

REPLIKA SOUND GUITAR LIBRARY : DEEP STEEL ACOUSTIC GUITAR v1

FEATURE GUIDE



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IMPORANT (REQUIREMENTS)

Please note this instrument will NOT work on the free Kontakt Player. It will time out after 10 minutes. You need to have a FULL version of Kontakt (5.3.or newer) to use this instrument.

MIDI REQUIREMENTS :

In order to get the best out of this instrument you will need some sort of external MIDI control device. There are 20 Dials and 9 Buttons on the main Performance View all of which respond to MIDI commands. You can draw this information as required in your DAW but being able to play the MIDI control information in real-time will bring out the best in this Instrument.

LIBRARY SIZE - The Library contains 1151 Samples and takes up 482 MB on the Hard disk. The Kontakt Instrument loads 140.86 MB into the RAM.

PACK CONTENTS

Samples - Various Articulations

1 Kontakt 5.3 Instrument

MIDI Files of Guitar Parts from the 3 Demos

User Manual

MAIN INTERFACE

Note: All the MIDI Note names used refer to C3 as middle C.

This means: C3 is the MIDI Note number 60. The Instrument Range is from D1 to E5.

When you start the instrument you will see this :-



No Articulation has been selected yet so all the Keys are black except for the red Articulation Key-switches. Hit one of these and you will see the Main Page :-



1	Chord Octave	Pitch all strummed Chords up an Octave
2	Bar Chord	Switch this On to strum Bar Chords
3	Open Chord	Switch this On to strum Open Chords
4	Power Chord	Switch this On to strum Power Chords (3 Note Chords)
5	Strum Speed	Control how fast each Chord strum is
6	Strum Emphasis	Make lower or higher Notes louder in each strum
7	Strum EQ	Make Down strums Heavier and Up strums Lighter
8	Tremelo Picking	Switch on to access fast repeated Note picking
9	Tremelo Picking Speed	Control how fast the Tremelo picking is
10	Velocity Sensitivity	Turn up to increase Velocity Sensitivity and Dynamic Range
11	Sample Playback Offset	Start Sample Playback further along each Sample. Increased Values make Deep Steel more responsive to your playing but have less of the "Pick" sound at the start of each Sample
12	Auto Hammer-On / Pull-Off	Switch On to allow overlapped Notes to trigger Hammer-Ons and Pull-Offs
13	Auto Hammer / Pull Note Range	Overlapped Notes inside this range will trigger Hammer-Ons and Pull-Offs
14	Auto Natural Harmonics Velocity Range	Set the Note Velocity below which will trigger Natural Harmonics (i.e. low Velocity Notes will trigger Harmonics)
15	Vibrato Amount	Control the amount of Vibrato applied to a Note
16	Vibrato Speed	Control the speed of the Vibrato

17	ADSR Short / Long	Switch between two separate ADSR Volume Envelopes - One for Long Notes One for Short Notes
18	Attack	Control the Attack portion of each Sample
19	Decay	Control the Decay portion of each Sample
20	Sustain	Control the Sustain portion of each Sample
21	Release	Control the Release portion of each Sample
22	Volume Stutter Gate Rate	Select Tempo-synced rate for the Stutter Gate - from 1/16 th Beat to 4 Beats (2 Triplet options as well)
23	Volume Stutter Gate Phase	Switch the Phase of the Stutter Gate (Off = Start with Sound. On = Start with no Sound)
24	Volume Stutter Gate Intensity	Control the amount of Temp-synced Volume Gating
25	Volume Stutter Gate Pulse Width	Control the width of each Volume Pulse
26	Random Fret Noise	Switch On to allow random Fret Noises to be played
27	Fret Noise Frequency	Control how often the random Fret Noises occur
28	Fret Noise Volume	Control how loud the random Fret Noises are
29	Slide-Down Speed	Change the speed of the Slide-Down Samples
30	Slide-Up Speed	Change the speed of the Slide-Up Samples
31	Pitch Bend Range	Select a Pitch Range from 0 to 12 semitones
32	Treble	Adjust the Treble Tone with a broad EQ combination
33	Bass	Adjust the Bass Tone with a broad EQ combination

ARTICULATION KEY-SWITCHES

These are on the left of the Kontakt keyboard in red.

