SESSION KEYS
Upright

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instruments
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Welcome to Session Keys Upright

Thank you for choosing Session Keys Upright.

Session Keys is a series of highly expressive and versatile acoustic grand, upright and famous electric pianos that lets you quickly achieve great results.

Session Keys Upright offers the sound of an excellent upright piano, captured with great care and applying two different tuning variants. These two tunings allow for greater flexibility when adapting the piano to your musical preferences.

With it's unmatched flexibility, creative sound design possibilities and inventive musical tools, Session Keys Upright has something special for everyone - resulting in a truly inspiring instrument.

We hope you enjoy using Session Keys Upright and we would be delighted to hear your feedback and ideas!

Session Keys Upright — Key Features

Session Keys Upright provides you with many sound options.

- **Two different sample sets are available:** “Open” and “Close”.

  For "Open", the upright piano's individual strings have been detuned very lightly, front covers were removed and it was recorded in a room with sound reflecting surfaces. As a result, the samples in this set sound open and feature the slightly hovering sustained sound characteristics, that many connect with an upright piano.

  "Close" was recorded with accurately tuned strings, front covers closed and in a fairly dry living room atmosphere, resulting in a very direct, clear and precise sound with the capacity to stand out in a lot of other noise.

- The unique Pentamorph controller allows for morphing the piano’s sound image from the standard characteristic sound into atmospheres that go far beyond the obvious and make it easy to create motions and soundscapes on the fly with just one knob.

- The Session Keys Animator turns notes or chords into authentic piano phrases while maintaining real-time controllability. Utilizing the Animator is just an intuitive and inspiring way to jam with piano performances covering a wide range of musical genres and styles with flexibly playable piano phrases that always follow your harmonies.

- Session Keys Smart Chord Mode provides a completely new and inventive way to play the piano and add a new depth of musical expression. Full chords or Animator songs can be played through either pad, a controller or single keys.

- The Piano section contains Dynamic Response and Timbre controls, the Pentamorph controller and three pedal controls.

- A Tonality section provides detailed control of all piano sound aspects including resonance, envelope, mechanical noise, such as pedal, key and release noise, and reverse sample volume.

- The Effects section features six effects; a 3-band Equalizer, Color, Reverb, Compressor, Stereo Width and Delay.
About Kontakt / Kontakt Player

Session Keys Upright is an Instrument powered by KONTAKT; you will, therefore, need to have KONTAKT or the free KONTAKT PLAYER installed on your computer in order to use Session Keys. Refer to the KONTAKT / KONTAKT PLAYER documentation to learn how to load and configure KONTAKT Instruments.

Installation

1. Make sure that your computer is connected to the internet.
2. Download Session Keys using the Downloader application. Save the data to a desired drive.
3. In the KONTAKT browser, click on the Libraries tab and select Add Library.
   Native Instruments’ Native Access application will open and ask you to input the library serial number.

   ![Native Access application](image)

   Clicking "Add library" opens the Native Access application.

4. Type in the serial number. Then click Add serial.
5. Now click Browse and locate your stored Session Keys Upright Library. Select its main folder. Then click Open.
6. Make sure that the correct path to the library is shown. Then click Install.
7. The library box will automatically appear in the Libraries tab.
   Your library is now activated and ready for use.
Session Keys Controls

This chapter introduces you to Session Keys’ specific controls, which are part of the Instrument within your Kontakt / Kontakt Player software.

The Kontakt Instrument Header

To learn how to operate the Instrument Header’s controls, please refer to the documentation of your Kontakt or Kontakt Player software.

Basic Control Types

Session Keys includes six basic types of controls:

Buttons

These can have different shapes (e.g. “LED”, rectangular, text or other) and are all toggles — click once to turn on, again to turn off. When actuated, buttons, button frames or text changes color which reflects the new state.

Selector Switches

Selector switches also come in different shapes and forms and are used to select one or several options. Click the desired option to select it.

Some program sections contain special selector switch types:

- The Phrase selector in the Animator (looks like an octave of piano keys) — click any of the “white” keys to select one of the available piano phrases.
- The Tempo selector in the Animator lets you select one of three available playback speeds (standard, half time, double time).
- The pentagon-shaped Pentamorph in the Piano section lets you select one of its five options by clicking on the corresponding name. You can also seamlessly morph between options by dragging the white button up or down like a vertically aligned fader.
- When assigning smart chords to keys or pads on your keyboard in the Smart Chord section dialog, you can make multiple selections; i.e. choose to select a bass note, one of two inversions and a modifier.

Knobs

To “turn” a knob, click on it and drag up to move the knob setting clockwise, or down to move it counterclockwise.

Knobs can be fine-tuned by holding down your computer keyboard’s [Shift] key as you turn the knob.

[Ctrl] + Click (Mac: [Cmd] + Click) resets a knob to its default value

Faders

Session Keys has two faders:

- A horizontal fader, located under the heading Dynamic in the Animator, used to determine the effect of key velocity versus pitch bend control in order to control the dynamics of the Animator phrases.
- Click between the two arrow head tips and drag horizontally.
- The Pentamorph in the Piano section.
- Click on the center of the pentagon shape and drag vertically to change its current setting. Alternatively, drag the white fader handle up or down.
Drop-Down Menus

These menus can usually be recognized by a small downward pointing arrow.

