



# SCARBEE FUNK GUITARIST

Manual



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Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.

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# Table of Contents

|          |  |           |
|----------|--|-----------|
| <b>1</b> | <b>Introduction .....</b>              | <b>6</b>  |
| 1.1      | Background .....                       | 6         |
| 1.2      | The Sound... ..                        | 6         |
| 1.3      | The Chord Concept .....                | 8         |
| 1.4      | The Groove Concept .....               | 9         |
| 1.5      | Playing with 2 Fingers .....           | 11        |
| 1.6      | The Guitarist: Søren Reiff .....       | 12        |
| <b>2</b> | <b>Basic Navigation .....</b>          | <b>14</b> |
| <b>3</b> | <b>Combi Tab .....</b>                 | <b>15</b> |
| 3.1      | Introduction .....                     | 15        |
| 3.2      | Key Mapping .....                      | 16        |
| 3.3      | How to Use the Instrument .....        | 17        |
| 3.4      | More About Grooves .....               | 18        |
| 3.5      | Key Sets .....                         | 18        |
| 3.6      | Combi Presets .....                    | 21        |
| 3.7      | Adding Combi Presets .....             | 21        |
| 3.8      | Deleting Combi Presets .....           | 23        |
| 3.9      | Where is Data Stored? .....            | 23        |
| <b>4</b> | <b>Chords Tab .....</b>                | <b>25</b> |
| 4.1      | Fretboard Display .....                | 25        |
| 4.2      | Using Chord Mapping Presets .....      | 26        |
| 4.3      | Adding Chord Mapping Presets .....     | 27        |
| 4.4      | Deleting Chord Mapping Presets .....   | 28        |
| 4.5      | Introduction to Chord Mapping .....    | 29        |
| 4.6      | Mapping/Unmapping Chords .....         | 31        |
| 4.7      | Mapping Chords by Recording MIDI ..... | 32        |

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|          |  |           |
|----------|--|-----------|
| 4.8      | Finding Alternatives to a Chord .....                    | 33        |
| 4.9      | Finding Identical Chords with a Different Root Key ..... | 33        |
| 4.10     | Swap Mapped Chords .....                                 | 34        |
| 4.11     | Some Tips to Create Cooler Chord Presets... ..           | 34        |
| <b>5</b> | <b>Grooves Tab .....</b>                                 | <b>35</b> |
| 5.1      | Groove Mapping Presets .....                             | 35        |
| 5.2      | Mapping/Unmapping Grooves .....                          | 36        |
| 5.3      | Changing the Name of a Mapped Groove .....               | 37        |
| 5.4      | Editing Grooves .....                                    | 37        |
| 5.4.1    | Overview .....   | 37        |
| 5.4.2    | Adding Notes .....                                       | 39        |
| 5.4.3    | Erasing Notes .....                                      | 39        |
| 5.4.4    | Selecting a Note .....                                   | 40        |
| 5.4.5    | Editing Note Parameters .....                            | 40        |
| 5.4.6    | Advanced — Other Editing Aids .....                      | 41        |
| 5.4.7    | More About the Articulations .....                       | 43        |
| 5.4.8    | The Blue Notes — Aid to do Better Grooves! .....         | 47        |
| 5.5      | Dynamics and the Groove Editor .....                     | 54        |
| 5.6      | Adding a Groove to the Groove List-box .....             | 55        |
| <b>6</b> | <b>FX Tab .....</b>                                      | <b>56</b> |
| 6.1      | Overview .....   | 56        |
| <b>7</b> | <b>Settings Tab .....</b>                                | <b>58</b> |
| 7.1      | Introduction .....                                       | 58        |
| 7.2      | Bass Settings .....                                      | 58        |
| 7.3      | Sample and Timing Settings .....                         | 59        |
| <b>8</b> | <b>Use in Sequencer .....</b>                            | <b>60</b> |
| <b>9</b> | <b>Credits .....</b>                                     | <b>61</b> |

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# 1 Introduction

## 1.1 Background

In 1997, Scarbee created the first prototype of a sample bass library. It started out on an Akai S3000XL sampler and then the development continued on an EMU4. In 1998, the first powerful software based sampler — Giga Sampler, was introduced and the hardware samplers were left for good. Today we base all our instruments on the Kontakt sampler, in close partnership with Native Instruments.

Scarbee was the first in the world to split recorded phrases and articulations, and use advanced programming so the instruments could combine any articulations and even form completely realistic solo phrases - regardless of tempo and pitch. Our goal is to create tools that we ourselves need in our daily music production. This way our hearts are involved in every product we release. We aim to create high quality products for the demanding musician, producer or composer, and we are proud that we can support these fantastic artists with our tools.

## 1.2 The Sound...

First of all, we wanted the product to be downloadable, so the library could not be too large. And since we wanted the product to ship with the 3 most-used pickup sounds: Neck, Neck-Middle (NM), and Middle-Bridge (MB), we also had to find a way to capture these sounds with the least number of recordings.

We had a guitar modified so there was an output for each of the pickups. However, we could not get the mixed positions, NM and MN, to sound right when combining them in Kontakt. We spent 3-4 months on first trying 5 different guitars (Thanks to Kim Alring from Gaya Musik, Holbaek, and Woodstock Guitars, Copenhagen) - then we modified 2 of them, tried up to 6 different pickup sets — including several noiseless ones (that we dumped), until we finally decided on a model. We then bought a new guitar of that model and modified it with 3 outputs.



Fig. 1.1 Mr.Scarbee, aka Thomas Hansen Skarbye, inspecting a guitar before recording.

However, we still had not solved the problem of the mixed pickups sound. After contacting pickup manufacturers, studying forums, asking product specialists, we finally managed to crack it...

It seems that there were three main issues: First of all, the potentiometers of each pickup had to have the exact same value in order to cancel out/enhance frequencies when mixed. I bought over 30 250k pots, each having values ranging from 210 to 290 — therefore making it very hard to find 3 matching ones. Secondly, the volume of each pickup had to be at a specific point (we taped the volume knobs to ensure the levels would not change). Finally the potentiometer values had to be lower than on the normal reference guitar because we removed the tone control to achieve the same tone.

Not since I worked on the Clavinet had I soldered so much — and with the guitar I was not as elegant as my good friend Stefan Sorensen from Gaya Musik. He put the final guitar together with perfect shielding as we ended up using rather noisy pickups, but ones with a really "fat" sound.





Fig. 1.2 Note the tape over the volume knobs...nice!

One final thing: we bought three very expensive Mogami Platinum cables after buying and testing virtually every cable on the planet — you'll be surprised how important cables can be. We used three identical MindPrint En-voice MKII pre-amps connected to Pro Tools. For strings we used Everly B52s 10-46. We tested the most popular brands of strings, and these ones sounded just as good as the best ones — but lasted much longer. We changed strings twice a day during the recordings.

Enjoy your new funk guitarist!

Cheers,

Thomas Hansen Skarbye

## 1.3 The Chord Concept

In the Scarbee Funk Guitarist you have 3413 chords to choose from — including *similar chords*. Due to the nature of the funk guitar style with 4, 3, and 2 string (octave) chords, a single chord can have several names depending on which bass note/root is played. For example, **C** is also an **Am7** if the bass/root is A. In this case, the **C** is the *mother* chord and the **Am7** is the *similar*.



The same chords can often be played on different strings like 4 hi (e,b,g,d), 3 hi (e,b,g) or 3 med hi (b,g,d), or in different inversions with different top notes. When playing funk guitar, you often create variations by splitting chords into several 3-string chords, and then alternate between 3 hi (for a treble timbre) and 3 med hi (for a deep, fat sound) — maybe with different top notes and/or in different fret positions. You can do that instead of playing a full 6-string chord, and you get the advantage of being able to better control your space in the mix. Therefore you can make the guitar sound survive in the mix when normally it would sound vague, or even be erased completely. And by carefully selecting one of the 3 pickups + FX you can always find the one that works best in the mix.

Each of the mother chords (the ones all the similar are based on) consists of between 130 and 150 samples or slices (including releases) that have been carefully extracted from the recordings and then controlled by advanced scripting and programming. The chords were recorded in a particular way to ensure that your guitar tracks sound realistic. During the first sessions, we discovered that when we compared an original guitar track with a track we created using our plug-in, there was still something missing. So one day we had the idea that Søren should be “fooled” into playing - as if it were a normal session on a song. For each articulation that we recorded — like staccato, slides, mutes etc. — we made a musical rhythm scheme that felt funky and natural to play. Søren would then play the exactly same beat at a tempo of 74 on every chord particularly designed for the articulation. We then extracted the pieces that we needed, and formed them into slices.

In this way we succeeded in making it sound authentic and funky, with all the variations and noises.