Sustain	C0
Staccato	C#0
Palm Mute	D0
Hammer On	D#0
Pull Off	E0
Slide-Up into Note	F0
Slide-Down after Note	F#0
Fret Noise	G0
Harmonics Natural	G#0

ARTICULATION DESCRIPTIONS

Sustain :	Long sustained Notes with no vibrato.
Staccato :	Short Notes with sharp attack.
Palm Mute :	Short Notes Muted by the Players picking hand. Warm and punchy.
Hammer On :	Note played by placing finger on the fret board. It is not plucked / picked.
Pull Off :	Note played by pulling the fretting finger away from the fret board. It is not plucked / picked.
Slide-Up :	Sliding up the fret board into the Note. The volume of the Slide-Up Sample is controlled by the velocity of the Slide-Up Key-switch i.e. Press F0 harder for louder Slide-Up Samples.
Slide-Down :	Sliding down the fret board after the Note has been played. The volume of the Slide-Down Sample is controlled by the velocity of the Slide-Down Key-switch i.e. Press F#0 harder for louder Slide-Down Samples.
Fret Noise :	Squeaks and scrapes made by the natural movement of the fretting hand around the fret board. Fast hand movements tend to make louder fret noises.
Harmonics Natural :	Harmonics played by placing the fretting finger at various "nodes" on the string. Each Note is not actually fretted. Chromatic Harmonics are provided here (Only possible on a real guitar with some clever technique).

CHORD AND STRUMMING CONTROLS

When you switch a Chord Button On the Kontakt keyboard will change like this :-



- 1 Chord Name Window
- 2 Chord Notes Window
- 3 Articulation Key-switches
- 4 Down Strummed Notes (Strum starts with lowest Note of Chord)
- 5 "Mute Strum" Notes (Muted Percussive Strums)
- 6 Up Strummed Notes (Strum starts with highest Note of Chord)
- 7 Chord Selection Key-switches

QUICK GUIDE TO CHORD PLAYING

Switch on a Chord Button (try Bar or Open first)

First select a Chord type (7)

Then play a Down Strum Note (4) or an Up Strum Note (6) – you will hear the Chord strummed.

You can adjust the Speed, Emphasis and EQ of each Chord using the appropriate controls.

Use the “Mute Strum” Notes as percussive elements in your strum patterns.

Try playing down strums with your left hand and up strums with your right.

You can overlap the Down and Up strum Notes – each successive Chord Note (played or in your DAW) will fade out the Chord Note before it. The same applies to the Dead Strums.

For both Bar Chords and Open Chords a section of the keyboard on the right (above the highest Note of the instrument) will turn yellow to indicate the range of Chords available. Each Note will select a different Chord, the name of which will be displayed in the Chord Name Window, along with the Notes which make up the Chord you are playing. Each Note of each Chord played is selected using a true Random-Robin algorithm.

For example in a 5 Note A Major Chord with the Sustain Articulation :-

1 of 3 possible Notes is selected for the A1 Note

1 of 3 possible Notes is selected for the next Note (E2)

1 of 3 possible Notes is selected for the next Note (A2) and so on.

This leads to a much more human feel as each repeated strummed Chord sounds different from those around it.

Bar Chords are made when the guitar player uses his/her index finger to act as a “bar” across the fret board. These Chords are the most flexible as many common shapes work up and down the entire range of the instrument. In total there are 30 Bar Chord types available. They are listed (together with their corresponding Chord Selection Key-switch) in the “Chords List” (page 14).

Open Chords are named as such because they contain lots of unfretted strings and therefore have a more “open” and resonant sound. They generally work in only one position (around the lowest frets of the guitar) and not all root Notes have the same types of Chords available to them. The 25 most common Open Chords are featured in this instrument (again listed in the “Chords List”). If a particular Note does not have an Open Chord associated with it only the Note you have played will sound (i.e. only a single Note will sound not a Chord).

Power Chords are 3 Note Chords made up of the root Note (i.e. the key you play), a Fifth above and an Octave above. They are often used in rock music styles and suit lots of heavy distortion.

STRUM SPEED CONTROL :

This dial will control how fast each Chord is strummed. Turn right for faster strumming; left to slow down the strum speed.

EMPHASIS CONTROL :

This dial will control whether lower (i.e. warmer) or higher (i.e. brighter) strings are louder for any particular strum. Turn left to get warmer strums and right to get brighter strums. You will get more from this control if your main (played) Note velocity is mid to low in your DAW (this allows sufficient headroom for Kontakt to make the relevant Chord Notes louder. Using higher velocities will max out all the Note volumes at 127 lessening emphasis the effect). The Emphasis control has a major effect on how your strummed Chords sound – use it a lot.