- To access a drop-down menu’s entries, click on the menu. A list holding several entries drops down. To select one of the entries, move the mouse to the corresponding entry so that it gets highlighted, then release the mouse button.

  The Instrument takes whatever action you have requested, then closes the menu.
Session Keys Upright – Quick Overview

Session Keys Upright can be used for real time performance as well as for production and sequencing work. It offers two differently recorded sample sets – Open and Close – and all additional controls for shaping the instrument sound. When you change to the other sample set, the background view will change but controls remain identical for both sample sets. These are described in detail on the following pages.

To select one of the two sample sets available, click on one of these two Sample Set buttons.

Sound section. This is where you create, name and load your own Sound presets.

Tonality & Effects buttons. Clicking one of these opens its dedicated pop-up dialog where you can edit the respective parameters. The combined Tonality & Effects settings can be named, saved and opened as Sound presets.

Sound section. Here you can activate, set up and use the Smart Chord function.

Pads & Keys buttons. With Smart Chord active, each of these buttons opens a dialog where you can set up and assign it to Pads and Keys on your hardware controller.

Settings button. Click to open the Settings pop-up where you can set up basic functions such as tuning and velocity curve as well as activate the silent key and half pedal functions and a Purge unused samples function.

Animators & Piano tabs (Piano tab view visible). Click a tab to open the respective section for direct use or editing.

Pentamorph fader and buttons (in Piano section) Click one of the five names to switch to the respective sounds or click in the pentagon shape and drag up-/downwards to morph between the sounds.

Pentamorph fader and buttons (in Piano section) Click one of the five names to switch to the respective sounds or click in the pentagon shape and drag up-/downwards to morph between the sounds.
Using the functions in the Session Keys Upright window you can:

- Select the desired sample set – "Open" or "Close" – by clicking on one of the two corresponding icons in the lower left corner of the piano picture, see page 8.

- Determine the tuning type and pitch as well as the desired velocity curve and other functions in the Settings dialog that appears when you click the cogwheel icon in the lower right corner of the piano picture, see page 9.

- Control all tonality aspects that you can set up in the Tonality pop-up which appears when you click the Tonality button in the Sound section, located in the upper left of the window, see page 12. Tonality parameters include enhanced and sympathetic resonance, envelope attack and decay, pedal, key and release noise and the volume of reverse samples.

- Control all effect settings in the Effects pop-up which appears when you click the Effects button in the Sound section, located in the upper left of the window, see page 15. Here you can activate/deactivate and set up the parameters of the following included effect units: a 3-band equalizer, a Color function for sound coloration with many presets and an intensity knob, a convolution reverb with many presets, a compressor with Response, Amount and Mix knobs, a Stereo Width knob and a delay with Time, Feedback and Mix knobs.

- Set up the overall dynamic response and timbre to the left in the Piano tab section that appears when you click the Piano tab in the lower right part of the window, see page 7. Here you can also use the Pentamorph fader and buttons (see page 7) to select or set up a blend of sound types. If you don’t have a hardware triple foot pedal, you can also manually activate/deactivate any combination of the three Upright piano pedals here.

- Save (and later load) all Tonality and Effects, Equalizer, Pentamorph and Dynamic settings as a Sound preset using the controls in the Sound section, located in the top left corner of the window, see page 12.

- Assign a root note and a chord map (gender or mode) to a key or pad on your controller keyboard and use the Smart Chord function to play harmonically correct chords by pressing a key or pad, see page 18. You can also play different chord inversions as well as certain interval notes by pressing additional keys or pads.

- Use the unique Animator that contains pre-programmed yet very flexible and usable piano phrases in various styles. These phrases are grouped as songs that contain different phrases for intro, verse, choruses, bridge and ending, which you can apply using your own chords. All Animator setup parameters become available when you click on the Animator tab in the lower left part of the window. As with all other parameters in this list, these are described in detail in their own manual section, see page 23.
Piano Section

The Piano section is located at the bottom of the window.

→ To open it, click the Piano tab located at the lower right end of the window.

From left to right, the Piano section hosts three functions that can greatly impact your sound:

• A Dynamic Response and a Timbre knob
• The Pentamorph Fader and buttons
• Three foot pedal switches

Dynamic

The two controls in this section help you control dynamics.

Response Knob

The Dynamic Response knob is used to control the overall dynamic volume response of the piano. For example, reducing the dynamic response range may be a solution when a softly played piano signal threatens to drown in a loud backing signal.

• The more you turn up the Dynamic Response knob, the larger the available dynamic range, i.e. the number of level steps between the softest and the loudest.

• The more you turn down the knob, the smaller the available dynamic range.

→ To set dynamic range, click the Dynamic Response knob and drag up- or downwards.

Timbre Knob

By turning the Timbre knob up or down you can set up the degree to which low or high velocity samples will be used. When the knob is in the 12 o’clock (default) position, an even amount of both velocity types is used.

