DC-ZERO

VINTAGE SYNTH FOR NI KONTAKT

TABLE OF CONTENT

DC-ZERO - Vintage Synth for Kontakt

The charming sound of an iconic retro synth, captured in detail - transforms your favorite sampler into a powerful synth platform.

Introducing DC-ZERO – a vintage synth for Native Instruments Kontakt. Inspired by an iconic synthesizer of the 80s, known for the charming sound of its DCOs, the distinctive and fat chorus, and of course, its easy-to-use workflow.

As the first part of this new synthesizer theme product line for Kontakt "Fusion series" – as the name might suggest – the fusion of wavetables and multisamples, combining both paths of sound generation together as a powerful synergy, allowing more creative space and more sound design features and possibilities for the user, as previous synthesizer sample libraries for Kontakt had to offer.

Capturing the warm analog sound of this well-known icon, by using Kontakt`s powerful sampler engine, in synergy with its new wavetable engine – DC-ZERO even captures the pulse-width modulation of its paragon. Giving you, more sonic freedom in the sound design process than "just multisamnples". Forming a compact instrument with focus on an easy-to-use workflow like known from analog synthesizers. Designed with a similar layout, as you surely know from modular systems – the core synthesizer module is complemented by additional tools like the voice mode for monophonic and polyphonic voicing and predefined chords. Output control module with stereo width, limiter, and fx rack routing.

The effect rack is packed with Kontakt`s studio-grade sound processing tools, featuring a lofi-drive module: transistor drive and bit crusher in one box. Followed by the Choral chorus and Phasis phaser effects. For more dynamic processing and more saturation, the Supercharger GT as a tube compressor gives you all you need for more fine-tuning, along with the Solid-G equalizer. Finalized with the outstanding Replika delay and the hybrid reverb module. All the effects have been kept in a reduced amount of controls, to keep the workflow focused on the essential core controls and not distract your creativity with too many controls or unnecessary menu-diving. All controls are always in sight, always a smooth and comfortable workflow.

The 175 included presets have been crafted with love for details, covering basic sounds as you would suspect from a classic analog synth, up to more cinematic pad sounds using the full load of the effect rack and fitting in a high variety of genres like synth-wave, deep house, and techno. In detail the factory presets contains 44 Bass, 11 Chords, 11 Drums, 12 FX, 17 Keys, 28 Lead, 30 Pad, and 22 Pluck sounds.

SPECS:

- vintage synth instrument for Kontakt
- 175 professionally crafted presets covering a variety of sounds
- combined use of wavetables and multi-sampled waveforms
- 3 oscillator layers (pulse, saw & sub waveforms) and additional noise oscillator
- pulse-width control and modulation via envelope and LFO
- monophonic (with legato) and polyphonic voice mode (both with glide & chord mode)
- 24db lowpass and additional highpass filter
- saturation, stereo width control & limiter
- dedicated fx rack using the state-of-the-art effect tools of Kontakt
- Effects: lofi-drive, Choral, Phasis, Supercharger GT compressor, Solid-G EQ, Replika delay, & reverb
- low footprint in disk space with only 152 MB in size

SYSTEM REQUIREMENTS:

Native Instruments Kontakt FULL VERSION (version 6.6.1.139 or later)
(Free Kontakt Player is NOT supported)*

Windows 7 or higher / Mac OS X 10.11 or higher
4 GB of RAM, 8 GB is recommended
64-bit DAW is recommended for optimized performance
157 MB free disk space

* When using the free Kontakt Player - the Instrument (same as basicly any other 3rd party Kontakt Instrument File) – will be stucked in demo mode. By that, the instrument will work properly or be usable as intended.

INSTALLTION

The installation consists of 2 quite simple steps. In the first step, copying the core instrument, and in the second step, placing the presets in the correct user content directory.

STEP 1
The instrument files can be found in the "Instrument (NKI)" folder – copy the "CFA-Sound DC-Zero Vintage Synth" folder to any folder on your hard drive. For example your preferred directory for your Kontakt instruments in general.

