# nord stage 3

# USER MANUAL

Nord Stage 3 *English* 

OS version: 2.5x

Edition: M



**CAUTION:** TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

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Instructions pertaining to a risk of fire, electric shock or injury to persons.

## **IMPORTANT SAFETY INSTRUCTIONS** SAVE THESE INSTRUCTIONS

**Warning** - When using electric products, basic precautions should always be followed, including the following:

1) Read these instructions.

2) Keep these instructions.

3) Heed all warnings.

4) Follow all instructions.

5) Do not use this apparatus near water.

6) Clean only with dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

No naked flame sources, such as lighted candles, should be placed on the apparatus;

Do not use the apparatus in tropical climates.

**WARNING**: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

The maims plug is used as the disconnect device and shall remain readily operable.

10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11) Only use attachments/accessories specified by the manufacturer.

12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13) Unplug this apparatus during lightning storms or when unused for long periods of time.

14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

# Additional Safety Information

Il convient de ne pas placer sur l'appareil de sources de flammes nues, telles que des bougies allumées;

L'appareil n'est pas destiné á étre utilisé sous un climat tropical.

L'appareil ne doit pas étre exposé à des égouttements d'eau ou des éclaboussures et de plus qu'aucun objet rempli de liquide tel que des vases ne doit étre placé sur l'appareil.

Lorsque la prise du résau d'alimentation est utilisée comme dispositif de déconnexion, ce dispositif doit demeuré aisément accessible.

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#### 

# INTRODUCTION

# THANK YOU!

Thank you for choosing the Nord Stage 3!

Continuing our vision of the ultimate instrument for the performing mu sician, our new agship instrument features our latest award-winning technologies including the Nord Lead A1 Synth engine with sample playback, the acclaimed Nord C2D Organ engine, a greatly enhanced Piano section and extensive hands-on effects – all in one exceptional performance keyboard.

# FEATURES

The Nord Stage 3 has the following main features:

- Organ section with faithful reproductions of three classic organ models, B3, Vox and Farf (Far sa), as found in our acclaimed 2D combo organ. There are also two Pipe organ models, each with its own distinct character.
- Digital LED drawbars on the 88 and 76 key models, physical draw bars on the 73 key model.
- Piano section with acoustic Grandand Upright pianos, tine and reed based Electricpianos, Clavinetand Harpsichord sounds and a Digital category which also includes rich sounding piano layers. The Misc category The memory capacity for the Piano section in the Stage 3 is 2 gigabytes.
- Synth section based on the Lead A1 synthesizer with dedicated OLED display, Sample playback, Cassic – analog style – waveforms, digital waves, formants and massive "superwaves".
- Comprehensive Effects section.
- Seamless transitions: Sustaining notes will not be cut off when changing programs.
- An Extern section for controlling external MDI instruments.
- Powerful Morph features for changing multiple parameters using physical controls.
- Four keyboard zones, with user adjustable split widths allowing sounds to smoothly cross-fade over split points.
- <sup>c</sup> There are three Nord Stage 3 models: Nord Stage 3 88 with a fully weighted hammer action keybed (AC), Nord Stage 3 HP76 with a lightweight hammer action keybed (E-G), Nord Stage 3 Compact with a 73-note semi weighted "waterfall" keybed (E-E) with physical drawbars.
- <sup>c</sup> Two independent panels each provide two complete instances of the Stage 3 sound engines and effects. This allows for all kinds of layers and splits as well as "dual manual" B3 organ playing – among other things.

# **NORD ONLINE**

On the website nordkeyboards.comyou will nd:

- » Information about the Nord Stage 3 and other Nord instruments
- » Latest Operating Systems for download
- » Free software: Nord Sound Manager, Nord Sample Editor 3 and drivers
- » Nord Piano Library sounds for free download
- » Nord Sample Library sounds for free download
- » Nord World: Nord releated news stories and videos
- » User Manuals for download
- » Tutorials can be found at nordkeyboards.com/tutorials

Follow Nord Keyboards on Facebook, Instagram, Witter and YouTube. Feel free to tag your content with our of cial hashtag #iseenord.

# ABOUT THE USER MANUAL

The manual is arranged mainly as a reference manual. In many cases you'll also get tips on how to practically use the different features in a musical context.