→ To set up timbre, click the Timbre knob and drag up- or downwards.

Pentamorph Fader & Buttons

The Pentamorph is a powerful tool in pentagon-shape that lets you very quickly and radically change your sound. It consists of five switches and a fader. The fader can be used to morph between the available sounds and Tonality settings.

Each corner of the pentagon shape is named. These names are switches.
Session Keys

- If you click on one of the names, the white round fader handle will directly jump to the respective corner of the pentagon shape and the corresponding setting will be used:

<table>
<thead>
<tr>
<th>Reversed</th>
<th>Only the reverse samples are used.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerial</td>
<td>Reverse and mechanics samples (pedal, key and release noise) are used.</td>
</tr>
<tr>
<td>Tonality</td>
<td>The original samples and all settings in the Tonality dialog (including reverse samples) are used.</td>
</tr>
<tr>
<td>Acoustic</td>
<td>The original samples and all settings in the Tonality dialog (without reverse samples) are used.</td>
</tr>
<tr>
<td>Mechanics</td>
<td>Only the mechanics samples (pedal, key and release noise) are used.</td>
</tr>
</tbody>
</table>

*Note: The audio volume of reverse and noise samples can be controlled in the Tonality dialog!*

Using the Pentamorph Fader

- If you click somewhere within the pentagon shape or on the fader handle and drag up- or downwards, the fader handle will move along the pentagon sides and the sound will morph accordingly.

Pedals

In this section, you can manually activate or deactivate any combination of the three grand piano pedals.

- **Activating the Soft pedal results in a less loud and slightly muffled sound.**
- **Activating the Sostenuto pedal works like a separate sustain pedal for all those keys that are pressed when this pedal is activated.**
- **Activating the Sustain pedal removes the damper from all strings so that all played notes conclude with their natural sustain.**

You can also use the Sustain pedal to hold chord playback when the Animator is active; see page 26.

- **Click the desired pedal to activate or deactivate it.**

Selecting a Sample Set

In the lower left corner of the piano picture, you can switch between the two available sample sets “Open” and “Close”. These were created with different instrument and microphone setups for complete capture of strings, instrument body, key, damper and pedal noise.

- The “Open” samples were taken from an upright piano with very lightly detuned strings. They give you the slightly hovering, moving sustained sound, often associated with an upright piano. For this sample set, the front covers were removed for concert sound projection and microphones set up for complete capture of string, instrument body, key, damper and pedal noise as well as room sound. The combined recorded samples give you the complete sound of this upright piano, as you would hear it in a concert without amplification equipment. Session Keys lets you easily tweak the individual sound components so that they match your personal sound preferences, see page 13 and page 15.

- **To switch to the “Open” sample set, click the Open button.**

The Open button (on the left) has been activated.
• The "Close" samples were taken from the piano, tuned as accurately as possible and with its covers in place and
the microphones positioned more closely to the strings and the other piano parts. The resulting sample set has
more attack and sounds clear, direct and bright. This may be an advantage when you use the piano in a modern
arrangement together with many other instruments, playing at the same time, as in many cases these piano
samples will have more punch within the mix.

➔ To switch to the "Close" sample set, click the Close button.

Settings Pop-Up Dialog

This dialog is used for a number of basic settings. It will appear when you click the Settings button (the small
cogwheel icon) in the lower right corner of the piano picture:

Clicking the Settings button...

...opens the Settings pop-up dialog.

Tuning

In this section, you can switch tuning between Equal and Stretched.

• “Equal” stands for equal temperament tuning, where each pair of adjacent notes has an identical frequency
ratio. In many cases, this will be the tuning of choice when you simultaneously use a synthesizer.

• “Stretched” stands for a tuning method for stringed musical instruments that attempts to accommodate the
natural inharmonicity of their vibrating elements.

➔ Click Equal or Stretched to select the desired tuning.

The currently selected option is shown in white.
Pitch Pop-up Menu

The Tuning section is also where you can change the standard concert pitch (A = 440 Hz), if necessary/desired.

- Click the downward pointing arrow head next to the currently set pitch to open a drop-down menu where you can select one of the available options.

Samples - Purge Unused

The Purge Unused function in the Samples section of the Settings pop-up dialog lets you remove the samples of the currently unused sample set ("Open" or "Close").

- To activate the function, click its name so that it lights up.

Silent Key and Half Pedal Functions

These two functions are located in the Function part of the Settings pop-up dialog.

- When you activate Silent Key, you can softly press and hold down one or several keys and prevent the (virtual) hammers touching the (virtual) strings. The strings can now vibrate freely and interact with notes that you play with normal velocity. Depending on the notes you play, this will e.g. produce harmonic overtones or other sympathetic resonance that produces effects similar to reverb.

- By activating Half Pedal – which creates the same effect as partially pressing the damper pedal – you can achieve a shorter sustain. The applied MIDI sustain value decides whether Half Pedal is applied or not. This function requires a sustain pedal that can send continuous sustain data.