STEP 2
Now you need to copy the presets (Snapshot format of Kontakt) to the specific user content folder of Kontakt, so Kontakt can load and use the snapshots with the instrument.
In "Presets (Snapshots)" you can find the folder "CFA-Sound DC-Zero" - which contains all presets – and needs to be copied to the user content folder under the following file path:

macOS:
Macintosh HD > Users > *Your User Name* > Documents > Native Instruments > User Content > Kontakt > *place "CFA-Sound DC-Zero" folder here*

Windows:
C: > Users > *Your User Name* > Documents > Native Instruments > User Content > Kontakt > *place "CFA-Sound DC-Zero" folder here*

After that, you can load the „CFA-Sound DC-Zero.nki" instrument file in Kontakt via the internal file browser of Kontakt, or by drag & drop the nki file into the UI.

How to access the presets (in case you`re not familiar with the use of Snapshots within Kontakt), it`s explained below, as well.
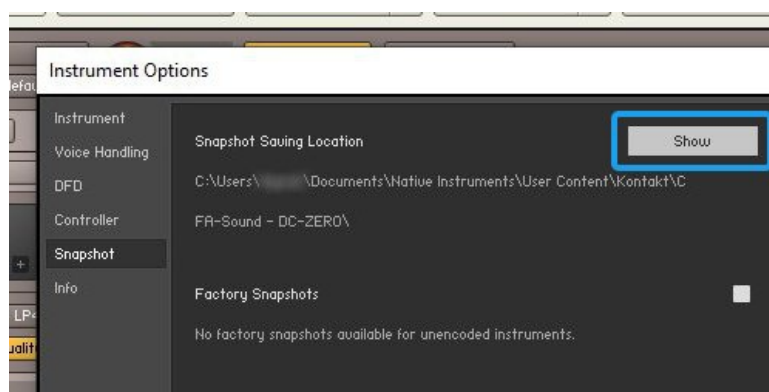
STEP 2 ALTERNATIVE WAY:
There is also an additonal way, to locate your user content folder.
Open Kontakt, and load the CFA-Sound – DC-Zero.nki instrument file.

Then, click on the tool icon to switch to the editing view.

Now click on „Instrument Options" and a popup will appear.

The „Snapshot" tab on the left, select this, and now click on „Show" - by that, your Kontakt user content folder will come up. This is the place, for Snapshots (Presets) of Kontakt Instruments.

LOAD AND ACCESS PRESETS

Once you have correctly copied the instrument and preset files, load the instrument in Kontakt. In the header there are 2 symbols (marked in blue in the picture below) - an info and a photo camera icon. By default, the info icon is active and shows information such as MIDI channel, voices, memory etc. in the header.
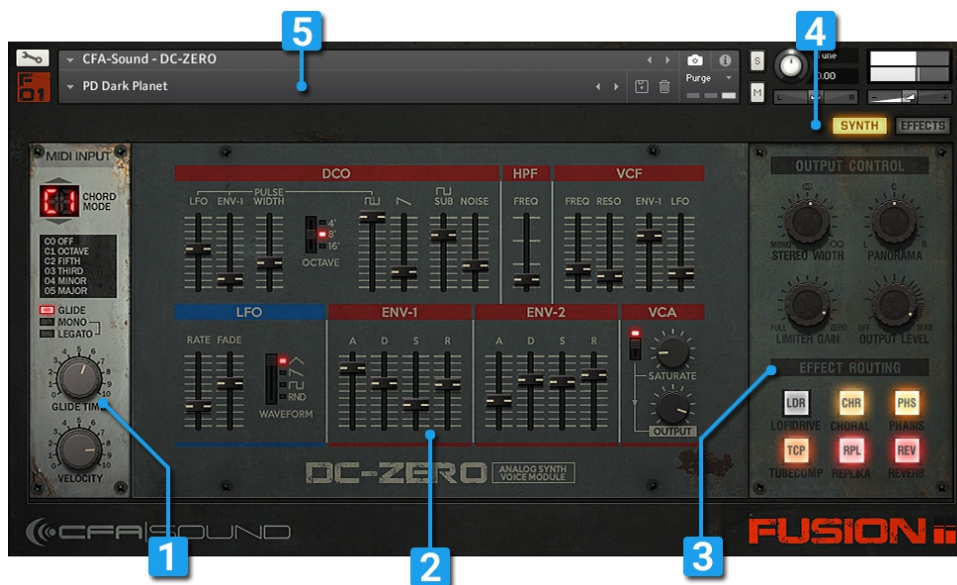

To switch to the presets view, click on the photo camera icon.