STRUM EQ CONTROL :

It is quite common when strumming Chords on a guitar to add emphasis to the Down Strums (eg at the beginning of a bar or rhythmically throughout a strum pattern) and play Up Strums more lightly. The Strum EQ Dial adds a broad lower EQ boost to every Down Strum and a Broad EQ cut to every Up Strum. Turning the Dial clockwise adds more of this effect. This effect is quite subtle - maximum Boost/Cut is 2 dB.

TREMELO FUNCTION

This function allows any Note in any Articulation to be played in a fast picked repeated style. Each Note is selected using the Random-Robin technique so each Note in the tremelo picked sequence will be different thus avoiding the “machine-gun” effect. Turning the “Speed” dial will change the speed of the tremelo picking.

VIBRATO CONTROL

It is useful to use the pitch bend wheel to simulate a player bending up a string (i.e. pitching up the string with his or her fingers). This is a common guitar technique, often used in solos. Small variations in pitch wheel position can also be used to simulate vibrato. In addition to this, the instrument allows you to apply multi - LFO based pitch vibrato. Turn the Vibrato Amount Dial to the right to hear a Note being affected. Turn the Vibrato Speed Dial to the right to achieve a faster vibrato affect. Vibrato Amount is directly controlled by your Mod-Wheel to start with but you can change this to whatever you want. The Vibrato here naturally gets subtly faster as the intensity is increased.

Vibrato is a very human musical quality and we recommend you keep the Amount and Speed varied too avoid it sounding mechanical. Vibrato often speeds up after initial application and then eases off as the Note ends.

MIDI CONTROL

Each Dial/Button can be controlled by external MIDI controllers (in fact this is recommended as a more intuitive way of using this instrument). The commonly used ones have already been assigned MIDI channel numbers for ease and of use. Here is the list of parameters and their corresponding MIDI channels and ranges.

CONTROL	INITIAL MIDI CHANNEL	MIDI RANGE (for DAW Automation)
Bar Chord On/Off	17	Under 65 = OFF. Over 64 = ON
Open Chord On/Off	18	Under 65 = OFF. Over 64 = ON
Power Chord On/Off	19	Under 65 = OFF. Over 64 = ON
Chord Octave	20	Under 65 = OFF. Over 64 = ON
Strum Speed	21	0 - 127
Emphasis	22	0 - 127
Strum EQ	23	0 - 127
Tremelo On/Off	24	Under 65 = OFF. Over 64 = ON
Tremelo Speed	25	0 - 127
Vibrato Amount	1	0 - 127
Vibrato Speed	108	0 – 127
Auto-Hammer On/Off	26	Under 65 = OFF. Over 64 = ON
Sample Offset	27	0 – 127
Slide-Up Speed	28	0 – 127
Slide-Down Speed	29	0 – 127

MIDI CC 107 and 108 (Vibrato controls) are used internally so do not assign these MIDI CCs to any other parameter (see MIDI Setup page 19).

CONTEXTUAL HELP

Clicking on Kontakt's Info button will reveal an Information Bar at the bottom of the player. Information can be displayed for each Dial/Switch on the GUI by hovering the mouse across each control.

THE SLIDE-DOWN KEY (KEY-SWITCH F#0)

This Key-switch behaves differently than the others. Pressing this Key-switch will cut off any existing Note(s) and play a Sample (at the preceding Note's pitch) of the Note being "slid" downward in pitch. This sound is commonly heard at the end of songs or during solos where the player slides his/her hand down the fret board in between Notes or to finish off a Chord. The volume of the Slide-Down is affected by the velocity of the Key-switch.

THE SLIDE UP KEY (KEY-SWITCH F0)

This Key-switch will temporarily deselect your current Articulation, play a short Slide-Up Sample and then re-activate your current Articulation to play a Note. This allows for subtle slides up into Notes. The loudness of the Slide-Up Sample is dictated by the Key-switch velocity (i.e. press the Key-switch F0 louder to get louder Slide-Up sounds). It will work with any Articulation.

VELOCITY SENSITIVITY

Use this Dial to adjust how Deep Steel responds to MIDI Note Velocity. Higher values of this Dial mean more sensitivity and hence more Dynamic Range.

SAMPLE PLAYBACK OFFSET

All the Samples were recorded and edited to include the actual pick/pluck sound in front of each Note. This is done for realism and the offset is approx. 152 ms for all main Articulations. Use the Offset Dial to lose some of this sound according to taste. Higher values will result in a quicker response of Note to keyboard playing but will have less of the "real" pick part of each Note. Really high values will result in a very soft sound. The Range of this Dial is 0 - 200 ms.