- To activate the desired function, click its name so that it lights up.
Velocity Curve

If your controller keyboard supports velocity, you can use these three switches and one knob to determine how Session Keys reacts to the velocity that you apply when pressing the keys on your keyboard. Three options – Hard, Linear and Soft – are available and should be self-explanatory.

To activate the desired velocity curve, click it so that it lights up.
**Sound Section**

This section, located top left in the Session Keys window, lets you set up tonality and effects and name, save or load these settings as a “Sound”. The two buttons at the bottom let you open the Tonality and Effects pop-up dialogs, where you can control all tonality aspects and effect settings.

The Sound section

All functions available in the Sound section are described in the following paragraphs.

**Sound Preset Handling**

All the settings that you make in the Tonality and Effects pop-up dialogs can be saved as a Sound preset.

**Creating a Sound Preset**

1. Open the Tonality pop-up dialog by clicking its button and set up its parameters as you like.
2. Open the Effects pop-up dialog by clicking its button and set up its parameters.
3. Click the small “+” switch in the upper left corner of the Sound section. The Sound preset name line will show “Enter Name” followed by two buttons.
4. Select “Enter Name”, type in a new name and click the small “OK” button. If you have changed your mind and want to start from scratch, use the “X” button to the left of the “OK” button to delete the preset.

**Loading a Sound Preset**

Two methods are available to load a Sound preset. You can either:

1. Open the Preset drop-down menu by clicking the downward pointing arrow head.
2. Select a preset in the drop-down menu by clicking on its name.

or:

- Use the two horizontal arrow heads in the upper right corner of the Sound section to directly select the previous or next setup preset.
  By clicking several times you can sequentially step through the preset list as it is shown in the drop-down menu.

**Deleting a Sound Preset**

Factory presets can not be deleted. For all other presets, two methods are available to delete a Sound preset.

- To delete the currently selected preset, click the small “x” button in the top left corner of the Sound section.
- To discard a Sound preset that you have just created but not yet saved, click the “X” button to the left of the “OK” button.

! Please note that you can not undo deleting a Sound preset!
**Tonality Pop-up Dialog**

- Click the Tonality button in the Sound section to open the Tonality pop-up dialog.

The Tonality pop-up dialog is a powerful tool to set up parameters that greatly influence the Session Keys sound. In conjunction with the devices available in the Effects pop-up dialog and the Pentamorph in the Piano section, you can create and quickly access everything from a naturally sounding piano to weird other-worldly sounds of strange beauty.

- To turn a knob, click and drag up- or downwards, as usual.

![Tonality pop-up dialog](image)

**Resonance**

In this section, you can control the level of resonance that either occurs when you play with pedal down or when you play notes or chords with other keys softly pressed down and held.

**Enhance Knob**

You can use the Enhance knob to increase the level of harmonic resonance that occurs when you play with pedal down. Use your ears and hear what happens when you apply the Pentamorph Fader in the Piano section, see page 7.

**Sympathetic Knob**

Use the Sympathetic knob to set up the level of sympathetic resonance that occurs when you play while other keys are pressed and/or when use the Silent Key function, see page xxx.

**Envelope**

These two knobs can be used to set up the shape of the sample envelope curve.

**Attack Knob**

- Turning up the Attack knob will gradually remove the attack phase and “fade in” the sound of the keys you play.

**Decay Knob**

- Fully turning up the Decay knob will let the samples sound out with their normal decay (providing you press the key for as long as necessary or use the sustain pedal). Gradually turning this knob downwards will shorten the decay phase.
Noise
This section holds three knobs that you can use to individually control the level of noise created by using the pedal or pressing and releasing the keys. These real-world sounds are an integral part of the complete piano sound. They have also been sampled separately and you can apply them as desired.

**Pedal, Key and Release Knobs**

> To set up the level of the respective noise type, click its knob and drag up or downwards.

Finding the “normal” level for these sounds is easy. But you can also try out setting noise parameters to fairly extreme values and maybe use the Cathedral reverb in the Effects section, see page 15. Then activate the sustain pedal in the Piano section or – if you happen to have one – use your hardware sustain pedal and hear what happens.

**Reverse Volume Knob**

Many Session Keys samples have also been included as reverse samples. These can be applied or removed in the most simple manner; by turning the Reverse volume knob up or down. We recommend that you experiment with this knob (in conjunction with the other Tonality knobs) to find the desired sound for the project at hand.
**Effects Pop-Up Dialog**

- **Click the Effects button in the Sound section to open the Effects pop-up dialog.**
  
  If you had the Tonality pop-up open before, you do not need to close it; simply clicking on Effects will do.

The Effects pop-up dialog contains a number of sound processing and effect tools to shape your Session Keys sound. All effects are daisy-chained from left to right. Inactive effects are bypassed. Where applicable, effects provide a Mix button. This lets you mix the signal arriving at the effect’s input with the signal processed by the effect. This mix is then passed to the next effect in the chain or to Session Keys’ main outputs.

- **To activate or deactivate an effect, click the respective On/Off button.**

![](Effects_pop-up_dialog.png)

**Equalizer**

This lets you decrease or increase the levels of low, mid and high frequencies in the piano sound to your liking.