## 1.4 The Groove Concept

Since we didn’t want to ship the library with MIDI files, we decided to create a mini-sequencer — built into the plug-in! And not just any sequencer but a very intelligent one that we used ourselves to create the grooves. The fact is that since we didn’t record specific grooves or loops, we could use all of the 130-150 sample parts to form a groove — and play each part with any chord!

We have carefully made AI rules so if a groove was made with a hammer-on for example, and the selected chord doesn’t have a hammer-on — another articulation will replace this automatically and the note in the sequencer will be grayed out to show that a replacement was made. All this happens in real-time.



Fig. 1.3 The built-in mini-sequencer is ready to use.

Special Note: Even though hammer-on slice is gray you still may hear a hammer-on — confused? Well this is because this chord has an alternative hammer-on, and this is used by the script instead of the missing normal hammer-on. The same thing can happen with pull-offs or slide-up alt and slide-down alt. If you don't like the “suggested” replacement you can select a different fill for this particular chord that has no hammer-on —you could even try making your own fill — why not?!

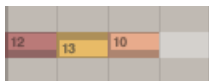


Fig. 1.4 Mini-sequencer with user individual chords.

First is down, next up, then down. Notice the bold line. Furthermore, up and down strokes are made automatically when you insert notes in the sequencer so unless you want a special style — you don't have to worry about this.

## 1.5 Playing with 2 Fingers

As promised, it should be possible to create completely realistic rhythm tracks using just 2 fingers. How is that possible? Well since this is just an introduction, I will make it brief as it will be explained in detail later in the manual. The most simple approach is to select a factory Combi that contains both a set of 36 chords and a set of 3 main grooves (4 bars each) + 18 fill grooves (1-2 bars each). Then choose one of the 50 FX Suites and set swing and humanize if you want that. Now switch on the MAPPING tab on the main page and play chords with the left finger.

You will see the chords mapped — they are even color-coded to denote major, minor, dominant etc. The dynamics (displayed in the top right corner) of the groove are controlled by the chord key-switch velocity. This will decide which samples are used — it will not just adjust volume. You can even tap on the same chord to make it heighten or lower dynamics at any time within a beat.

With your right finger you control the grooves. The C3, C4, C5 hold the main grooves. These will play until you press another main groove. However, the 33 fill grooves can interrupt the main groove as long as they are held for a minimum of a quarter of a beat. After this, the main groove takes over — and continues from the point it would have played to if not interrupted. So this intelligent system allows you the following: Play main groove C3 at bar 1, then just before beat 4, bar 2, play E3 fill groove and release it just before the end of bar 2. Now C3 will return on the start of bar 3 as if it had been playing in the background the whole time, just waiting for its chance to return.

If you want to make your own chord presets and grooves, you can either modify the factory presets or build everything from scratch — it's your choice, but whatever you do it is quite easy and fun. And if you make something wild, you can exchange Combis with friends over the internet using the export/import function.

## 1.6 The Guitarist: Søren Reiff



Fig. 1.5 Søren Reiff ready to record what turned out to be the hardest job he has ever had.

Søren Reiff was Musical Director on Danish National television for acts such as David Sanborn, Chaka Khan, and Mark King/Level 42. He has played with Robert Palmer, Randy Crawford, Paul Young, Thoots Thielemanns, Curtis Stigers, Bonnie Tyler, Eric Marienthal, Rick Braun, Tracy Silverman, Los Lobotomys, and David Garfield. He has made numerous recordings, amongst them projects with Mike Stern, Michael Brecker, Tower of Power, Michael Ruff, Juju, as well as other artists from the UK, Scandinavia, Japan, India, and Mexico. In 2010, Reiff released the album "Miss You" - featuring David Garfield (keys), Will Lee (bass), Steve Ferrone (drums), John Pena (bass), Ricky Lawson (drums), Michito Sanchez (percussion), and Veronica Mortensen (vocals). In 2003 he released the album "Reiff jr - Funky Flavas" featuring Mike Stern and Michael Ruff amongst others.

Reiff has written 4 instructional guitar books "Reiffs riffs" (2004), "Reiffs rytmer" (2005), "Reiffs riffs II" (2008), "Reiffs rytmer II" (2011), as well as the book "Gode Råd er guld værd" (2008) detailing the life of a professional musician. In 1998 Reiff was included in

the "International Who's Who In Music". He has worked as guitarist in a TV house-band, appearing in around 200 shows of "Meyerheim & Co." (1991-94). He also played in the house-bands for the TV shows "Don't forget your toothbrush", Denmark (1995) and "Safari", Denmark (1996). He was the Musical Director of the house-band on the TV shows "It's Saturday Night", Denmark (1997) and "The Big Class Reunion" (1998-99).

## 2 Basic Navigation



Fig. 2.1 The five main areas of control with "Combi" selected.

The interface has five main areas of control. Upon opening the instrument, you will notice the five tabs at the bottom. These allow you to navigate the five control areas.

- On the [Combi tab](#) you can see an overview of which chords/grooves are mapped to which keys. Here you can save and load combination presets. These presets include chords, grooves and effect parameters (the settings on the first four tabs).
- With the [Chords](#) tab you can associate keys in the lower range of your keyboard with chords. The chord key-mapping can be saved as a preset and there are factory presets that you can load.
- With the [Grooves](#) tab you can associate keys in the upper range of your keyboard with grooves. You can also edit grooves or add new ones. The groove key-mapping can be saved as a preset and there are factory presets that you can load.
- The [FX tab](#) gives you access to a number of effect parameters, e.g. EQ, Compressor etc.
- Finally, the [Settings tab](#) features some additional settings.
- The next sections of the manual will explain each tab in detail.

## 3 Combi Tab

### 3.1 Introduction



Fig. 3.1 User interface of Scarbee Funk Guitarist.

In the top-left corner, you see the currently active chord and in the top-right corner, the name of the currently active groove.

In the middle the name of the Current Combi Preset is displayed. This preset contains information about how chords and grooves are mapped to the keyboard as well as some other settings. The **KEY** setting lets you transpose all chords up or down by any given number of semitones.



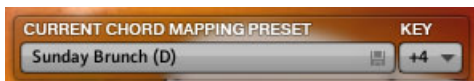


Fig. 3.2 Closer look at the Current Chord Mapping Preset.

**!** If you map a new chord to a chord preset AFTER transposing it, and then you transpose it back again,, it is not guaranteed that the chords will have their original fret position and inversion.

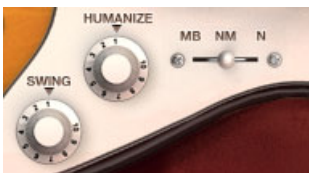


Fig. 3.3 Adjustments for rhythm and timing.

With the **SWING** knob you can gradually change the rhythm between straight and shuffle, and by turning the **HUMANIZE** knob, you can make the timing of the guitar a bit 'sloppy', in order to create a more human touch. However, thanks to the way that the samples have been cut, there is already some human feeling in the timing, so there may be no need to exaggerate the effect.

Next to the two knobs, you'll find a pickup selector where you can select between middle-bridge (**MB**), neck-bridge (**NB**), and neck (**N**) pickups. Please note that switching the pickup will cause new samples to load. Thanks to the new Kontakt background loading feature, this happens in the background and you can continue to work. While the samples are being loaded there will be some extra strain on the computer, so further performance depends on your hardware. Please note that you may experience some temporary hiccups if you start the playback before the loading is complete.

## 3.2 Key Mapping

► Click on the **MAPPING** button to display a mapping overview.

To the left you see which chords are mapped to which keys. To the right you see which grooves are mapped to which keys.



Fig. 3.4 Overview on the mapping of chords and grooves.

At the bottom-right of each octave of mapping keys you will see the name of the lowest C, including the octave number. In this way you know which octave you are looking at. Use the up and down arrows to shift octave. When you press a key on your keyboard the corresponding octave is automatically scrolled into view.

The little color marker to the left of each mapped chord shows the chord type — whether it's a major, minor, dominant or other type of chord.

### 3.3 How to Use the Instrument

This is how you use the instrument:

1. To start playback, double-click a chord with your mouse or press the corresponding key on your MIDI keyboard (the higher the velocity the harder the dynamic will be).
2. To switch to a different chord or groove, click on a chord (keys to the left) or groove (keys to the right) or press the corresponding trigger key on your MIDI keyboard.
3. Stop playback by pressing the B2 key-switch on your MIDI keyboard (the key just to the left of the middle C).



If you do not have a MIDI keyboard connected, you can instead also use the virtual keyboard in Kontakt. Activate the [Keyb](#) button in the toolbar to display the keyboard at the bottom of the window. The B2 stop key-switch has a red color. Click on it if you want to stop playback. The chord trigger keys are colored orange and the groove keys are colored green/blue.