#### READING THE MANUAL IN PDF FORMA

This manual is available as a digital PD le. It can be downloaded, free of charge, from the Nord Stage 3 section on our website.

#### RESTORING THE FACTOR PRESETS

The factory programs, Synth presets, samples and pianos are available as individual Nord Sound Manager backup les for download from our website. There is also a complete backup of the entire instrument and its factory content, in case it needs to be restored to its original state.

#### OS UPGRADES

The latest OS (Operating System) version for the Nord Stage 3 is always available for download from our website. There is also an Update History page on the website, which speci es what has been updated with each new version. Please visit our website from time to time, to make sure you have the latest version in your unit.

#### FREE SOUNDS

Since the Nord Stage 3 is designed as an open system, each and every piano and sample in the Nord Stage 3 can be replaced. This is done using the Nord Sound Managerapplication, available as a free download from the Software section at www.nordkeyboards.com. The Nord Stage 3 is compatible with the continuously expanding Nord Piano Library and the Nord Sample Library. When new sounds become available, these can be download for free from the Sound Libraries section at www.nordkeyboards.com.

#### CUSTOM SAMPLES

Use the Nord Sample Editor 3 for quick and easy creation of custom sample instruments for the Nord Stage 3. Whether creating a fully mapped instrument, a simple FX sound or assigning a sampled intro for a song to a single key, the Nord Sample Editor 3 opens up many possibilities together with the Nord Stage 3.

The Nord Sample Editor 3 can be downloaded from the Software section at www.nordkeyboards.com.

#### DISCLAIMER

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The Nord Stage 3 is designed to be a highly exible, musically expressive and easy-to-use instrument. Let's have a look at some of its key features:

# ORGAN SECTION

The dedicated Organ section uses our latest B3 tonewheel Ogan model, as found in the acclaimed Nord C $\mathcal{D}$  Combo Organ.

The B3 model is based on the analysis of the signals generated by each of the 91 spinning discs inside several original instruments, and painstaking work on understanding exactly how all the original com ponents interact with each other. The virtual circuitry reacts not only to the settings on the panel but also during the real time performance. The Stage 3 will faithfully reproduce the important foldback and energy robbing characteristics; the latter will produce the gentle compres sion effect that makes those lovely smears absolutely wonderful.hTe 3 tonewheel modes allow for switching from a clean, factory spec'd instrument to a worn and battered workhorse.

We have also created carefully modelled emulations of two of the most famous transistor organs from the 1960's; the VoxContinental and the Farf (Far sa) Compact. Alongside the organ's themselves, the Nord Stage 3 features a rotary speaker simulation derived from the Nord C2D. Incorporating the acoustic variations that occur as a physical rotating spreads the sound around in a room, they bring the Stage 3's organs to life with remarkable realism. In terms of control, the 88 and 76 key model utilize our tried-and-true digital LED drawbars, whereas the 73 key Compact model is equipped with physical drawbars.

Finally, there are two distinct Pip@rgan models including a "Principal" Pipe model with two variations, delivering a wide range of versatile pipe/church organ sounds.

This section is described in detail in the @gan chapter, beginning on page 17.

# PIANO SECTION

The Nord Stage 3 Piano section, with its 2 GB of internal memory, delivers a stunning range of piano and keyboard sounds. Piano sounds are divided into six different types including both classic Gand, Upright and Electric pianos as well as Digital piano and precon gured Layer sounds.

#### NORD PIANO LIBRAR

The Nord Stage 3 bene ts from the sounds found in the ever-growing Nord Piano Library. We spend a lot of time and effort on expanding the palette of available sounds, ranging from state-of-the-art concert grand pianos to characterful uprights, historical instruments, electric pianos and more.

New sounds are regularly made available free of charge on the www.nordkeyboards.com website.

#### STRING RESONANCE

String resonance is a physical phenomenon which occurs inside every acoustic piano when strings, or parts of strings, resonate at their fun damental or harmonic frequencies as other strings are being played. When String Resonance is turned on, played notes will affect each oth er to reproduce the acoustic interactions that occur inside an acoustic grand or upright piano.

#### NORD TRIPLE PEDAL

The Nord Stage 3 is compatible with the Nord Tiple Pedal which un locks additional functionality within the Piano section.