- **Turn any of the three knobs to the left to decrease the level of the corresponding frequency range, or to the right to increase the corresponding frequency range level.**

**Color**

Color lets you color the piano sound by selecting one of many different effects and set up its intensity.

- **Click the small downward pointing arrow head to open the pop-up menu and select an effect.**
- **Try out different intensity settings by using the Intensity knob.**
Reverb

You can add reverb to your piano sound; Session Keys has a built-in high-quality reverberation unit with a great number of reverb presets.

Selecting a preset

- Click the small downward pointing arrow head below the graphics to open a drop-down menu where you can select one of many available Reverb types. As an alternative, you can click the bigger left and right pointing arrow heads to step through the entries in the pop-up menu without having to open it.

Mix Knob

- Click the Mix knob and drag up- or downwards to set the desired ratio between dry and wet signals.
  - When the Mix knob is fully turned down, no reverb will be audible, when it is fully turned up, only the reverb (wet) signal is audible.
  - Note, that the output level will increase when you apply reverb.

Compressor

Session Keys also features a compressor unit that you can use to control the dynamics of the resulting sound.

The Session Keys compressor has three knobs.

- Click the respective knob and drag up- or downwards to set the desired values.

Response Knob

This knob lets you select one of three available level dynamics response modes; smooth, glue and punch.

Amount Knob

This lets you control the amount of compression and automatic make-up gain applied.

Mix Knob

Using the Mix knob, you can define the proportion to which the input signal arriving at the Compressor input and the compressed signal contribute to the Compressor output signal. In other words:

- If you turn Mix down fully, the signal that arrived at the Compressor input will be passed through unprocessed.
- If you turn Mix up fully, only the compressed signal will be passed to the effect’s output.
- Use the Mix knob to create a mix of processed and unprocessed signals.
Stereo Width

As the name implies, this function lets you control the stereo width of the piano sound.

→ Click the Width knob and drag up- or downwards to set the desired stereo width.

Delay

The Delay unit can be used to add echo to your piano sound. The unit has three knobs.

→ Click the respective knob and drag up or downwards to set the desired values.

! Please note: The Delay unit is always synchronized to the tempo set in your host application.

Time Knob

The Time knob is used to set the desired echo repeat time.

Feedback Knob

The Feedback knob is used to adjust how long the echoes are repeated.

Mix Knob

→ Click the Mix knob and drag up- or downwards to set the desired ratio between unprocessed (dry) and processed (wet) signals.

When the Mix knob is fully turned down, no delay will be audible, when it is fully turned up, the maximum number of delays will be audible.
# Smart Chord Section

The Smart Chord section is located in the top right corner of the window. Smart Chord lets you play musically correct chords by pressing one or more keys or pads on your external MIDI controller keyboard or Pad controller unit such as Native Instruments’ Maschine. Smart Chords can also be used by clicking the keys or pads in the Keys and Pads pop-up dialogs. It works like this:

- You select a root note and chord map from the two drop-down menus in the Smart Chord section.
- The chords defined by root note and chord map will automatically be assigned to the (“white”) keys/pads on-screen and on your controller keyboard/pad controller, starting with the C key or the lower left pad.
  
  If you select “F” as root note and “major” as gender, pressing the C key on your keyboard will create an F major chord.
- Then you can play the resulting chords by either pressing the respective key or pad on your external key or pad controller or by clicking the respective key or pad in the Keys or Pads pop-up dialogs.
- By additionally pressing one or more dedicated modifier key(s) or pad(s), you can add a root or fifth bass note and interval notes or use chord inversions.
- MIDI Learn is used to assign the pads on a hardware pad controller to the corresponding Smart Chord pads, see page 22.

To activate or deactivate the Smart Chord function, click its On/Off button.

The two buttons at the bottom of the Smart Chord section are used to open the Pads and Keys pop-up dialogs. The options offered by these dialogs are described on page 21 and page 19.

## Selecting Root Note and Chord Map

Selecting a root note and a chord map automatically determines the chords that Smart Chord will create. For example, if you select the C scale and one of the available chord maps and then press the keys C, D, E, F, G, A and B (without activating an interval note) Smart Chord will create the following chords:

<table>
<thead>
<tr>
<th>Keyboard key played</th>
<th>Chord created with key set to C major</th>
<th>Chord created with key set to C minor</th>
<th>Chord created with key set to C dom 7</th>
<th>Chord created with key set to C Dorian</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>C major</td>
<td>C minor</td>
<td>C major</td>
<td>C minor</td>
</tr>
<tr>
<td>D</td>
<td>D minor</td>
<td>D minor</td>
<td>D minor</td>
<td>D minor</td>
</tr>
<tr>
<td>E</td>
<td>E minor</td>
<td>Eb</td>
<td>E dim</td>
<td>Eb</td>
</tr>
<tr>
<td>F</td>
<td>F major</td>
<td>F minor</td>
<td>F major</td>
<td>F major</td>
</tr>
<tr>
<td>G</td>
<td>G major</td>
<td>G minor</td>
<td>G minor</td>
<td>G minor</td>
</tr>
<tr>
<td>A</td>
<td>A minor</td>
<td>Ab</td>
<td>A minor</td>
<td>A dim</td>
</tr>
<tr>
<td>B</td>
<td>B dim</td>
<td>Bb</td>
<td>Bb</td>
<td>A#</td>
</tr>
</tbody>
</table>

To select a root note and a chord map, open the drop-down menus in the Smart Chord section and select the desired menu entries.