## 3.4 More About Grooves

You may have noticed that the grooves mapped to C keys are highlighted. Grooves mapped to C3, C4, C5, or C6 are **main grooves**. The grooves mapped to other keys are **fill grooves**. The difference lies in how they are triggered:

- A fill groove is active for as long as the key that triggered it is held. When the trigger key is released the last played main groove is automatically resumed.
- A main groove remains active also after its trigger key has been released.
- In other words, you can view the main groove as a kind of default groove that may at any time be temporarily interrupted by a sequence of one or more fills, only to be resumed when the last fill key-switch is released. So basically, the fills are “mixed” in and out of the main grooves but without any fading of course!



If no main groove has been played since the playback was started, releasing a fill will not cause any change. i.e. the fill will continue to play if no main groove to default to has been established.

## 3.5 Key Sets



Fig. 3.5 You can use up to three Key Sets.

As described earlier, chords and grooves may be mapped to several different octaves. But what if you run out of keys? Not to worry. The **KEY SET** to the right of the mapping keys can be set to either A, B, or C, and for each set you can set up a separate mapping. Initially you do not need to worry about this, but if you run out of keys, or want to vary chords between verse and chorus and still keep the trigger keys near the middle C, then this feature can come in handy. In addition to clicking on a **KEY SET** in the user-interface, you can control it by moving your modulation wheel.

You can think of it as having access to three different keyboards, thus giving you three times the number of mapping keys. However, instead of having to physically switch between them, you use your single keyboard and turn the mod-wheel to select the current one.

If you do not have a modulation wheel on your keyboard you can instead use the modulation wheel on the virtual keyboard in Kontakt. Activate the **Keyb** button in the toolbar to display the keyboard. You will find the virtual modulation wheel at the bottom-left of the window under the caption **MOD**.

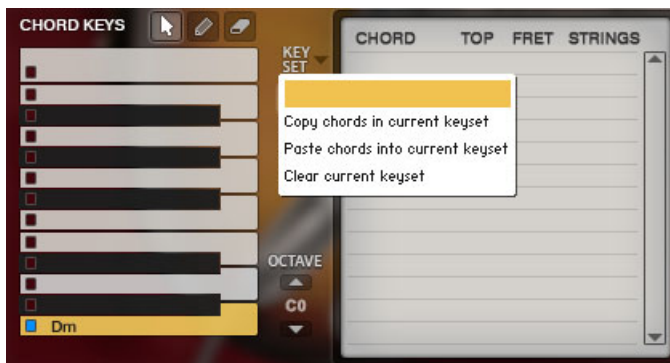


Fig. 3.6 Function to copy and paste chords.

A clever little detail is the almost hidden menu to the right of the Chord MAP **KEY SET** (a little triangle) on picture above. Here you can perform copying and pasting of chords. For example, you can load a new chord preset, transpose it 2 semitones up, and copy it. Load another key set, choose **KEY SET B** and then paste it into that. Now you have 2 **KEY SETS** with different chords.

► This menu is NOT available for Groove **KEY SET**.

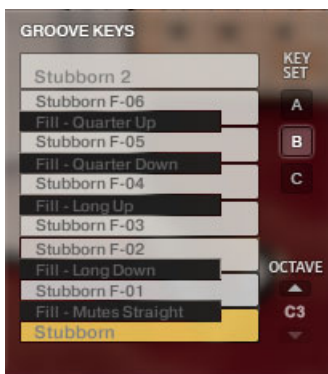


Fig. 3.7 Adjust individual grooves for each Key Set.

When you switch to **KEY SET B** or **C** you automatically have the grooves from **KEY SET A** available. These grooves are now displayed with a gray color to indicate that they are used as fallbacks, in case you don't map anything to a key in the current key set. As soon as you map another groove to **KEY SET B** or **C**, these single keys will be displayed as normal, like in the picture below.

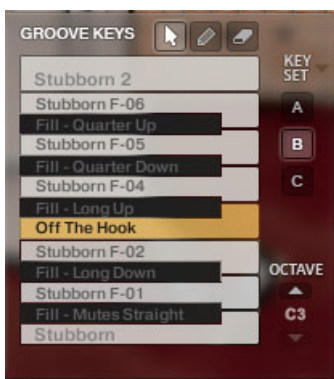


Fig. 3.8 Grooves from one Key Set appear grayed out when another Key Set is selected.

- Only the groove mapping keys use fallbacks in this way.

## 3.6 Combi Presets

A Combi preset contains data about the chord and groove mapping, the contents of the mapped grooves, and the swing and humanize settings on the Combi tab. Basically, this is all the data on the first four tabs except for the guitar pickup setting.

- Press the **BROWSE** button to show a list of Combi presets.

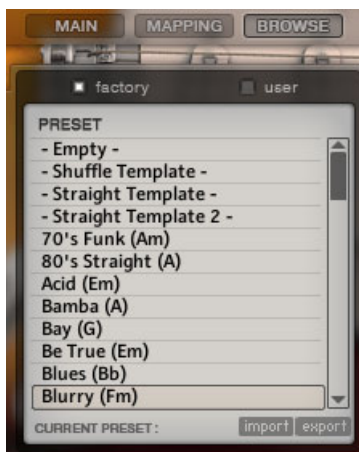


Fig. 3.9 By clicking on BROWSE, this window with the Presets appears.

- Click on a Combi preset in the list to load it.  
→ Note how the names of the mapped chords and grooves change.
- The import and export buttons at the bottom can be used to open and save the current Combi preset to a file on your hard drive.



The size of an exported Combi preset is just 128 kB, so these files can be easily shared with other people over the internet. Such sharing is something that we encourage and have tried our best to enable and make easy.

## 3.7 Adding Combi Presets

In the middle of the upper part of the user-interface you will see the name of the Current Combi Preset.



Fig. 3.10 The currently selected preset is always displayed



Fig. 3.11 Easily add new presets or overwrite existing ones.

In order to add a new preset to the list, press the button with the disc image to the right of the preset name. You are now presented with a dialog box where you may edit the name of the preset and save it. If you give the preset the same name as an existing preset, you can overwrite the existing preset by pressing the [Overwrite](#) button at the bottom. If the name you entered is new, you will instead be given the option to click the [Add New](#) button. This will add the current preset as a new preset under the name you have given it. Press [Cancel](#) if you want to return to the main page without making any changes.



If you hold the [CTRL] key whilst clicking on the arrow keys or backspace key, instead of shifting just one space, the text cursor will jump to the beginning, end, or in the case of backspace, delete all the previous text. Also note that the text is automatically capitalized by the script as you type, so there is no need to worry about switching between upper- and lower-case letters.



## 3.8 Deleting Combi Presets



Fig. 3.12 Delete presets you don't need anymore to keep your list organized.

When you move the mouse cursor on top of the Combi preset list you will see a little **X** marker at the right of the row over which the mouse cursor is placed. Click the **X** button to delete the preset on that row. Please note that you cannot undo a deletion so make sure that you are certain before deleting a preset. You will, however, be given a confirmation screen.

## 3.9 Where is Data Stored?

On the Combi tab you access presets by clicking on the **BROWSE** button and, as we will see later on the other tabs, you access presets by clicking on a sub-tab called **PRESET**. The contents of the preset list is stored at a certain place on your computer and not inside a specific song arrangement. This means that every instance of the Funky Guitar instrument that you load will have access to the same list of presets. This is only true for the contents of the preset-list box — all other data is specific to your current song arrangement.

When you add a new preset, overwrite a preset, or delete a preset, that change does not only affect your current song arrangement (or NKI file if you are running Kontakt in Stand-alone mode). If you were to load an old or a new instance of the instrument, the change to the preset list would be reflected there too.

As soon as you load a preset, the script however creates a *copy* of it which becomes your working copy. It's probably easiest to explain with an example. Let's say that you load a preset called **Funkalicious**. Once you have loaded it you are working on a local copy of it.

This means that if you, for example, change the **SWING** setting, modify the chord mapping, the groove mapping, or the rhythm of a groove, then these changes will only affect your current song. If you were to start a new song and load the **Funkalicious** preset, you would not see any change. In case you think the changes you made to the preset could be useful in future songs, you can however, save the changes back by clicking on the save button at the top/center of the user-interface, and then click the Overwrite button to replace the earlier preset with the one currently loaded containing your changes.

Let's revise this: the contents of the preset list-box are common to all songs and are changed when you add new presets, overwrite old presets or delete presets.

The currently loaded preset is however, a working copy whose data is specific to your current song (changing it will not affect any other song).

What was stated about presets above also applies to the list-box of grooves that you will see later with the Grooves tab.

## 4 Chords Tab

► Click on the *Chords tab* at the bottom of the user-interface of the instrument in order to access and modify the chord mapping and chord mapping presets.



Fig. 4.1 The five main areas of control with "Chords" selected.