The right pedal is the sustain pedal. When operated, all notes being played will sustain until the pedal is released again. It also adds dy namic control of the mechanical "pedal noise" during operation and enables dynamic "half-pedaling" techniques.

The left pedal is the soft pedal, also known as the Una Corda. When applied, all notes will be slightly lower in volume and have a softer, more tor low pass lter and a powerful combined low-pass/high-pass lter. subdued, tone quality.

In the middle is the Sostenuto pedal. Notes that are held when the pedal is pressed down will "have their dampers raised" and keep sus taining, while subsequent notes will not be sustained.

#### PEDAL NOISE

When the sustain pedal is operated on an acoustic grand or upright piano, many different sounds are produced by the mechanical com ponents of that instrument's pedal mechanism. Your Nord Stage 3 reproduces many of these natural sounds. When the sustain pedal is pressed down, lifting the dampers from the strings, a beautiful sizzle can be heard.

When the pedal is released, the dampers are returned to the strings, which creates a different, muted type of sound.

#### PIANO AND CLAV TIMBRE

A quick method for altering the character of the current piano sound is to use the Piano and Clav Tmbre settings. The Clav settings are designed to emulate those of the original instrument, while the Piano settings are designed speci cally with piano players in mind - instantly making a sound softer, brighter or more mid-focused, depending on what the song calls for.

This section is further described in the Piano chapter, beginning on page 21.

# PROGRAM SECTION

A program on the Nord Stage 3 contains settings for all sound engines and effects. The center area of the instrument - the Program section is where programs are navigated and stored, and various performance features and settings menus are accessed. Importantly, this is also where the two Panel buttons are located, used for switching between the two independent panels available within each program.

This section is described in detail in the Program chapter, beginning on page 25.

# SYNTH SECTION

The Nord Stage 3's powerful synthesizer engine is based on the ac claimed Nord Lead A1. In addition to Classicwaveforms and digital Waves and Formants the Stage 3 Synth can be used for all sorts of Sample based sounds. It also features a Super (superwave) category suitable for those massive, multi-oscillator, sounds that can not be created by other means. The large number of oscillator con gurations allows for a multitude of single or dual oscillator setups, waveshaping, frequency modulation and more. An OLED display dedicated to the Synth section provides a clear overview of its current setup.

The Nord Sample Library gives Stage 3 owners access to a huge free library of world-class sounds, including the famous vintage Mellotron and Chamberlin samples. User-created samples can also be loaded into the instrument, opening up a whole new creative world of sound.

In addition to the versatile 12 and 24 dB low-pass Iters and the 12 dB

high- and band-pass Iters, the Stage 3 provides an emulated transis

With both Amp and Modulation envelopes, an IFO and Unison control, the Stage 3's synth capabilities are powerful, and provide virtually limitless possibilites in terms of stunning on-stage sounds.

There is an in-depth description of this section in the Synth chapter, beginning on page 33.

# EXTERN SECTION

The Nord Stage 3 delivers powerful capabilities as a NOI controller, especially when using the dedicated Etern section. Extern can be turned on and off and assigned to keyboard zones just like the internal sound engines, but specializes in controlling external gear - comput ers, synth modules etc. - over MDI.

This section is described in detail in the Etern chapter, beginning on page 43.

# EFFECTS SECTION

A wide array of classic effects are at your ngertips, within the compre hensive Effects section:

The Effects 1 and 2 units provide all essential modulation effects such as Tremolo, Chorus and Phaser, modeled after legendary stomp boxes and effects units. The Delayeffect can go anywhere from solidly vin tage to modern and atmospheric sounding - with its Analog mode and dedicated feedback Iters.

Classic ampli er simulations, a versatile **Q** and powerful, resonant Iters are available in the Amp Sim/EQsection, and a punchy Compressor with an extra tight "fast mode" helps keeping your perfor mance in control. Finally, the lush Reverbindependently available per panel - provides an array of small and large room simulations for instant atmosphere.

Many of the effect parameters can be morph controlled - that is addressed by the modulation wheel, control pedal or after touch which opens up for all kinds of creative, real-time interaction.

This section - and the Rotary Speaker - is described in detail in the Effects chapter, beginning on page 45.