The root note that you select is assigned to the C key on your controller keyboard.

- By clicking/playing one of the black keys or respective pads on the screen or your keyboard or pad controller, you can play chord inversions and/or add interval notes such as sus2, sus4, +7 and +9 and add a root or fifth bass note.

The MIDI Learn function lets you assign Smart Chord pads to your external pad controller hardware. Find more information on page 22.
**Keys Pop-Up Dialog**

- Click the Keys button to open the Keys pop-up dialog.

**Key Octave**

The entire right half of this dialog is occupied by an octave of keys. It shows the smart chords that were automatically assigned to the "white" piano keys when you selected the root note and chord map in the Smart Chord section drop-down menus.

- You can now either play these chords by clicking the desired key or pressing the corresponding key/pad on your external controller hardware.

- Additionally selecting one or more “black” modifier keys on-screen or pressing them on your external hardware controller lets you play chord inversions and add interval and bass notes. Selected (and played) keys/pads get a white frame on-screen.

! You can also use Smart Chords to control the Animator, see page 26!

**Additional Bass Note Keys**

You can add bass notes to all smart chords. Two smaller keys named Bass and Fifth Bass are displayed to the left of the key octave in the Key pop-up dialog.

- If you select one of these keys so that its frame gets highlighted, the selected bass note type will be added to all chords that you play using the Smart Chord function.

- Click the desired bass note type to activate or deactivate it. Activating one of the two options deactivates the other.

- You can also trigger bass notes manually. Bass and fifth bass are assigned to the keys C-1 and D-1 on your external keyboard or to the two right pads in the second pad line on your pad controller.

**Humanize & UI Velocity**

These two knobs are available both in the Keys and Pads pop-up dialogs.

**Humanize Knob**

- When the Humanize knob is fully turned down, all notes in a smart chord are triggered simultaneously. Depending on the situation this may or may not be desired as you might perceive it as "machine-like".

- Turning up the Humanize knob introduces slight random delays between the individual notes within the chord, as would happen when a human player would play it.

- Click and drag the Humanize button up- or downwards to set the desired value.
UI Vel(ocity)Knob
The User Interface knob lets you set the velocity value that is applied, when you play chords by clicking on keys or pads in the Keys and Pads pop-up dialogs.

- Click and drag the UI Vel button up- or downwards to set the desired value.

UI Octave Selector
If you want to play smart chords by clicking on the keys in the Keys pop-up dialog, you can apply the Octave selector to choose the octave Smart Chord should use.

- Select one of the available seven octaves by clicking the respective number so that it gets highlighted.

![User interface Octave selector and Master switches](image)

Master Switches
The chords assigned to keys on your keyboard and to pads on your pad controller may be different, depending on what you have set up using the MIDI Learn function, see page 22.

Pad Assignment and Key Assignment Switches
You can use these two Master switches to toggle between the two setups.

- Click Pad assignment or Key assignment to switch to the desired setup.
  The currently selected assignment will be highlighted.
Pads Pop-Up Dialog

- Click the Pads button to open the Pads pop-up dialog.

Pad Block

The entire right half of this dialog is occupied by a pad block with 16 pads. The lower eight pads show the smart chords that were automatically assigned to them when you selected the root note and chord map in the Smart Chord section drop-down menus. The upper eight pads are used for chord modifiers (sus2, sus4, 7th, 9th), chord inversions and the selected bass note.

- You can now either play chords by clicking the desired pad or pressing a key/pad on your external controller hardware.
- Additionally selecting one or more modifier pads on-screen or by pressing them on your external hardware controller lets you play chord inversions and/or add interval and bass notes. Selected (and played) keys/pads get a white frame on-screen.

Bass Note Pads

You can add bass notes to all smart chords. Two pads named Bass and 5th Bass are displayed in the pad block.

- If you select one of these pads so that its frame gets highlighted, the selected bass note type will be added to all chords that you play using the Smart Chord function.
- Click the desired bass note type to activate or deactivate it. Activating one of the two options deactivates the other.
- You can also trigger bass notes manually. By default, bass and fifth bass are assigned to the two right pads in the second pad line on your pad controller. You can change this using the MIDI Learn function, see page 22.

Humanize & UI Velocity

These two knobs are available in the Pads and Keys pop-up dialogs.

Humanize Knob

- When the Humanize knob is fully turned down, all notes in a smart chord are triggered simultaneously. Depending on the situation this may or may not be desired as you might perceive it as “machine-like”.
- Turning up the Humanize knob introduces slight random delays between the individual notes within the chord, as would happen when a human player would play it.
- Click and drag the Humanize button up- or downwards to set the desired value.