This changes the header to the snapshot view. Click on the preset (by default the preset "BA 80s Funk" will be visible and loaded there) and you will find all presets, sorted into sub-folders via a dropdown list.

Of course, you can also save your own presets. All you have to do is click on the disk icon on the right.

SYNTH VIEW

[1] MIDI Input module
[2] Synth module — DC-Zero
[3] Output Control module
[4] Switch between Synth and Effects view
[5] Snapshot Selection (Presets)

EFFECTS VIEW

[1] LoFiDrive module
[2] Choral module
[3] Phasis module
[4] Tube Compressor module
[5] EQ module
[6] Replika Delay module
[7] Reverb module
[8] Switch between Synth and Effects view
[9] Snapshot Selection (Presets)

SIGNAL PATH
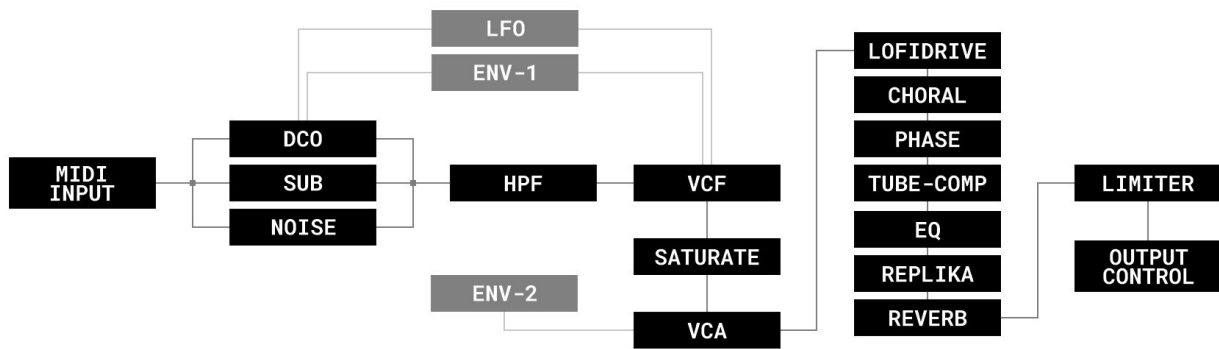
SYNTH VOICE MODULE — DC ZERO
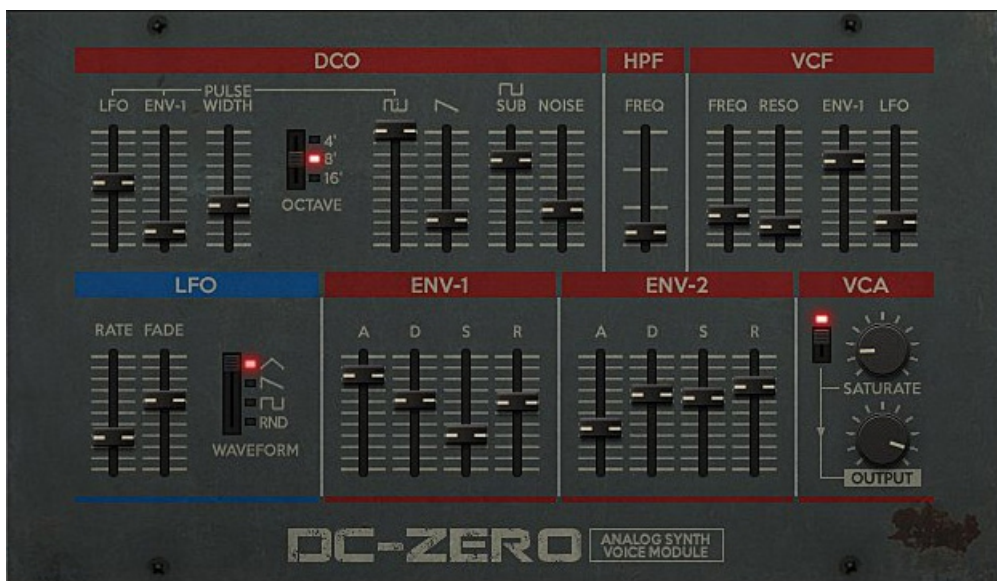
DCO (OSCILLATORS)

SQUARE - Adjust the volume of the square waveform inside the oscillator core.