# GETTINGSTARTED

Let's spend a few minutes getting acquainted with the most fundamental features of the Nord Stage 3. In this chapter the most common scenarios and tasks will be described in a step-wise fashion, hopefully serving as a good starting point for further editing and more advanced set-ups as well.

## HOOKING IT UP

Connect the Nord Stage 3 power cord to the unit and a mains power supply, connect the sustain pedal and a set of headphones or a sound system.

Make sure to turn on the Nord Stage 3 rst, before the sound system. Please be careful with the output volume.

For more information on all the connections on the Stage 3, have a look in the Connections section on page 59.

# PROGRAMS

The Program area is located at the center of the panel and has an OLED display in the middle. Complete settings of every parameter on the panel are stored in the program memory of the Nord Stage 3, with enough room for 400 programs.

Programs are organized into 16 banks, labeled A-P. All programs can be edited and replaced freely as desired.



A complete set of the factory programs is available on the www.nordkeyboards.com web site. This means that the program memory can always be restored to its original state.

#### SELECT A PROGRAM

Programs are selected by pressing any of the ve buttons, located below the display. The / buttons are used to navigate program pages – a page being a group of 5 programs. A Program bank on the Nord Stage 3 can contain up to 25 programs divided into 5 program pages.

Some of the factory programs are labeled with MW or AT. This indicates that the Mod Wheel or Aftertouch has an active part in the sound and invites you to use these performance features.

Programs can also be navigated by simply turning the dial.

# PANEL CONTROLS

#### DIALS AND KNOBS



The dials on the Nord Stage 3 are knobs without any xed start and stop positions, used for navigating parameters and settings in a step-wise fashion. The dial is one such example. In this manual, dials are sometimes also referred to as encoders.



dials are surrounded by LED indicators. These provide a visual indication of the current value for the associated parameter.



Potentiometer-type knobs are used for many parameters on the Nord Stage 3. When a program is loaded the physical positions of these knobs will in most cases not correspond to the actual parameter values. As soon as a knob is turned however, its associated parameter value will "snap" to the knob's position.



Knobs that can serve as a Morph destination are equipped with green Morph LEDs. These are located at the bottom left of the knob, and will light up if a Morph is targeting that parameter. Read more about Morphs on page 25.

Hold the button – found in the Program section – and turn a knob to view the stored setting of a parameter in the display without changing it.

#### BUTTONS



Selector buttons are used to select one setting in an array. They have a set of round or triangular LEDs to indicate its current setting. Press the button several times to cycle through the possible options.



buttons are used for activating a function or a group of functions such as effects and have a LED close to them to indicate the on/off status and sometimes also the source or zone.

The On/Off buttons of the Effects shown here also have a selector functionality. Press once to turn the Effect on, and press immediately again to select the "next" source.

#### THE SHIFT BUTTON



Many panel controls on the Nord Stage 3 have a secondary function, which is printed immediately below it. These additional functions are accessed by pressing and holding while operating the control.

The Shift button is also used to a menu or to cancel an ongoing Store operation.

# LIST VIEW

Any dial that has written below it - such as the Program dial - can be used to access a useful list view.

Press and turn the dial to enter a list view of all the Programs.



Browse to any program, using the dial. All 8 program banks can be accessed when in List mode.

Press again to the List view.

List views for the Piano, Synth Preset and Waveform dials function in just the same way.

# EDIT A PROGRAM

Editing a program is as easy as turning a knob or pressing a button, to change an existing setting. Let's give it a quick try:

Dial up Bank A, Program 1 (a piano based program) for this exer cise.

The controls for the Piano instrument are located immediately to the left of the Program area on the panel. Notice that the Piano section of the Program area display shows the name of the selected piano sound, and that the six-way indicator is set to Grand.

#### SELECT A NEW PIANO SOUND

Turn thedial to browse the piano sounds. To switchbetween sounds of different type (Grand, Upright, Electric Pianoetc.) use thebutton.

Earlier versions of the Nord Stage 3 have no dedicated Type button, instead the Piano Select dial is used to access all Piano sounds.

Try selecting a piano sound from the view, accessed by pressing and turning the dial. Use Shift again to the list view.