UI Vel(ocity) Knob

The UI (User Interface) knob lets you set the velocity value that is applied, when you play chords by clicking on keys or pads in the Pads and Keys pop-up dialogs.

- Click and drag the UI Vel button up- or downwards to set the desired value.
Octave Selector
This lets you select an octave for smart chords that you play both by clicking on the pads in the Pads pop-up dialog or by pressing pads on your external hardware.

> Select one of the available seven octaves by clicking the respective number so that it gets highlighted.

Master Switches
The chords assigned to pads on your pad controller and to keys on your keyboard may be different, depending on what you have set up using the MIDI Learn function, see below.

Pad Assignment and Key Assignment Switches
You can use these two buttons to toggle between the two setups.

> Click Pad assignment or Key assignment to switch to the desired setup.
  The currently selected assignment will be highlighted.

MIDI Learn Button
Use this function in the Pads pop-up dialog to assign the available Smart chords, bass and interval notes as well as chord inversions to pads on your external hardware controller.

1. Activate MIDI Learn by clicking it so that it gets highlighted.
   The frame of the upper left of the pads (sus2) starts to flash
2. Now press the pad on your external hardware to which you want to assign sus2.
3. The frame of the next pad (sus4) starts to flash indicating that you can now assign sus4 to the next pad on your external hardware.
4. Repeat the process for all 16 pads.
   The MIDI Learn procedure will only be complete when all pads have been assigned and the last pad has stopped flashing.

  ! Please note: To be able to use your pad controller hardware, you must activate the Pad assignment switch so that it gets highlighted.

5. If you want to keep your settings, save the NKI.

Set Default Button
Using the Set Default button will reset pad assignment to the factory settings.

> Click Set Default to do this.
  Note that this can not be undone, unless you have saved your changes in the NKI and can load them again.
Animator

The Animator is an adaptable MIDI piano phrase player. It contains pre-programmed piano phrases in various styles, grouped as songs, which you can utilize using your own chords. Styles from different songs can be combined and saved as new songs.

» To open the Animator section, click the Animator tab located in the lower left of the window. When you do this, the default song will also automatically be opened.

» To activate the Animator, click the On/Off button in the Animator tab so that it lights up.

**Song section.** Here you can load, name, store, add and delete Animator songs and assign the current Sound preset to the current song

**Browser.** If you double click a MIDI phrase here, it will be assigned to the selected “white” key in the phrase selector.

**Phrase selector.** Here you can select phrases for direct use or replacement.

**Animator — Quick Overview**

All Animator parameters are visible at a glance.

**Animator Section Top End Elements**

The top end of the Animator section contains the following elements:

- The + symbol lets you add a new song, see page 24.
- The x symbol lets you delete the currently selected song, see page 25.
- The chain symbol lets you assign the current Sound preset to a song, see “Creating a New Animator Song” on page 24.
- The downward pointing arrow head lets you open the Song drop-down menu where you can load one of the available songs.
- The phrase selector (the “white” keys in the vertically aligned keyboard octave) contains the individual piano phrases of a song. To utilize the play characteristics of a piano phrase, select one of the keys and play chords on your external keyboard, see “Phrase Selector” on page 25.
- The browser next to the phrase selector lets you browse for and select individual piano phrases from other songs for assignment to the currently selected key in the phrase selector. This also lets you assemble your own songs, see “The Browser” on page 25.
Animator Section Bottom End Elements

From left to right, the bottom end of the Animator section contains the following elements:

- The On/Off button lets you activate or deactivate the Animator.
- Chord detection displays the chord you currently play.
- The Loose and Tight buttons let you toggle between a long or short chord recognition time.
- The complexity of the Animator piano phrases can be increased or decreased by clicking the vertically aligned arrow head buttons in the Complexity section or by using the Modulation wheel on your external keyboard. Three complexity levels (1-3) are available.
- The Dynamic section lets you set up phrase dynamics control. The two dynamics triangles work like a bipolar fader: by clicking and dragging horizontally inside this Dynamic fader you can determine the degree to which dynamic is controlled by you using the Pitch Bend wheel and/or the velocity of your play.
- Three velocity indicators reflect the currently applied velocity.
- The Swing knob lets you add a swing feel to rhythmically straight Animator piano phrases.
- The Quantize knob lets you continuously control Quantizing (i.e. positioning of individual notes to rhythmically correct positions within the bar).
- The Tempo section lets you set Animator phrase playback to half, normal or double tempo.

Opening an Animator Song

When you open the Animator for the first time after loading Session Keys Upright, it is opened with the default song. All additional factory songs (except for some special versions containing arpeggio triplets etc.) are visible both in the Song drop-down menu and in the browser.

! Please note: The Song drop-down menu is used to select complete songs with all piano phrases whereas the browser is used to select and assign individual phrases to your personal song version. You can not load a complete song from the browser in one go!

To open an Animator song, open the Song drop-down menu and select the desired song. All piano phrases of the Animator song are loaded into the phrase selector.