AUTO HAMMER-ON / PULL OFF

When this is switched on any Notes that overlap will trigger an appropriate Hammer-On (if the following Note is higher in Pitch) or Pull-Off (if the following Note is lower in Pitch) Sample for the following Note played. This means you do not have to Key-switch Hammer-Ons or Pull-Offs. Key-switches are available for these Articulations but it is quicker to just play in your line to your DAW and simply overlap any Notes you want to have Hammer-Ons or Pull-Offs.

The Hammer Drop-down Menu allows you to choose the Note range that you want.

AUTO NATURAL HARMONICS

Notes that have Velocity equal to or less than the selected value in the Harmonics Drop-down Menu (see 14 on the diagram on Page 7) will trigger a Natural Harmonics Sample for that Note. This allows you to play Harmonics without Key-switching. The Natural Harmonics Articulation has its own Key-switch if required but this is a quicker way to play in Harmonics. If you do not want this feature then set the Velocity Range to 1 in the Drop-down menu.

ADSR VOLUME ENVELOPES

There are 2 ADSR envelopes - One that affects Long Notes (Sustain, Hammer-On, Pull-Off, Natural Harmonics) and one that affects Short Notes (Staccato & Palm Mute). Use the s/l Button (17 on the diagram on Page 7) to switch between the two. When the s/l Button light is on it is the Short Notes that are being affected.

TEMPO-SYNCD VOLME (STUTTER) GATE

Deep Steel comes with a Tempo-synced Volume Gate. This Gate will alternately allow sound through and then drop to silence at a Tempo-synced rate defined by you. Use the Intensity Dial to adjust how strong the Gating effect is.

The Width Dial defines how much of each Gate Cycle is allowed to sound. Shorter values give a more clipped sound.

Click the Phase Button to change the phase of the Volume Gate. When this Switch is OFF the Gate Cycle starts with the sound being played. When it is ON the Gate Cycle starts with no (or very little, depending on the Pulse Width setting) sound. This Switch also inverts the Pulse Width Setting (so large Pulse Width parameter settings result in more silence).

The Volume Gate LFO Rate Menu allows you to change the basic Tempo-synced speed of the Volume Gate. Its Range is from 1/16th beat (fast) to 4 beats (slow). There are 2 triplet options (3/16th and 6/16th).

RANDOM FRET NOISE

When switched on this function will randomly inject Fret Squeaks into the phrase you are playing. Use the freq and vol Dials to adjust how often they occur and how loud they are. The higher the freq Dial is the more often they will occur. Generally Fret Noises will occur more often with larger Note intervals (eg more likely to happen with a Note difference of, say, 10 semitones than with one of 2 semitones). This reflects a Guitar player having to move the fretting hand further to connect Notes and having a higher chance of squeaking on the strings.

SLIDE-UP & SLIDE-DOWN SPEED

The Slide-Up and Slide-Down Articulations can have their speeds (lengths) changed. They make use of Kontakt's TM Pro Timestretch Algorithm. Use the Dials to change the length of each slide to suit your musical phrases.

TREBLE & BASS CONTROLS

These 2 Dials offer very broad Tonal Controls. They actually affect a series of combined bell EQs. Use these to help sit Deep Steel into your mix. Very approximately they affect a wide bell of frequencies around :-

Treble 4500 Hz

Bass 240 Hz

CHORD LIST

BAR CHORDS :

<i>CHORD</i>	<i>Number of Strings Used</i>	<i>Key-switch Note</i>
Major	6	F5
Minor	6	F#5
7th	6	G5
Major 7	6	G#5
Minor 7	6	A5
Suspended 2nd	5	A#5
Suspended 4th	6	B5
7th Suspended 4th	6	C6
6th	5	C#6
Minor 6	5	D6
6 Add 9	6	D#6
9th	5	E6
Major 9	6	F6
Minor 9	5	F#6
Add 9	5	G6
11th	5	G#6
Major 11	5	A6
Minor 11	6	A#6
13th	5	B6
Major 13	6	C7
Minor 13	6	C#7
13 Flat 9	5	D7
Diminished	5	D#7
Diminished 7th	5	E7
Augmented	5	F7
7 Sharp 9	6	F#7
7 Flat 9	6	G7
Major minor 7th	6	G#7
Major 7 flat 5	6	A7
Major 7 Sharp 5	5	A#7

OPEN CHORDS :

<i>CHORD</i>	<i>Key-switch Note</i>
Major	F5
Minor	F#5
7th	G5
Major 7	G#5
Minor 7	A5
Suspended 2nd	A#5