Note that changing any parameter on the Nord Stage 3 panel causes an "E" to appear next to the current program number in the display. This indicates that the program has been edited but not yet saved into memory. If a new program is selected prior to performing a Store operation any edits will be lost and the program will have its original settings the next time it is loaded.

# TURN OFF MEMORY PROTECTION

When the Nord Stage 3 is shipped from factory its memory is protected to prevent accidental overwriting of original programs. Memory protection can be turned off by toggling a setting located in the System menu.

Hold and press the (Program 1) button below the display.

Memory Protect is the rst setting of the System menu. If the display shows a different setting, use the Page button to navigate to the Memory Protect setting.

Change this setting to Off by turning the dial.

Press (Shift button) to exit the System menu.

This setting, like all other System settings, will be permanently stored until it is changed again.

Read more about menu settings, starting at "System Menu" on page 53.

# STOREA PROGRAM

Press the button to the left of the display once, to begin the process of storing the current program.

The LED will begin to ash and the display will ask you for the location to where you want to store the program.

# STORE PROGRAM TO A:11 Royal Grand 3D

If you want to store the edited version to the current location, replacing the original, simply press again. If not, use the dial and/or / buttons to select a different location.

The program in the selected location becomes active on the keyboard, allowing it to be auditioned before it is replaced by the program being stored.

When you have found a suitable location for your program, press again to con rm the store operation.

Press Shift/Exit once to abort an ongoing Store process if you change your mind.

Read more about Store and how to name a program in the Program chapter, on page 27.

# LIVE MODE

The ve programs differ from other programs in that all edits made to them are instantly stored - without the need for a manual Store operation.

Press and use the ve buttons to navigate the ve Live programs.

Make an edit, such as activating one of the effects sections, to one of the programs.

Select a different Live program and then return to the one that was edited. Note that the edit was automatically stored.

If Live Mode is active and you decide to store the settings permanently as a program in one of the Program banks, you can do so using the standard Store methods (see above).

You can also store programs into any of the ve Live Mode memory locations, in which case the program settings will replace that current Live Mode memory setting.

Press the Live Mode button again to exit Live Mode and return to the Program banks.

# ACTIVATE AN EFFECT

Activate the reverb by pressing the Reverb button.

Adjust the balance with the knob above the reverb selector.

Activate the delay effect by pressing the Delay button once.

The LEDs above the button indicate which sound engine is routed to the effect. Press and the Delay button until the LED is lit, if it is not already.

Double-clicking the On Off / Source button is a shortcut for quickly changing the source for any effects section.

Try the , and controls, to alter the char acter and intensity of the Delay effect.

# THE TWO PANELS



The Panel A and Panel B buttons give instant access to two complete instances of the features on the physical panel. There can be one complete Organ/Piano/Synth/Extern/Effects setup on Panel A, and another complete setup on Panel B.

This allows for easy back-and-forth switching between two different sounds, or for complex programs with up to two organ settings, two different pianos and two different synthesizers. The two panels can be combined either as layers or as split keyboard arrangements. Let's set up a split and then expand it with an additional layer combination.

#### CREATE A SPLIT

Make sure that only Panel A is active and that only the Piano section is turned on.

To activate Split mode, press the button, located in the top row above the Program area display.

To adjust the position of the Split point(s), press and hold the button, located in the top row above the Program area display.

The " " symbol associated with this button indicates that one of its functions - is accessed by keeping the button pressed down.

There are two settings for each split point; note and width. Make sure the Note row is selected by pressing the Program 1 button,

corresponding to the / symbol in the display until the cursor is on the lower row. Set the Mid split point to C4 using the dial.

Make sure that the other two split points (Low and High) are set to "Off". This can be done by selecting the Width row and adjusting the Low and High values using the dial.

The keyboard is now divided into two zones, the split point being indicated with a green LED above the keyboard. The LED above the button will also be lit, indicating both that Split is turned on, and that only the Mid split point is active.

#### ASSIGN THE PIANO TO THE UPPER ZONE

Hold and press the Piano button repeatedly until only LED's and are lit.

This assigns the Piano to the upper zone of the keyboard. Feel free to use the buttons in the Piano section for accessing a different range of the piano sound.