Creating a New Animator Song

New songs can be created based on phrases of available factory songs. You can assemble phrases as you like, save them as a new song and use them to play the chords of your own composition. Each pre-programmed song has different piano phrases for intro, verse, choruses, bridge and ending.

To add other phrases to an existing song or to the available Empty Factory preset, proceed as follows:

1. In the phrase selector, select the phrase you want to replace.
2. Navigate to the new phrase in the browser and double click it, see page 25.

   The new phrase will now replace the old one in the phrase selector.
3. Repeat until you’re done.
4. Click the small + symbol in the top left corner of the Animator view.
   The previous song name will be replaced by “Enter Name”.
5. Name the new song by selecting “Enter Name” and typing in a new name.
6. To save the current Sound settings with the new song, make sure the links in the small chain icon are unbroken
   by clicking on the icon, if necessary.
7. Save the new song by clicking the small OK button.
   It will now also appear in the Song drop down menu as a new Animator Song and can be selected at any time.

Deleting an Animator Song

To delete one of your own Animator songs, proceed as follows:
1. Open the song you want to delete.
2. Click the small x button to delete the currently loaded song.
   The song will immediately be removed from the phrase selector and from the Song drop-down menu.

! Please note: Factory songs can not be deleted.

Phrase Selector

When you load an Animator song from the Song drop-down menu, its phrases will be loaded into the phrase
selector and you can select the desired piano phrase by clicking here or by using the keys of the C-2 octave as
switches.

Phrase selector

1. To select a phrase, click on it so that it gets selected. Alternatively, press one of the keys in the C-2 octave on
   your external keyboard controller.
   A selected phrase has a white frame.
2. Play chords on the connected external MIDI keyboard.
3. Select another phrase etc.

! Please note that each Animator phrase contains three complexity levels which you can select by
   clicking the vertically aligned arrow head buttons in the Complexity section, see page 24, or by using
   the Modulation wheel on your hardware controller keyboard.

The Browser

In the browser you can pick individual phrases from the available factory songs and load them into the phrase
selector. You can also select individual Animator piano phrases from various other Animator songs and assign
them to the currently loaded song or compile a new song by using the Empty Factory preset. You can save
your phrase compilation under a new name and it becomes available on the Song drop-down menu, see
“Creating a New Animator Song” on page 24.
The column to the left in the browser shows all available factory songs as folders. Each folder contains up to six phrases. If you click a song folder, its phrases are displayed in the right browser column.

To assign a piano phrase file to one of the slots (keys) in the piano phrase selector, proceed as follows:

1. Select the phrase slot in the phrase selector by clicking on it.
   The key graphic will get a white frame.
2. In the browser, double click the desired piano phrase to assign to the selected slot.

**Animator Hints**

**Using Smart Chords as Animator input**

If you have activated Smart Chords, see page 18, you can play Animator phrases with one (or two or three) fingers only! The chords created by the Smart Chords function will then be used to play the currently selected Animator phrase.

- If you want to use the plain chords provided by the selected Smart Chord’s root note and chord map, you can do this by pressing one key or pad only!
- If you want to use an inversion or additional interval notes, you can do this by additionally pressing the corresponding key(s) or pad(s) on your external MIDI controller hardware.

**Using the Sustain Pedal**

In Animator mode, you can use the sustain pedal to hold chord playback for as long as you wish. This can be very useful.

- Press the desired chord, then press the sustain pedal and let go of the keys.
  The chord will continuously play back until you release the pedal.

**Using independent Bass notes**

When you play Animator phrases, you can freely change the bass note and the phrase playback will change accordingly. Try this:

1. Play chords in the middle C octave
2. Now use the left hand to play additional singular bass keys and note how the bass changes in phrase playback.

**Playing Bass Keys below C2**

If you use the Animator (without Smart Chords) and play a key below C2, you will only get the bass of the respective phrase, as the complete phrase would simply not sound right.
External Control

Using External Sequencer Automation
All knobs and faders in Session Keys can be controlled by external MIDI or host automation.

→ Simply open the KONTAKT automation window and drag the automation ID to the desired knob or fader.
  For further information on automation assignment please refer to the Kontakt manual.

NKS Integration
All Session Keys products are compatible with Native Instruments’ Native Kontrol Standard (short: NKS).

NKS is an extended unified feature set including tag-based browsing across sound type, vendor, instrument type, with instant sound previews, pre-mapped key parameters and other features, all available when you use Native’s controller hardware such as KOMPLETE KONTROL or MASCHINE.
Credits

Produced by Thomas Koritke
Recorded by Thomas Koritke, Andreas Rogge, Sascha Haske
Sound Design / Sample Editing: Sascha Haske, Lars Dahlke, Andreas Rogge, Thomas Koritke
Script Programming: Alexander Paprotny, Till Weinrich, Sebastian Bretschneider
Animator: Lars Dahlke, Thomas Berlin, Arne Straube
Interface Design: Max Mondon
3D Rendering: pixelsonic Martin Jann
Piano by Pianohaus Trübger, Hamburg
Piano Technician: Oliver Griem
Special Thanks to Jürgen Klever
Manual: musicandtext.com
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