### 4.1 Fretboard Display

In the top-left corner you see the same little chord information box as on the Combi tab — only on the Chords tab it is slightly expanded and shows a field called **EXCL.** at the bottom. This field is a list of zero or more notes that are not part of the chord. For example, the image below shows a C69 chord with excluded notes 1, 5. This means that the first and fifth note in the scale are not included among the played notes.



Fig. 4.2 The Fretboard display provides useful information.

The little number (**12**) below the fretboard is the fret number. The higher the number the closer the chord is to the bridge. So fret 1 is the first fret from the head of the guitar (guess where we got that now...).

The **TOP** field tells you which note in the scale of the chord key is the top note of the chord. In the case shown in the image above, the #9th note in the scale represents the top note. The top note is important since it is that note that we humans most strongly perceive when we listen to a chord. The **EXCL.** shows which note in the scale is excluded — in this case it is the root (1).

Since the chords normally use only three or four of the six strings, one single recording of a chord can normally be described in several different ways. For example, one chord sample may have up to 12 different names. More about that later...

## 4.2 Using Chord Mapping Presets

Just like on the Combi tab there is a list in a box at the center of the page. At the top of this list-box you see two sub-tabs: **PRESET** and **MAP**. On the **PRESET** tab you are presented with a list of chord mapping presets. On the **MAP** tab you can edit the chord mapping of the currently selected chord preset.



Fig. 4.3 Choose between the Preset and the Map tab.

Let's start with the **PRESET** tab.

► Click on the **PRESET** tab to show the preset view.

To the left you see the same chord mapping information as on the Combi tab. To the right you can select which chord mapping presets you want to see in the list-box — **factory** presets or **user-made** presets.

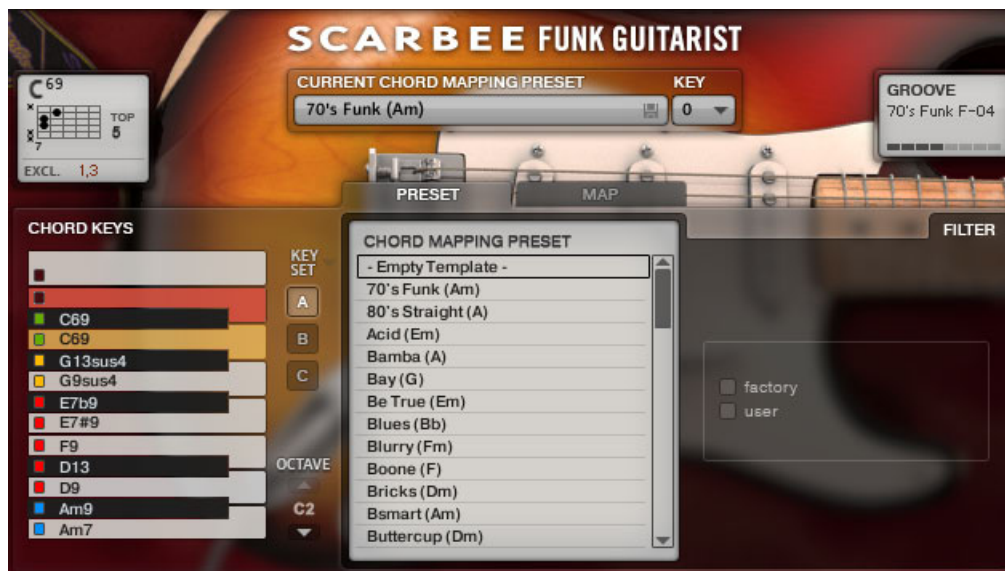


Fig. 4.4 Choose from the different Chord Mapping Presets.

► Click on a Chord Mapping Preset in the list-box to load it.

→ Please notice how the chord names on the mapping keys to the left change, and how Kontakt starts to load the new samples used in the preset.

After you have loaded a new Chord Mapping Preset you can use it, as explained in the previous section:

1. Double-click with the mouse on a mapping key to the left, or press the corresponding key on your keyboard to start playback.
2. Click on or press other keys to change chord.
3. Press the B2 key-switch (just to the left of the middle C) to stop playback.

## 4.3 Adding Chord Mapping Presets

At the top of the user-interface you see the name of the chord preset along with a KEY menu that you can use to transpose the chords up or down by any given number of semi-tones.

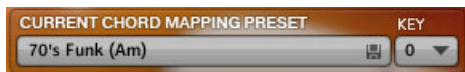


Fig. 4.5 The currently selected Chord Mapping Preset can always be seen.

► Click on the Save button with the small disc icon to the right of the name to save the chord preset.

You are now presented with a save dialog box that works just like the one we have previously seen for the Combi presets.

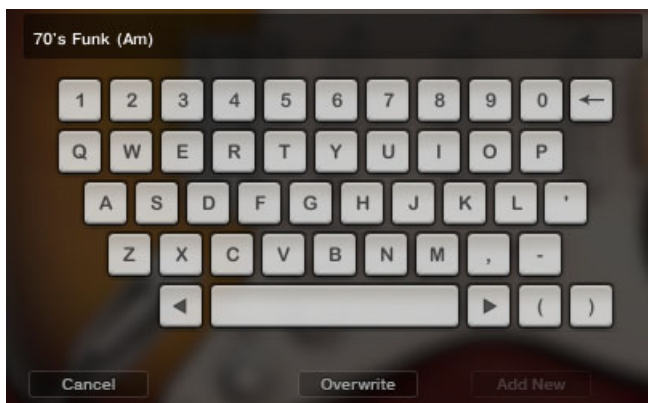


Fig. 4.6 Easily add new presets or overwrite existing ones.

If the Chord preset name is the same as that for an existing Chord preset you may choose to [Overwrite](#) the existing preset. If you enter a name that is not in use you instead get the option to click on the [Add New](#) button where you can add a new chord preset with the given name to the list of presets.

## 4.4 Deleting Chord Mapping Presets

The deletion of a [Chord Mapping Preset](#) is also carried out in a similar fashion to that of Combi presets. When you move the mouse cursor over a row in the preset list-box, an [X](#) button will appear to the right. Click this [X](#) button in order to permanently delete the corresponding Chord preset.



Fig. 4.7 Delete unwanted presets to keep your list organized.

## 4.5 Introduction to Chord Mapping

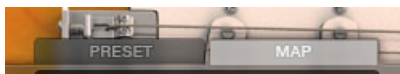


Fig. 4.8 Choose between the Preset and the Map tab.

► Click on the **MAP** tab button to show the view where you can map chords of your own choice.

You will notice three changes to the user-interface:

- To the left three tool buttons — a pointer, a pen and an eraser — appear above the mapping keys. These are used to select, add, and remove, chord mappings.



Fig. 4.9 These are the three tool buttons.

- To the right there is a large number of chord filters. These are used as search criteria when the list-box with the chords is populated.
- The list-box changes from showing presets to showing individual chords. The list of chords is empty until one or more of the chord filters have been selected. For each chord, the script displays **CHORD** (the chord name), **TOP** (the scale note that is the top note of the chord), **FRET** (the fret number of the chord), and **STRINGS** (how many and which strings — high or medium high — are used to play the chord).
- Let's search for a chord, say **Dm**.



► Click on the **D** button among the **KEY** filters followed by the **minor** button among the chord **TYPE** filters.

As you see, the list-box is now populated with all **Dm** chords that are available. Single-clicking on a chord displays it in the chord-box where you can see the fret board display and also what notes are excluded from the chord.

► Double-click a chord to load the sample and hear how it sounds.

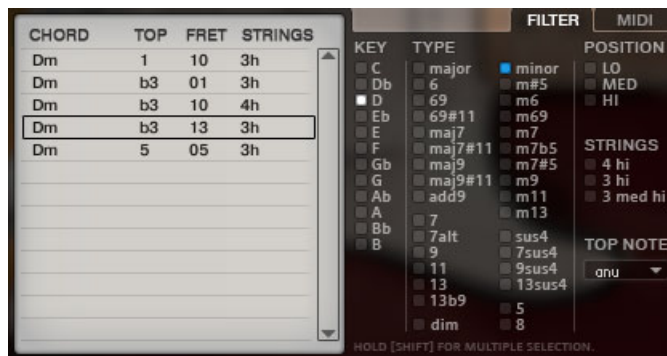


Fig. 4.10 Here you get detailed information about each chord.

You can combine multiple chord filters by [SHIFT]+clicking on them. This way you could, for example, filter out all chords that are Dm or Dm9.