#### SET THE SYNTH TO THE LOWER ZONE

Turn the Synth section. Hold and press Synth until only LED's and are lit. This will activate the synth and assign it to the lower half of the keyboard.

By using all three split points, Low, Mid and High, it is possible to divide the keyboard into a total of four distinct zones, all of which can have any or all of the six sound engines and two Extern sections assigned to it.

# LOAD A SYNTH PRESET

Turn the dial and select any of the Synth presets from the 8 User preset banks - perhaps a Bass Synth sound. Note that the location and name of the preset is displayed at the bottom of the Program area display. The Synth display will at all times show the currently active oscillator settings.



All the synthesizer parameters on the panel can be adjusted, even when using a preset as a starting point. An in-depth description of these parameters can be found in the Synth reference chapter, starting at page 33.

To view a parameter setting without changing it, hold the Monitor button and turn the pa rameter's knob.

#### CREATE A LAYER

Let's add a third sound to the Synth/Piano split we just created.

Activate Panel B by pressing the button, giving access to a second set of sound engines and effects.

Make sure that only the Synth section is active: Press + and select Synth from the display by pressing Program button 4.

The Prog Init function is used for quickly initializing the current panel in a manner which suits the type of program which should be created, and will disable all sections and reset all parameters that should not be used.

Use the dial to select a sound which should be layered upon the previously set up split.

#### ACTIVATE BOTH PANELS

Press both the and buttons simultaneously to create a layer with the sounds from both panels. Panel A now contains the Synth/Piano split while the Panel B Synth sound is layered on top.

The ashing panel LED (A or B) indicates which panel is currently focused for editing on the panel. Press the other Panel button to shift this focus to the other panel.

#### SET UP A SPLIT CROSS-AFDE (SPLIT WIDTH)

As a nal step, let's adjust the split point so that the split Synth and Piano sounds will transition gradually between one another:

Again, press and hold the button, located in the top row above the Program area display.

Press the Program 1 button, corresponding to the symbol in the display. The Split width for each split point can now be adjusted.

Select the Mid split point and set it to "12" by turning the dial. Let go of the button.



Playing across the Split point now will "cross-fade" between the lower and the upper sound, within a range of 12 semitones above and 12 semitones below the split point.

The Extern section can also be part of a split or layer scenario, e.g. if an external unit should be controlled from just one zone on the keyboard. Note that the Split width setting will not apply to the Extern section.

To turn off a panel combination, hold down the Panel button you wish to keep and then press the other Panel button.

## MORPHS



The modulation wheel, a connected control pedal or the keyboard aftertouch can be used to alter one or several parameters while playing. This is achieved by using morphs. In short, this is done by selecting a a source (the physical controller) a destination parameter and the parameter range included in the morph.

We will now morph the drawbars with the wheel, so start by making sure that the Organ section is turned On.

Make sure that the B3 model is active and "pull out" the rst three drawbars on the left (Sub, Sub3 and Fund) by pressing the corresponding lower drawbar buttons, or by actually pulling the drawbars if using the Nord Stage 3 Compact model.

Press and hold the button in the Morph Assign group, above the Program area dial.

Pull out the four right-most drawbars all the way. The indicators will show single LEDs to indicate how much the Morph will affect the parameter.

Let go of the Morph button. Play a few notes or chords, while moving the modulation wheel.

As the wheel moves, the drawbars are pulled out and the sound changes accordingly.

One Morph source (Wheel, Control Pedal or Aftertouch) can control several parameters at once.

A Morph source can increase one parameter's value while decreasing the value of another at the same time. This makes it possible, for example, to crossfade between instruments.

Read more about the Morph functionality on page 25.

# THE SYNTHESIZER

Let's have a look at some of the features of the Stage 3 Synthesizer, beginning with how to set up a sound using Classic, "analog" waveforms.

Make sure the Synth section is active, by pressing the Synth button, or by using (Shift + Live Mode) and selecting Synth from the display.

In order to start off from a "blank slate", let's initialize the synthesizer to its default settings by pressing (Shift + Unison) and then Init using the display soft button.

Make sure the Waveform selector under the display is set to • . T urn the dial until the sawtooth waveform is selected.

Note that the right half of the display is currently empty. We are now using a basic, single oscillator, con guration which means that the knob has no impact on the sound. Let's choose a

different con guration:



Turn the dial to browse the different con guration and select the Mix Square con guration.