SAWTOOTH - Adjust the volume of the sawtooth waveform inside the oscillator core.

SUB SQUARE - Adjust the volume of the sub oscillator. Running at one octave below the core oscillator.

NOISE - Adjust the volume of the noise inside the oscillator core.

OCTAVE - Sets the pitch for the oscillator to 3 different octave settings.

PULSEWIDTH - Adjust the pulsewidth of the square wave inside the oscillator core.

LFO (LINKED TO PULSEWIDTH) - Controls the modulation amount via the LFO to the pulsewidth of the square wave inside the oscillator.

ENV-1 (LINKED TO PULSEWIDTH) - Controls the modulation amount via ENV-1 to the pulsewidth of the square wave inside the oscillator.

HPF (12db HIGHPASS)
HPF FREQ - Adjusts the frequency below which signals will be attenuated.

VCF (24db LADDER LOWPASS)
VCF FREQ - Adjusts the frequency above which signals will be attenuated.

VCF RESO - With a value greater than zero, this control will boost a small frequency range around the cutoff frequency.
VCF ENV-1 - Controls the modulation amount via ENV-1 to the lowpass filter frequency.

VCF LFO - Controls the modulation amount via the LFO to the lowpass filter frequency.

LFO (LOW FREQUENCY OSCILLATOR)
RATE - Adjusts the frequency of this LFOs output signal in Hz (cycles per second). Values range from 0.01 Hz (one cycle in 100 seconds) to around 210 Hz.

FADE - If this value is greater than zero, the LFO will not start the waveform right away when a note is received, but rather smoothly ramp it up over a time of up to 5 seconds.

WAVEFORM - Select a different waveform of this LFOs output signal. Triangle, Sawtooth(falling), Square and Random can be selected.

ENV-1 & ENV-2 (VCF & VCA ENVELOPES)
ATTACK - The initial time it will take the envelope to reach its maximum level after it has been
triggered.

DECAY - The time it will take the envelope to fall from its maximum level to the level set by the Sustain control.

SUSTAIN - After it has completed its attack, and decay phases, the envelope will stay at this
level as long as the key is being held.

RELEASE - The time it will take the envelope to fall from its sustain level back to zero after the key has been released.

VCA (OUTPUT STAGE WITH TAPE SATURATION)
SATURATE (ACTIVATE/BYPASS) - Activates the Tape Saturation on the signal output of the synth voice module.

STATURATE (LEVEL) - Controls the level of the effect. High values will increase the amount of tape distortion and compression.

OUTPUT - Adjust the output volume of the synth voice module.

MIDI INPUT MODULE

CHORD MODE - Select between additional 5 choices for MIDI note stacking: Off, Octave, Fifth, Third, Minor, Major.

GLIDE - Activate Glide for all Voicing/Chord Modes.

MONO - Set the voicing mode to monophonic. If not activated, the instruments stays in polyphonic voicing mode.

LEGATO - Activates Legato mode. Only works in monophonic voicing mode.

GLIDE TIME - Sets the glide time between notes when Glide function is activated.

VELOCITY - Controls the intensity of the note velocity affecting the overall output volume.

OUTPUT CONTROL MODULE

STEREO WIDTH - Determines the width of the stereo image. With a negative value (left) the signal becomes mono, with a positive value (right) the stereo image is spread.

PANORAMA - Controls the position of the signal in the stereo image.

LIMITER GAIN - Determines the threshold value of the limiter at the end of the effects chain. Only signals above the threshold are affected. The lower the threshold is set, the more intensely the signal is affected. The maximum value is -40 db (completely left). A value completely to the right sets the threshold value to 0 db.

OUTPUT LEVEL - Controls the signal volume behind the limiter. The maximum value is limited to -0.1db.

EFFECT ROUTING
Activates individual effects in the routing of the effect chain. Following effects can be activated or bypassed: LoFi Drive, Choral, Phasis, Tube Compressor, Replika Delay and Reverb

LOFI DRIVE MODULE

TRANSISTOR - Determines the degree of distortion by a transistor-based drive effect.

BIT DEPTH - Determines the digital resolution of the sound in bits. The lower the bit value, the stronger the lofi effect.

RATE REDUCER - Controls the sample rate value. If the value is reduced (value range to the left), the treble reproduction is reduced and so is the sound quality.