You can also narrow the search down further. Let's set (fret) **POSITION** to **LO** (low), **STRINGS** to 3 hi (3 highest strings), and **TOP NOTE** to b3 (the third in the minor scale). Now we get this result:

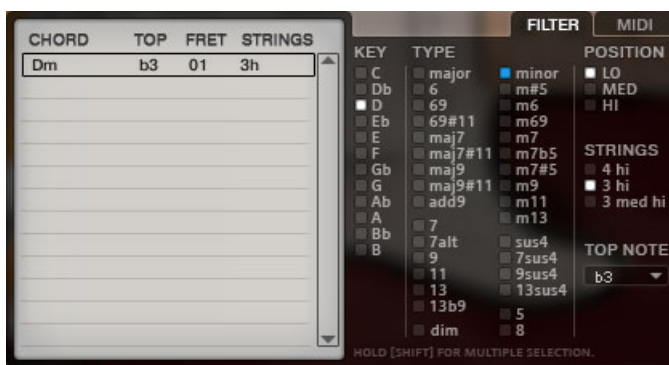


Fig. 4.11 Modifications can be made in the Filter tab.

- Now another cool trick is to see if this chord has a similar — meaning: can we find the same finger setting in the same fret — but with another bass note?
- If you [CMD]+click (Mac) and [Ctrl]+click (PC) on the Bb key filter button you suddenly get a Bbmaj7. So this is same chord as Dm — but with another bass note. If you use the playalong bass you will now hear the chord in a different way — pretty cool huh? This is also useful for making songs where the bass wanders while the chord stays the same. There is a further smart trick we will see in a moment...

## 4.6 Mapping/Unmapping Chords

To *map* a chord to a key:

1. Activate some chord filters and select the chord you want by clicking on it in the chord list-box. Please note that as you select it, the active toolbar button on top of the mapping keys to the left will automatically switch to the pen button.
2. Now click on the mapping key in the left part of the user-interface to which you want to map your chord.
3. To *unmap* a chord:
4. Click on the eraser tool button (the rightmost one).
5. Click on the mapping key that you want to unmap in the left part of the user-interface. Activate the select toolbar button (the leftmost one) if you once again want to be able to select chords by clicking on them. When the select button is active, clicking on a mapping key does not change the mapping.

## 4.7 Mapping Chords by Recording MIDI

If you produce someone else's music, it is not always certain that you know what chords are in the song. Imagine you have a MIDI track playing a synth string and you come up with the idea that you want to replace it with our Scarbee Funk Guitarist (well of course you want that, right?). To do this, click on the [MIDI](#) tab on the Chord Mapping page and press [REC.](#) Now play the MIDI track and hit [REC.](#) again to stop. You can also play it manually of course — and you even get an electric piano reference sound so you can hear what you are doing — doesn't get much better, huh?

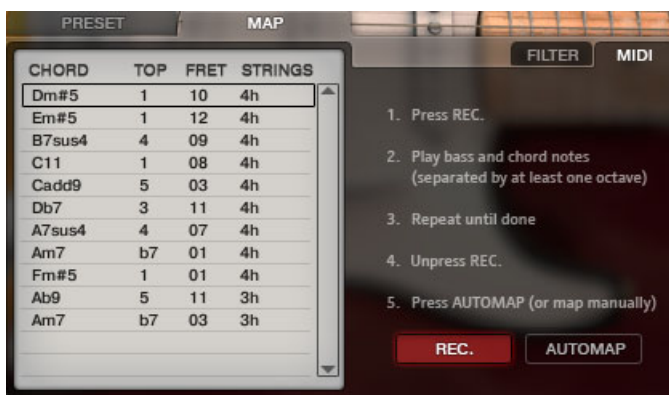


Fig. 4.12 Switch to MIDI on the Chord Mapping page.

Well maybe it does — simply press [AUTOMAP](#) and all chords are mapped so the last recorded one is mapped to the last chord mapping key.



Fig. 4.13 Easily enhance your recorded chords.

You can now enhance your work by following the next steps. Note that it supports advanced chords too.

## 4.8 Finding Alternatives to a Chord

If a chord is mapped to a key and you want to change, for example, the inversion or fret position, you can [ALT]+click on one of the mapping keys in the left part of the user-interface. The script will then automatically search for chords with the same name. The original chord will be selected automatically.

## 4.9 Finding Identical Chords with a Different Root Key

If a chord is mapped to a key and you want to find any identical chord — but with another root key, you can [CMD]+click(Mac) and [Ctrl]+click (PC) on one of the mapping keys in the left part of the user-interface. The script will then automatically search for similar chords with other roots. The original chord will be selected automatically.

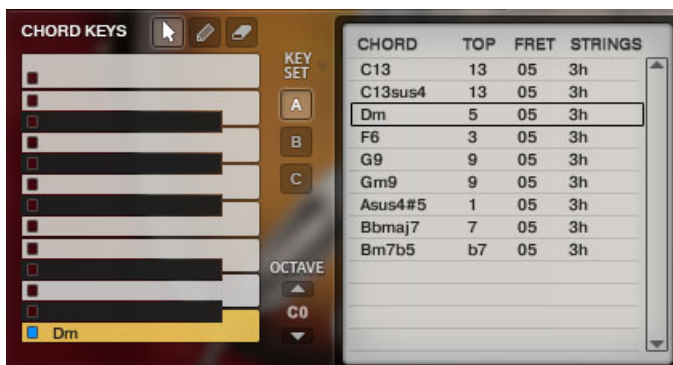


Fig. 4.14 You can search for identical chords with another root key.

Now you get a C13, F6, G9, Gm9 etc. The original chord is auto selected in the list.

## 4.10 Swap Mapped Chords

In case you want to change the order of the chords, you can select one chord and then [ALT]+[CMD]+click(Mac) and [Ctrl]+[ALT]+click (PC) on one of the other mapping keys. These two chords will now swap places. This also works from one [KEY SET](#) to another.

## 4.11 Some Tips to Create Cooler Chord Presets...

When you make a chord preset it may be good to think like a guitar player.

- In general, you want to use only 4 string chords, f e.g. in a verse. You can sometimes blend in deeper 3 med hi strings — this way the fatness of the chord sequence is not suddenly compromised.
- For a chorus, you can blend the two 3 strings chords 3 hi and 3 med hi + octaves. This makes sense to make the chorus a little thinner, as generally the mix is often denser than the verses. So unless you want guitar part to be turned down or erased — you'd better learn your place!
- Have 1-3 variations of same chord mapped on different octaves so you can change voicing — it sounds cool and adds some variation to the timbre.

## 5 Grooves Tab

► Click on the [Grooves](#) tab at the bottom of the user-interface of the instrument in order to access and modify the groove mapping, groove mapping presets, and to edit and design grooves yourself.



Fig. 5.1 The five main areas of control with "Grooves" selected.

### 5.1 Groove Mapping Presets

The view is divided into two sub-tabs — [PRESET](#) and [MAP](#) — just like on the [Chords](#) tab. On the [PRESET](#) tab you are presented with a list of groove mapping presets. On the [MAP](#) tab you can edit the groove mapping and also design your own grooves.



Fig. 5.2 Choose between the Preset and the Map tab.

Let's start with the [PRESET](#) tab.

► Click on the [PRESET](#) tab to show the preset view.

To the right you see the same groove mapping information as on the [Combi](#) tab. On the opposite side you can select which groove mapping presets you want to see in the list-box — [factory](#) or [user](#) presets.

The [PRESET](#) sub-tab works in the same way as the same sub-tab on the [Chords](#) tab, only in this case it controls the mapping of grooves.

You load a groove mapping preset by clicking on it in the list-box.

You can save changes to a preset, or add a new one, by clicking on the save button next to the [CURRENT GROOVE MAPPING PRESET](#) name, displayed at the top of the user interface. See section 2.3.3 for more information about the save dialog box.

Just like for chord presets, you delete a groove preset by clicking on the [X](#) button that appears to the right in the list-box when you move the mouse cursor over the row.

## 5.2 Mapping/Unmapping Grooves

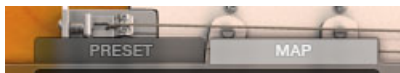


Fig. 5.3 The Map tab is selected here.

► Click on the **MAP** tab button to show the view where you can map grooves of your own choice.

On the left side next to the list you can select which grooves you want to see in the list-box — **factory**, **user**, or **favorites**. The **favorites** are your personal selection of grooves. You can add or remove a groove from favorites by [CMD]+click (Mac) and [Ctrl]+click (PC) on a groove in the list. If added to favorites, an asterisk is now added to the name like: Buttercup\*.

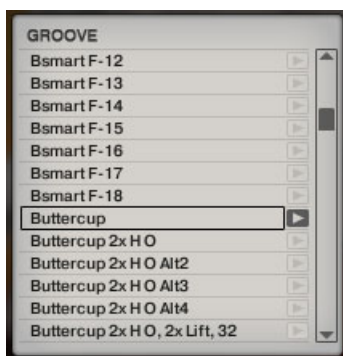


Fig. 5.4 Pre-Listening can save a lot of time.

► Click on the **PRE-LISTEN ARROW** at the right side of a groove in the list-box to hear the groove play. This is a fast way of finding the grooves you are looking for.