25 Common Open Chords featured in this Virtual Instrument :

Root Note	Major	Minor	7 th	Major 7th	Minor 7th	Sus 2
C	Y	Y	Y	Y	-	-
D	Y	Y	Y	Y	Y	Y
E	Y	Y	Y	-	Y	-
F	Y	-	-	Y	-	-
G	Y	-	Y	-	-	-
A	Y	Y	Y	Y	Y	Y
B	-	-	Y	-	-	-

“Y” : Included

“-“ : Not Included

EFFECTS UNITS



- 1 4 Band EQ
- 2 Chorus
- 3 Transient Master
- 4 Delay
- 5 Convolution Reverb
- 6 Reverb Impulse Response Selection Menu

Simply click on the left hand switch of each Unit to engage the effect. An amber Circle indicates the Unit is On. Use CTRL (PC) or CMD (MAC) click to reset each effect parameter back to its "zero" state. Hold down Shift when clicking to make fine adjustments.

EQ :

4 Band Equalization comprised of 2 shelves and 2 bell EQs.

Low Shelf EQ : 40 Hz to 600 Hz

Low Mid "Bell" EQ : 200 Hz to 2.5 KHz

High Mid "Bell" EQ : 600 Hz to 7 KHz

High Shelf EQ : 1.5 KHz to 22 KHz

All EQs have a Gain Range of +/- 20 dB

The Mid EQs have a Q (Bandwidth) Range of 0.70 Octave to 2.5 Octaves.

CHORUS :

Level : "Wet" level. Range is OFF to 0 dB. When the "Wet" Level is 0 dB this is equal to the "Dry" Level (i.e. 50% each).

Depth : Adjusts the range of modulated detuning. Higher values give a more pronounced chorusing effect. Range is 0 to 100.

Speed : Adjusts the LFO speed. Range is 0.05 Hz (slow) to 8 Hz (fast).

Phase : Imparts a phase difference between left and right channels widening the signal. Range is 0 ° to 90 °.

TRANSIENT MASTER :

Controls the Attack (initial) and Sustain (body) portions of a sound. One use is to bring out or soften Chord strums.

Attack : -100% to +100% (scaling factor. Note that 0 = "Normal" i.e. No Effect)

Sustain : -100% to +100% (scaling factor. Note that 0 = "Normal" i.e. No Effect)

DELAY :

Level : This is the "Wet" level. Turn this up to hear the delay sound. Range is OFF to +3 dB.

Time : This is the delay time in 1/16th Notes. Range is 1/16th to 16/16th (1 Beat).

Feedback : Range is 3% to 90%. 3 gives only one short, almost imperceptible, repeat. 90 results in a long echo tail.

HF Damping : Controls the attenuation of the high frequencies of each echo. 0 results in no high frequency damping. 100 results in lots of high frequency damping (i.e. a warmer sounding echo).

Width : Turning this up will result in a wider echo sound. Each echo will be panned alternatively left and then right. At 100 the result is wide left and right echoes - the classic "ping-pong" effect.

REVERB :

This Reverb Unit uses the Impulse Responses (basic reverb character) selected from the Impulse Response Selection Menu.

Level : "Wet" level i.e. the volume of the reverb effect. Range is OFF to +3 dB.

Predelay : This is the length of the short delay between the dry signal and the reverb effect in milliseconds. Range is 0.1 ms to 200 ms.

Hi Pass : Adjusts the cutoff frequency below which the signals frequency content will be attenuated. Range is from 50 Hz to 2 KHz.

Low Pass : Adjusts the cutoff frequency above which the signals frequency content will be attenuated. Range is from 2 KHz to 20 KHz.

IMPULSE RESPONSE SELECTION :

You can choose from several reverb Impulse Responses for the Convolution Reverb Unit :-

Ambience 1, 2, 3, 4, 5, 6

Plate 1, 2, 3, 4

Room 1, 2, 3, 4

Studio 1, 2

Club

Arena

Stadium

Hall

Cathedral

MIDI SETUP



MIDI CC numbers are already assigned to all the main controls of this instrument (see MIDI Controls Page 11).

All of these MIDI CC numbers can be reassigned using the drop-down menus to suit your own setup.

Note - MIDI CC 107 and 108 are used internally so please avoid reassigning those to anything else. You won't be able to use them.

GROUP PURGE SWITCHES

The series of switches below the MIDI Control Setup Panel allow you to load or unload each Articulation group from your computers RAM. If you find you do not need any particular Articulation you can unload it here and save some RAM.

An "On" switch (Amber Circle is lit) means the Articulation is loaded.

CONTACT

For further information, news and other libraries please visit www.replikasound.co.uk

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