NOISE FEED - Adds noise to the audio signal. This is independent of the amp envelope and runs continuously.

CHORAL (CHORUS) MODULE

RATE - Adjusts the speed of modulation, from slow pitch changes to fast vibratos.

AMOUNT - djusts the amount of modulation applied to Delay, altering the delay times of the chorus voices. Due to the configuration of the delays, this also changes the pitch of the chorus voices, creating the typical chorusing effect.

VOICES - Fades from one to three chorus voices. Increasing the number of chorus voices adds a dense and ensemble-like quality to the sound. The modulation affects the second and third chorus voice differently from the first, resulting in a wider and livelier sound.

FEEDBACK - Adjusts the level of the feedback signals from the outputs of the chorus voices to their inputs, creating a more sustained and spacious sound.

DELAY - Adjusts the delay times of the chorus voices, allowing you to change the spatial depth of the sound. This parameter strongly interacts with Feedback.

WIDTH - Pans the chorus voices opposite directions, widening the stereo image. When Width is set to 0, the inputs stereo image is preserved.

MIX LEVEL - Blends between the input signal and the effect signal by means of an equal-power crossfade.

CHORUS MODE - Switches between 2 chorus modes, each with its own sound characteristic and modulation behavior. Universal is a more generic chorus implementation. Its sound characteristic is clean

and modern. Synth mode is inspired by the choruses of polyphonic synthesizers from the late seventies and early eighties. Its sound characteristic is dark and vintage.

PHASIS (PHASER) MODULE
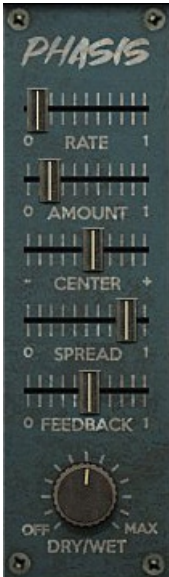
RATE - Adjusts the frequency of the modulation applied to Center and Spread. The modulation effect becomes more pronounced as Amount is increased.

AMOUNT - Adjusts the amount of modulation applied to Center and Spread, adding movement to the phasing effect.

CENTER - Shifts the peaks and notches in the frequency spectrum by changing the frequencies of the all-pass filters that create the phasing effect (relative to the Center frequency).

SPREAD - Adjusts the density of the peaks and notches in the frequency spectrum. Turning the knob to the left moves the peaks and notches closer to each other. Turning the knob to the right moves the peaks and notches further apart from each other.

FEEDBACK - Adjusts the amount of feedback, or resonance, applied to the all-pass filters that create the phasing effect. Turning up Feedback makes the peaks and notches in the frequency spectrum more pronounced.

DRY/WET - Blends between the input signal and the effect signal by means of an equal-power crossfade.

EQ (SOLID-G) MODULE

CUT/BOOST AIR - Adjusts the amount of boost or cut at the High Frequency point of the EQ.

CUT/BOOST MID - Adjusts the amount of boost or cut at the Mid Frequency point of the EQ.

FREQUENCY MID - Adjusts the center frequency of the Mid frequency band at which the boost or cut will occur.

CUT/BOOST SUB - Adjusts the amount of boost or cut at the Low Frequency point of the EQ.

TUBE COMPRESSOR (SUPERCHARGER GT) MODUL

INPUT(DB) - Adjusts the input gain to the compressor. Affects the level of dynamic processing in combination with the Compress control.

ATTACK - Determines how fast the compressor reacts to incoming signals. Increasing this
parameter will add more punch and decreasing it will reduce sharp attacks.

RELEASE - Adjusts the length of compressor's Release phase, which determines how long it
takes for the compression to stop after the input signal falls below the Threshold level.

COMPRESS - Determines the amount of compression applied to the input signal. The higher the
value, the more compression is applied to the input signal.

SATURATE - Applies decent saturation to the signal. Turning the control right applies more saturation to the signal.

CHARACTER - Changes the sound characteristic of the compression effect by applying
equalization to the signal.

OUTPUT(DB) - Sets the output level of the compressor in dB. You can use it as a make-up gain control that allows you to bring the output signal up to the same peak level as the input signal after compression.