For more precise scrolling hold down [SHIFT].

Mapping and unmapping grooves work just like it does for chords. The only difference is that you have the mapping keys to the right and groove filters to the left.

To map a groove to a key:



1. Select the groove you want by clicking on it in the **GROOVE** list-box. Please note that as you select it, the active toolbar button on top of the mapping keys to the right will automatically switch to the pen button.
2. Now click on the mapping key in the left part of the user interface, to which the groove you selected should be mapped.
3. To unmap a groove:
4. Click on the eraser tool button (the rightmost one).
5. Click on the mapping key that you want to unmap in the right part of the user interface.

Please note that when you unmap a groove, any changes made to the groove will be lost. Activate the select toolbar button (the leftmost one) if you once again want to be able to select grooves by clicking on them. When the select button is active, clicking on a mapping key does not change the mapping.

## 5.3 Changing the Name of a Mapped Groove

In order to edit a groove you first need to map it to a key. If you want to create a new groove, you start by mapping the factory groove called — **Empty Template** — to some key and you use that as a template. In this case you may want to give a more memorable name to your mapped groove.

► Change the name of the groove by double-clicking on the mapping key.

When you double-click on the key that the groove is mapped to, you will be presented with a dialog box very similar to that used for saving chord and groove presets — only in this case it is simply used to modify the name of the groove you mapped. Click the **Ok** button to change the name, and **Cancel** in case you change your mind and don't want to make any change.

Note: this only works in **MAP** mode.

## 5.4 Editing Grooves

### 5.4.1 Overview

► To edit the currently active groove, click on the small **edit** button above and to the right of the groove information box.

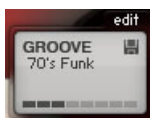


Fig. 5.5 See the edit button in the upper right corner.

This will change the view and bring up the groove editor which looks like this:



Fig. 5.6 User-interface of the groove editor.

The groove editor is in many ways similar to the traditional piano scroll in your sequencer. Let's look at it piece-by-piece. A groove can be between 1-4 bars long and you select which bar you are currently looking at by clicking on one of the four **BAR** buttons at the top. The **GRID DIVISION** buttons to the left work like the grid quantize setting in many sequencers, i.e. it determines if the length of newly entered notes should be a multiple of an 1/8th, 1/16th, 1/32nd, 1/8th triplet, or 1/16th triplet respectively. To the right, you see the name of the groove that you are editing, as well as a **close** button that you can press to return to the normal view again.



Fig. 5.7 The header of the groove editor.

Under that, you see a display of the four beats in the current bar. Instead of having the notes on the vertical axis, there is one row for each articulation. A note symbol in the grid represents playing the articulation on that line, at the time when the note starts. In the groove below, the first beat consists of a slide-up during the first half and then a quarter note articulation followed by a smooth articulation.

**!** A quarter articulation does not necessarily need to be a quarter long. It's called a "quarter" since the sample works well for notes the length of a quarter, but it can also be shorter and is the one to use for 1/8 notes or extra 1/16 notes.

At the bottom of the groove editor you find tools with which you can modify the groove:

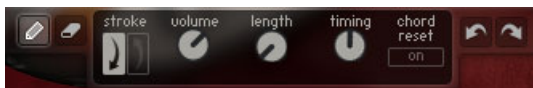


Fig. 5.8 The footer of the groove editor.

### 5.4.2 Adding Notes

When the pen button is active you can draw a note in the grid. This is done like this:

1. If the articulation of your choice is not already highlighted in the editor, click once anywhere on that row.
2. Now as you move the mouse cursor over this selected line you will see a pen cursor. Click somewhere to add an articulation at that point.

Please note that if you add an articulation at, let's say, the start of beat 2 and another articulation already starts at that time, then the previous note will automatically be replaced by the new one that you add.

### 5.4.3 Erasing Notes

Click the eraser button (the second button from the left) to activate erase mode. While this mode is active you can click on a note in the grid to remove it. Click on the pen symbol again to return to the standard mode.

### 5.4.4 Selecting a Note

To select a note, ensure that the pen button is active and then click on the note in the grid. The selected note is highlighted to let you know which one it is. Selection of multiple notes at the same time is not supported. When a note is added it is also automatically selected.

Notice that you must click on the left part to avoid creating a new note.

### 5.4.5 Editing Note Parameters

The other tools at the bottom let you enter settings for the currently selected note. You can control whether the chord will be played with a down stroke or an up stroke by selecting either the down-arrow or the up-arrow. The knobs let you control:

- **volume** — a note-specific volume adjustment (in dB)
- **length** — a percentage of the maximum length supported for the articulation of the selected note. Please note that if your note is two 1/16th long and the next note comes after one 1/16th, then the effective length will be just one 1/16th in any case since one articulation cannot overlap another.
- **timing** — a small timing adjustment.
- **chord reset** — when on and the current chord is the result of a hammer-on, pull-off, or other articulation that automatically changes the current chord, the chord is restored to the original.

An example may help to explain the chord reset button. Let's say that you have activated the chord Am7 and you start playing a groove that contains a hammer-on.



Fig. 5.9 The chord reset function.

The hammer-on will cause the active chord to automatically change to A7sus4 — the target of the hammer-on transition.

Special Note: when a chord is mapped, the script will automatically load all the samples corresponding to the possible targets chords too, so there is no need to explicitly map these chords.

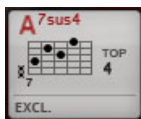


Fig. 5.10 The color changes from black to red.

Note that color change to red when target chord is played.

This A7sus4 chord will remain active until either the groove reaches the end and loops around to the beginning, or a note for which **chord reset** has been set to on is found. In other words, you set **chord reset** to turn on for a note if you wish to return to the original chord (Am7 in this example) before playing the articulation of that note.



If after the automatic change to G9, upon the hammer-on you were to trigger another chord — let's say Cm — the chord reset parameter would have no effect even if it's turned on with later groove notes. The chord is only changed back to the original if the currently active chord was set automatically, and not by the user, which would not be the case with the Cm chord.

On each note in the grid you see a slice number. Each sample is normally divided (“sliced”) into different parts and the slice number controls which part to play. For example, a staccato down sample includes 9 different staccato hits in different variations and dynamics. You change a number by holding the mouse button on it and dragging up and down. As a rule of thumb, low numbers correspond to lower (softer) dynamics and high numbers correspond to higher (harder) dynamics.

The two last buttons are undo and redo buttons (undo is the left arrow, and redo is the right arrow). Please note that you may switch groove while being inside the groove editor by pressing a groove trigger key on your keyboard. However, if you switch groove you will lose the ability to undo changes made to the earlier groove.

## 5.4.6 Advanced — Other Editing Aids

This section is for advanced groove editing so if you are just trying to familiarize yourself with the instrument, you may want to skip over this for now and return here later.

In addition to tool buttons and knobs below the grid of notes, there is a drop-down menu for each beat in the currently shown bar.

► Click on the beat in the time line to show this drop-down menu.

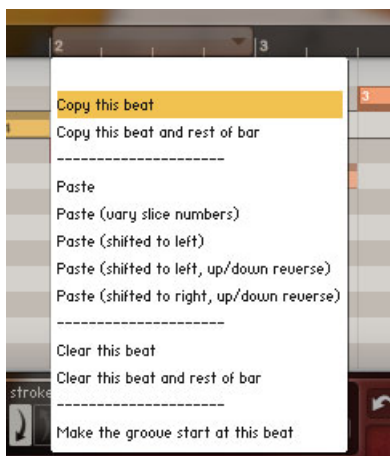


Fig. 5.11 Choose from various options.

You can choose to copy a single beat, or the beat you clicked on, or the remaining beats in the bar, and put them on the clipboard. After having copied one or more beats, you can show the drop-down for another beat (also in another bar if you want) and choose to paste the contents of the clipboard there.

There are several different options for exactly how to paste:

- **Paste** — pastes the copied notes as they are.
- **Paste (vary slice numbers)** — inserts the notes as if you had been manually inserted them one by one again. This means that the script assigns a slice number according to its normal rules instead of using the exact slice number of the notes that you copied. This can be useful if you want some variation, since different slice numbers means that different samples are used. The exceptions are the mutes. When you copy, the variation is made based on the dynamics of the copied material and the values are modified +1-2 or -1-2.
- So a copied mute with slice 10 can become 8,9,11 or 12. This way the dynamics are kept.
- **Paste (shifted to left, up/down reverse)** — paste the notes one step to the left (according to the current grid division) and reverse the stroke direction.
- **Paste (shifted to right, up/down reverse)** — paste the notes one step to the right (according to the current grid division) and reverse the stroke direction.

Please note that since the note clipboard is emulated by the script you can not, due to technical reasons, copy and paste notes between different instruments. You can however, copy from one groove and paste to another.

