the Tom-like sounds in this library in one easy-to-play percussion bank, with a unique percussion sound for each key and menu items for each main sample style category.

Crystal Tones.nki

This preset includes a wide variety of 18 different sustaining tonal, synth lead, pad and atmospheric presets we've hand-tailored using a variety of sound design techniques to fit perfectly with the spirit and sound of this library and provide melodic accompaniment and texture to the percussive and effect elements.

DSP EFFECTS RACK

The FX Rack tab contains our advanced, flexible FX Rack that integrates many of Kontakt's built-in effects. The following section describes all of the available effects. The FX Rack is accessible in all presets by clicking on the UI tab at the bottom of the instrument labeled "**FX Rack**."

EFFECT TYPES & CONTROLS

MOD MULTI-FX

The Mod FX module features Chorus, Flanger and Phaser.

Power Button - Toggles the effect on and off.

Drop-down - Use this drop-down menu to select the active effect.

Rate - This knob controls the Rate of the selected effect.

Feedback - This knob (not available in Chorus mode) control the amount of feedback for the active effect.

Phase - This knob controls the Phase of the active effect.

Depth - This knob controls the depth (intensity) of the selected effect.

Mix - This knob controls the amount of wet and dry output of the effect. Values left-of-center reduce the wet level, while values right-of-center keep wet levels the same but

DYNAMICS (COMPRESSOR)

The Dynamics FX module is a configurable compressor.

Power Button - Toggles the effect on and off.

Threshold - This knob controls the volume threshold of the compressor.

Ratio - This knob controls the ratio of the compressor. The value is displayed to the right.

Attack - This knob controls the attack time of the compressor.

Release - This knob controls the release time of the compressor.

Makeup - This knob controls the makeup of the compressor.

DRIVE (DISTORTION)

The Drive FX module features a variety of distortion types: Distortion, Skreamer, Tape Saturator and De-Rez effect (Lo-Fi).

Power Button - Toggles the effect on and off.

Drop-down - Use this drop-down menu to select the active distortion effect.

Drive - This knob controls the amount of the distortion effect.

Volume - This knob controls the output level of the distortion effect.

Degrade - This knob (only available in De-Rez mode) controls the amount of bit crushing and sample rate reduction that the Lo-Fi effect applies.

Lows - This knob (when available) controls the level of low (bass) frequencies.

Highs - This knob (when available) controls the level of high (treble) frequencies.

Tone - This knob (only in Skreamer mode) controls the tone level of the Skreamer effect.

AMP SIMULATOR

The Amp FX module is a configurable amp simulation effect. It includes the "Twang" and new "Jump" amp simulators.

Power Button - Toggles the effect on and off.

Drop-down - Use this drop-down to select between the available amp types: twang and jump.

Volume - This knob controls the volume output level of the amp simulator.

Drive - This knob controls the amount of extra gain on the amp simulator.

Lows - This knob controls gain of low (bass) frequencies.

Mids - This knob controls the gain of mid-level frequencies.

Highs - This knob controls the gain of high (treble) frequencies.

Boost Button - This button (only available in the Jump amp sim) toggles Hi Gain mode on and off. The Volume is adjusted -9dB when activated to maintain relative volume while increasing the drive.

Presence - This knob (only available in the Jump amp) adjusts the presence of the effect.

SPEAKER CAB SIMULATOR

The Cab FX module is a configurable cabinet (speaker) simulation effect.

Power Button - Toggles the effect on and off.

Drop-down - Use this drop-down to select between the available cabinet types including the Rotator cabinet effect.

Volume - This knob controls the volume output level of the cabinet sim.

Air - This knob controls the amount of the "Air" in the cabinet effect, simulating distance between the virtual microphone and speaker cabinet.

Size - This knob controls size of cabinet effect, effectively the dimensions of the simulated speaker.

Fast Button - This button (available only with the Rotator cabinet type) toggles the rotation effect of the cabinet from slow to fast.

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CONVOLUTION REVERB

The Reverb FX module allows users to load reverb impulses to simulated real-world spaces or effects.

Power Button - Toggles the effect on and off.

Custom Button - Turning this "On" bypasses the our built-in impulses so you can save presets with your own impulses in the Insert FX module through Kontakt's Editor view.

FX Menu - This menu allows you to select one of our special effect convolutions. Selecting an impulse from this menu overrides and unloads any currently loaded impulse from the Spaces menu.

Rooms Menu - This menu allows you to select one of our real-world environmental convolutions. Selecting an impulse from this menu overrides and unloads any currently loaded impulse from the Effects menu.

Lo Pass - Sets the low frequency cut-off of the impulse response, allowing you to dull and darken the sound.

Hi Pass - Sets the high frequency cut-off of the impulse response, allowing you to remove rumble and low end.

Size - Sets the simulated room size of the convolution.

Delay - Sets the amount of pre-delay time before the wet signal is returned

Mix - This knob controls the amount of wet and dry output of the effect. Values left-of-center reduce the wet level, while values right-of-center keep wet levels the same but reduces the dry level.

DELAY

The Delay FX module is a configurable Delay effect.

Power Button - Toggles the effect on and off.

Rate - This knob controls the time between delays. Higher values mean a longer time between delays, creating a more pronounced echo.

Damping - This knob controls the damping of the delay effect, which attenuates and damps each successive echo.

Pan - This knob controls the amount of stereo panning of the delay effect.

Feedback - This knob controls the feedback of the delay effect. High values can cause and endless loop.

Mix - This knob controls the amount of wet and dry output of the effect. Values left-of-center reduce the wet level, while values right-of-center keep wet levels the same but reduces the dry level.

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THANK YOU

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info@soundiron.com

Thanks!

Mike, Gregg, Chris and Spencer

BECOME A GLITCH MASTER

CRYSTAL

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Crystal Version 1.0 Released June 23, 2015.

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