MIX LEVEL - Controls the dry/wet mix of the compressor. This can be used to create a parallel compression style routing, which increases the quieter signals rather than reducing the louder ones. When the Mix control is set to 0%, only the uncompressed (dry) signal will be heard, and at 100%, only the compressed signal will be heard. Settings between the 0% and 100% are a mix of both signals.

STEREO MODE - Selects from 2 stereo modes. Stereo Link applies equal gain reduction to both the left and right channels. It is the most common mode as it eliminates the risk of shifting the stereo image. In MS mode, the input signal will not be split into a left and right channel, but instead processed as mid and side signals.
MS mode enhances the side signal to a certain extent, so signals processed using this mode may sound wider.

REPLIKA DELAY MODULE

DELAY TIME - Adjust the delay time in synchronized time intervals to your host or master tempo. Available time settings:
(from left to right in perspective/visually seen)
1/32, 1/32D, 1/16T, 1/16, 1/16D, 1/8T, 1/8, 1/8D, 1/4T, 1/4, 1/4D, 1/2T, 1/2, 1/2D, 1/1

FEEDBACK - Adjusts the level of the signal that is fed back to the delay's input. Increasing
Feedback adds delay repeats. Levels above 100% create swelling echo repeats up to selfoscillation.

MIX LEVEL - Blends between the input signal and the effect signal by means of an equal-power crossfade.

DELAY MODE - Switch between two delay modes (Modern and Analogue).

REVERB MODULE

PREDELAY - Introduces a short amount of delay before the reverb takes effect.

DISTANCE - Adjusts the size of the room simulated by the reverb effect. Higher values replicate larger rooms.

DURATION - Adjusts the duration(time) of the reverb effect.

DIFFUSION - Cuts the high-frequency content of the reverb signal.

DAMPING - Adjusts the amount of absorption in the room simulated by the reverb effect. Higher values result in more absorption.

MIX LEVEL - Blends between the input signal and the effect signal by means of an equal-power crossfade.

Controller Infos

If you`re unsure what a certain knob, fader or button of the instrument has as function – just hoover with the mouse over the element, and the general info area of Kontakt, will display a short description of the knob/fader/button and it`s specific function.

Controller`s default value

To reset certain control elements such as faders and knobs to their basic value, you just need to click on the respective controller while holding down CTRL key. This will reset the controller to the same value, as stored in the Init Patch (which can be found in the preset/snapshot library in the template folder).

Automation & Modhweel

Almost every controller can be automated by MIDI-CC/MIDI-learn, and of course Also be automated internally by the DAW. The only limitation are buttons, which unfortunately cannot be automated due to how Kontakt works. All faders and knobs can be automated.

The Modwheel can also be used via MIDI-learn to modulate controllers like faders and knobs – same as any other MIDI controller on your keyboard or inside your DAW. The Modwheel was not built into the instrument as a fixed modulation source on purpose, in order to prevent unwanted double movement or limitation of the modulation later on. So the user can freely allocate and use the Modwheel for every controller he wants to modulate.

Saving CPU performance

Sometimes it may be necessary or helpful, like on older systems, processors or laptops, to save CPU performance in some places.

Through the Effect Routing area of the Output Module in the Synth view, you can activate or deactivate the individual effects, which of course can reduce the CPU load. For example, if one effect is not really used (e.g. dry/wet level at 0%), it makes sense to deactivate the effect directly by the effect routung buttons – so the CPU doesn`t need to consume extra processing power on the unused (but active) effect.
Same goes for the case, to use external effects for e.g. delay & reverb. It makes more sense to disable them directly instead of setting their dry/wet level to 0%.

Likewise, disabling the saturation effect of the VCA reduces the CPU load.

Missing Content Dialog - Batch Re-Save
Sometimes the error message "Missing Content" can appear with instruments and libraries for Kontakt, which is often due to the displacement of the content, resulting in changed file paths. This can easily be corrected with a "Batch re-save", which is clearly presented and well explained in the Native Instruments support area:
https://support.native-instruments.com/hc/en-us/articles/210274985-How-to-Batch-re-save-a-KONTAKT-Library

If you still have questions about loading the Instrument (and snapshots) I recommend reading the user manual for Kontakt, and the online articles, since they most of the time explain and present topics in a very good and detailed way.

Alternatively, you can of course, always contact us directly on our website and explore the online help desk: https://www.CFA-Sound.com/