In the beat drop-down menu you will also find the options:

- **Clear this beat** — deletes all notes within the beat.
- **Clear this beat and rest of bar** — deletes all notes within the beat and the following beats until the end of the bar.
- **Make the groove start at this beat** — deletes all previous notes (also in other bars) and moves the notes starting at this beat to the beginning of the groove (bar 1 / beat 1).

### 5.4.7 More About the Articulations

- **long** - The names says it all — these are the long ones! There are 3 down-strokes and 3 up-strokes — hard, medium, and soft. Remember, if groove is created with a hard slice then it will automatically become softer (utilising other samples) when played at softer chord velocities. (see chapter below about the **DYNAMIC Levels**).
- **RELEASE behavior:** the release sound comes AFTER the end of slice. This way longs can play down/up uninterrupted by the release. However if you WANT a release — shorten the slice slightly to make room for it — so there is a gap between this and the following note.
- **quarter** - These are a quarter of a bar long. There are 6 down-strokes and 6 up-strokes — 2 x hard, 2 x medium, and 2 x soft. You can use one of these for many purposes: as a quarter note, 1/8 note, 1/8T note, and also as an extra 1/16 note (it sounds good to shorten them a little — see RELEASE notes below). You also use them as an attack note for up-stroke START smooth notes. This is indeed a very important task for the brave quarter! You can also use them as START notes for smooth down — though they also have their own START notes. (see later)

It is also fine if you want a down-up, down-up sequence of 1/8; 1/8T (slower tempo) or Quarter notes as smoothes that are only 16 notes.

- **RELEASE behavior:** (see **long**)
- **smooth** - used ALL the time in funk, pop, and jazz, as well as pretty much any musical style. What makes them special is the fact that these are 1/16 notes up/down strokes but played smoothly. This means that on some strokes not all the strings are hit every time — so the rest of strings are ringing on top of the phrase. If, for example, a 4

string chord is played, sometimes only the 3 or 2 highest strings are hit every time — where as the deepest string is hit less frequently. This gives a funky and dynamic timbre. Here are details for each smooth slice:

- ▶ Important: NONE of the smooth up-strokes can be used as START slices — so if a smooth sequence starts with an up-stroke you must use a proper ATTACK note.
  - ATTACK NOTES are:
    - long
    - quarter
    - slide-up
    - slide-up Alt
    - slide-down Alt
  - hammer-on
    - pull-off
- ▶ Note: Staccato, mutes, and fall CANNOT be used as ATTACK notes, e.g. smooth sequences.
  - Dynamic: smooth HARD (red)
    - 12-Down: Suitable START slice — down-stroke is identical to Quarter down-stroke 5
    - 12-Up: full (all strings hit) hard up-stroke
    - 11-Down: full hard down-stroke
    - 11-Up: full hard up-stroke
    - 10-Down: full hard down-stroke
    - 10-Up: full hard up-stroke
    - 09-Down: full hard down-stroke
    - 09-Up: full hard up-stroke
  - Dynamic: smooth MEDIUM (orange)
    - 08-Down\*: Suitable START slice — hard down-stroke is identical to Quarter down-stroke 4
    - 08-Up: un-accentuated medium up-stroke
    - 07-Down: un-accentuated medium down-stroke
    - 07-Up: un-accentuated medium up-stroke
    - 06-Down\*: full (all strings hit) medium-hard down-stroke
    - 06-Up: un-accentuated medium up-stroke
    - 05-Down: un-accentuated medium down-stroke



- 05-Up: un-accentuated medium up-stroke
- **Dynamic: smooth SOFT (yellow)**
  - 04-Down\*: Suitable START slice — medium-soft down-stroke is identical to Quarter down-stroke 2
  - 04-Up: un-accentuated soft up-stroke
  - 03-Down: un-accentuated soft down-stroke
  - 03-Up: un-accentuated soft up-stroke
  - 02-Down\*: full (all strings hit) medium-soft down-stroke
  - 02-Up: un-accentuated soft up-stroke
  - 01-Down: un-accentuated soft down-stroke
  - 01-Up: un-accentuated soft up-stroke
- **RELEASE behavior: (see long)**
- **staccato** - These are 1/16 note staccato samples. There are 9 down-strokes and 9 up-strokes — 3 x hard, 3 x medium, and 3 x soft. These are NOT suitable as start notes for smoothes or falls as they have a built-in RELEASE sound (see under RELEASE Behavior) and therefore do not make a fluid transition to other articulations. If you want a hard up/down sequence then use smooth 12-09 or quarters/longs
  - **RELEASE behavior:** The staccato RELEASES are built into the slices — meaning that within the slice length there is reserved space for release. This way it always sounds like a short staccato hit. Also we have made clever engine so that the reserved part will grow in percentage the faster the tempo. So in tempo 74 less percentage of slice is reserved for RELEASE than in tempo 120. We discovered early in project that this had great influence on the realism.
- **mute** — these are a major part of funk guitar playing. There are 15 down-strokes and 24 upstrokes - hard, medium and soft.
- **RELEASE behavior:** There are no RELEASES.
- **slide-up** - Imagine rhythm guitar without slides? Doesn't really work, does it? These slides come from 1 fret below and slide whole chord up. There are 9 down-strokes and 9 up-strokes.
- **RELEASE behavior: (see long)**
- **slide-up alt** — In general these type of slides only affect 1 string — typically the highest one. There are 3 slices: hard 1, hard 2, and medium. This articulation works together with counter part **slide-down alt** so you can slide up and down again from the related chord (see chapter about target chords).



Fig. 5.12 Gm is an exception.

- The exceptions are the 3 string chords like Gm where the slide-up alt and slide-down-alt moves the whole chord 2 semi-tones — the same goes for octave chords.
- **RELEASE** behavior: (see **long**)
- **slide-down alt** - In general these type of slides only affect 1 string — typically the highest one. There are 3 slices: hard 1, hard 2 and medium. This articulation works together with counterpart **slide-up alt** so you can slide down and up again from the related chord (see chapter about target chords).
- **RELEASE** behavior: (see **long**)
- **hammer-on** - The hammer-on only affects some of the chord strings — like the highest or the two highest strings (the exceptions are the 3 string chords, like Gm, where the slide-up alt and slide-down-alt moves whole chord 2 semi-tones — see **slide-up alt**). There are 3 slices: hard 1, hard 2, and medium. This articulation works together with counterpart **pull-off** so you can hammer-on and pull-off back again from the related chord (see chapter about target chords). Sometimes a chord can have 2 hammer-ons
- **RELEASE** behavior: (see **long**)
- **pull-off** - The pull-off only affects some of the chord strings — like the highest or the two highest strings (the exceptions are the 3 string chords, like Gm, where the slide-up alt and slide-down-alt moves whole chord 2 semi-tones — see **slide-up alt**). There are 3 slices: hard 1, hard 2, and medium. This articulation works together with counterpart hammer-on so you can pull-off and hammer-on back again from the related chord (see chapter about target chords).
- **RELEASE** behavior: (see **long**)
- **fall** — this is the characteristic slide all way down the fretboard from the chord. There are 2 slices: slow (slice 2) and fast (slice 1).
  - **RELEASE** behavior: There are no RELEASES.
- **NO ATTACK**: The fall is just a tail and requires a proper **ATTACK** (see **smooth**) slice before it. The fast fall (1) should have a 1/16 slice in front of it whereas the slow fall (2) can have either a 1/16 or a 1/8 or 1/8T in front of it.
- **misc** — here we have fret noises and guitar noise (instrument hiss & hum). There is just 1 slice of each but fret-noises will randomize between 12 different fret-noises.

### 5.4.8 The Blue Notes — Aid to do Better Grooves!

If you make a groove yourself you may suddenly see blue notes like in the example below.



Fig. 5.13 There are different colors for the notes on the clipboard.

The problem here is that this sequence will sound very chopped-up and harsh as each staccato has a built-in release. The two ways to make this sound more authentic are shown below:



Fig. 5.14 This shows one possibility.

Solution one is to make a hard smooth sequence that ends with a staccato down.



Fig. 5.15 This shows the second solution.

Second solution is to make a medium smooth sequence — notice that this time it ends with a smooth — and it is shortened. This is to give space for a release in case, for example, a mute comes directly afterwards. This ending is usually a little smoother than using a staccato as an end because the smooth doesn't hit all the strings — but only the top ones. Another example of blue notes is when a wrong START note is used as the first note in a smooth sequence. Then it will have no proper attack.



Fig. 5.16 This blue note has no proper attack.

In this case the blue note should be replaced with a quarter, or with a smooth down 12, 8, or 4.



Fig. 5.17 This blue note has to be replaced.

Here the blue note should be replaced by a proper START note like a quarter up — see below.



Fig. 5.18 See the color of the note changing to red.

Now the attack is right. Notice that I changed the second note to a 9 slice. This is because slice down 8 is a START note and I wanted to make it more smooth by using a non-start slice after the quarter.

Another typical error is that you forget the ATTACK note before the fall — as the fall is just a tail.





Fig. 5.19 Here we have two notes without attack.

There is a fast fall and then a slow fall. Both have no attack.



Fig. 5.20 A proper attack is applied.

Now the falls have proper attacks. Note that the slice now ends a 1/16 later — so you want to cut it.

I used an 1/8 note before the slow fall — but a 1/16 will do fine too.

## 5.5 Dynamics and the Groove Editor

The dynamics (to what degree chord strokes are soft or hard) are controlled by the velocity with which chord trigger keys are hit. If you hit a chord hard the sound will be harder, and if you hit it soft the sound will be softer.

There are 8 **Dynamic Levels** and the factory grooves are all created in level 7 — the second hardest.

This way they can transform into softer levels, or go 1 step up and freak out on the output! Velocity 100 corresponds to dynamic level 0 which is the neutral one.



*You can actually change the dynamics over time by hitting the same chord trigger key on your keyboard several times in a row but each time with different velocity.*

The way this dynamic change is done is by having the script dynamically change the slice numbers to either softer or harder dynamics. For this to work well, the grooves should be designed so that they don't overuse soft dynamics. If there are too many soft dynamics to start out with, it's difficult to later turn to even softer dynamics without sacrificing the ability to change between many different slices in order to increase variation.

In other words: create a groove the way it should sound played very close to hardest dynamic possible!

For this reason, this velocity controlled change of dynamics is deactivated as soon as you enter the groove editor. For as long as the groove editor is open, the slices will be played back as they are (using the slice numbers presented in the editor) and it won't matter whether you hit chord trigger keys hard or soft. As soon as you close the editor the normal behavior is restored.



Please note what is significant is whether the groove editor is open on the Grooves tab. If you have the groove editor open on the Grooves tab and then switch to the Chords tab, it will still be treated as open and the velocity controlled dynamics change will be deactivated until you go back to the Grooves tab and close the groove editor.

## 5.6 Adding a Groove to the Groove List-box

Normally you do not explicitly need to save changes made to the grooves. These changes are automatically preserved as you trigger different grooves.

However, if you have designed a new groove or edited an existing one and want to re-use it in other songs, then you can, similarly to the mapping presets, add your groove to the list-box shown on the [MAP](#) sub-tab on the groove tab.

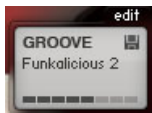


Fig. 5.21 Easily save your own grooves.

► Click the little save button (just below the edit button) in order to save your groove to the list of grooves available in the [MAP](#) mode.

You will be presented with the save dialog where you can click on Add New if you have given the groove a name that not already exist, or the Overwrite button if there is already a groove that goes by the given name (the old groove will then be replaced by your new one).

## 6 FX Tab

### 6.1 Overview

► Click on the [FX](#) tab at the bottom of the user interface of the instrument in order to change sound effect parameters.



Fig. 6.1 "FX" is selected.

The view will look somewhat like this:



Fig. 6.2 Load effect suite presets or create your own by altering them.

At the top you have an [EFFECT SUITE PRESET](#) drop-down menu, and below that, eight different sound effects. Each sound effect has its own preset menu, one or two knobs to control its effect parameters and an [On/Off](#) button at the bottom.



Fig. 6.3 Personalize existing presets by changing the sound effects.

If you want to control a single sound effect you can use the [On/Off](#) button and knobs to change its settings. There are a number of factory presets you can choose from in the drop-down menu.

An [EFFECT SUITE PRESET](#) is a kind of master preset that controls all the sound effects at once, and selecting an item from the menu will cause knob settings that you have made to be lost.

If you make a custom setting it will be saved with the nki — but will disappear on any nki update.

It is NOT possible to SAVE FX presets or suites.

## 7 Settings Tab

### 7.1 Introduction

► Click on the [Settings](#) tab at the bottom of the user interface of the instrument in order to change general instrument settings.

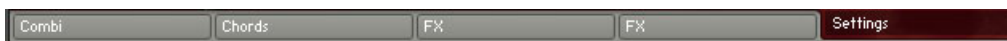


Fig. 7.1 The five main areas of control with "Settings" selected

The settings you make on the Settings tab control the behavior of the instrument.

### 7.2 Bass Settings

When you map and try different chords it is important that you are able to hear the bass/ root note of the chord as this is often missing in the funk guitar style. This way you can use Scarbee Funk Guitarist as a great composer tool too, so that in any song you can have a bass play along as well. In the user interface you can set the following:

- [LEVEL](#) — the bass volume
- [MODEL](#) — the type of bass samples
- [TIMING](#) — how often to play bass notes

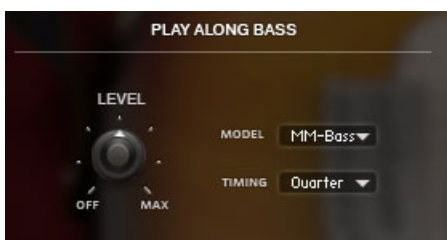


Fig. 7.2 Change the sound of the bass as desired.

Please note that the [PLAY ALONG BASS](#) feature is meant as an aid, but not really something that you would have turned on as part of a final production.

## 7.3 Sample and Timing Settings

Below you find these three settings:

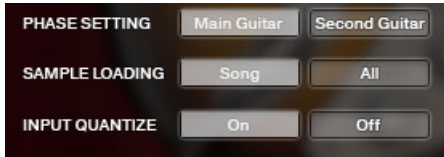


Fig. 7.3 Easily change the sample and timing settings.

- **PHASE SETTING** — Main Guitar is the default setting. If you want a double-guitar setup and want to avoid phasing, you can activate the Second Guitar for one of the instruments. This will enable a slice remapping scheme that makes the two instruments use different samples.
- **SAMPLE LOADING** — By default only samples corresponding to the chords that you map in your song will be loaded into the RAM. If you want to load all samples then activate the **All** button - with standard 60kb pre-load this full load will use around 2GB RAM.
- **INPUT QUANTIZE** — When this setting is On (which it is by default) and you trigger a different groove slightly ahead of the beat, the script will wait a little while, and then switch the groove exactly on the beat. This makes it possible to play in a relaxed way since it's not the end of the world if the timing of the trigger keys is not completely precise.
  - Click the **Off** button to turn off this behavior

## 8 Use in Sequencer

When using Scarbee Funk Guitarist (SFG) in a sequencer with **INPUT QUANTIZE ON** (default in SETTINGS) you need to pay attention to this:

SFG plugin's advanced engine requires information about chord start and groove start and, as with all MIDI transmission, it can only receive one piece of information at a time. Therefore, in principle you need to let the chord key switches come a little bit ahead of the beat — less than a 32nd note. If not, you may experience that the chord comes a quarter note *later* than it should!

If you however like to quantize your MIDI track, you need to do this:

On your MIDI track where you have the SFG, look for a setting where you can change the *Delay* of the track. Then **set this Delay to a negative value** (choose something shorter than a 1/32 note). This way, the plug-in gets information ahead and can make sure chords come in at the right time.

Q: But won't this make the guitar play too early?

A: No — relax... the plug-in syncs to the host so it is always the same negative delay.

Q: Oh — but what if I want the audio to be a little more ahead or behind of the beat?

A: Then you need to **bounce the track to audio** and move it.

Some sequencers (e.g., Logic) seem to be unable to handle negative MIDI time shifts when one wants to loop a subset of bars. A solution in that case can be to not use such an offset, but instead freeze the track (or just put the chord keyswitches ahead of beat). It should also be noted that in some sequencers it's best to start the song on at least bar 2 when using negative offsets in order for the first bar to play back correctly.

When **INPUT QUANTIZE** is set to **OFF**, one needs to insert chord triggers slightly ahead of the groove trigger notes in order for them to be reliably recognized in time.



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## 9 Credits

**Original idea:** Thomas Hansen Skarbye

**Guitarist:** Søren Reiff

**Concept Development:** Thomas Hansen Skarbye, Nils Liberg, Søren Reiff

**Scripting:** Nils Liberg

**Programming and Editing:** Thomas Hansen Skarbye

**Additional Editing:** Jimmy Ostbygaard, Oscar Hansen Skarbye

**Instrument Graphics:** Efflam Lebivic

**Grooves and Chord Presets:** Søren Reiff, Thomas Hansen Skarbye, and others.

**Manual:** Nils Liberg, Thomas Hansen Skarbye

**Guitar setup, soldering, wiring:** Steffen Sorensen

**Product Manager:** Gerald Zollner

**Others on team:** Dinos Vallianatos, Sascha Kubiak, Tobias Menguser, Frank Elting, Marcus Rossknecht, Alexander Stamm, Josef Natterer, and Nicki Marinic.

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