OSC CONFIG



There are now two oscillators available, one set to sawtooth and one set to square wave. Turn the knob to mix the sound of the two oscillators.

Turn the dial of the Oscillator section and select a different pitch for the square wave, indicated in semitone steps on the display. This way the sound of the rst oscillator (the sawtooth sound in this case) can be combined with a sound of a different pitch, from one octave below ("Sub", used in the example below) to several octaves above.



As a nal step, let's turn to the Filter section for some adjustments:

Turn the Filter • knob counter-clockwise, and notice how the sound is gradually subdued. Repeat this with all settings, paying attention to how they each have a different effect on how the sound is shaped.

Read more about the Filter Types, and other settings in the Filter section, beginning on page 38.

#### LOADING AND ADJUSTING A SAMPLE PRESET

Now let's instead set up a string pad sound based on a sample, loaded from the Sample Preset bank.

Apart from being selectable with the Osc1/Waveform dial, samples are available as Read-Only presets within the Synth Preset banks. When loaded from such a preset, some of the Synth settings – such as Amp Envelope and Velocity – are automatically set to values which suit that particular sample. All parameters can still be adjusted manually as needed.

Activate the Synth Preset List view by pressing and turning the dial.

Press the button (Shift + Mono/Legato) until is selected.

Select an appropriate Strings Ensemble sample by turning the dial.

Play a few notes. To make a pad out of the sound we will want to do a few tweaks. Let's turn to the (Ampli er Envelope) section:

While playing, adjust the Amp Env control until a suitably

$\sim$	Preset Strings Ens	
1	OrchStrings Legato	
2	OrchStrings Leg HiVib	
3	OrchStrings Marc HiVib	
4	OrchStrings Tremolo	
5	OrchStrings Pizzicato	

long tail is heard when releasing a note, perhaps at a value of around 5.0.

Similarily, use the control to create a softer and more gradual onset of the notes you play. Again, a value of around 5.0 may be suitable.

To nalize the string pad, adjust the • to give the sound a softer character. A value of around 6.0 could be a good starting point.

Since we are basing this example on a preset, you may want to set the knob to 0 (12 o'clock) when trying out point 7 above, to reset any preset velocity settings.

There are several ways to further enhance this basic string pad sound, for instance by adding modulation or by using effects. Read more about modulation options on page 34 and about effects, beginning on page page 45.

Additional samples can be added to the Nord Stage 3 by using the Nord Sound Manager software.

You can store a tweaked synthesizer sound as a preset, by pressing Shift and the Store Synth button.

# THE ARPEGGATOR

As a nal exercise, let's create a sound using the Synth section and its arpeggiator.

Make sure that only the Synth section is turned on and perform a (Shift + Unison). Set the Amp Env time to 0,

the to around 3, select a sawtooth waveform and open up the Iter a little bit. This will produce a percussive sound.

Press , play a chord on the keyboard and turn the Arpeggiator Rate knob. This will play the notes that are held down, one after the other in a repeating fashion.



Press and the Arpeggiator selector button to select a differ ent direction.

When no direction LED is lit, the direction is Up, from the lowest key and up to the highest and then it starts over again. The other directions are (down), (up and down) and (random).

Press the selector button repeatedly to select a range.

When none of the range-LEDs are lit, the range is exactly the keys that are held down. A setting of extends the range by transposing the arpeggio one octave up and plays this octave after the initial octave, adds yet another octave and gives a range of four octaves.

Press the button to keep the arpeggio going without the need for pressing the keys.

#### MASTER CLOCK

Now that we have an arpeggio going, let's try the Master Clock feature to synchronize the arpeggio and to bring in an effect as well.

Holdand turn the Arpeggiatorknob to lock the arpeggio to the Master Clock, theLED lights up.

Press down on the Mst Clk button in the Program area to dial in a tempo with the Dial. You could also press (Shift + Tap/Set) to view and adjust Master Clock settings without having to keep the button pressed down. The display will indicate the BPM. Set this to 130 BPM for this exercise. Release the button to exit, or press (Shift) if in "Clock" mode.

Tap four times on the Mst Clk button to set the tempo on the y.



Turn the Arpeggio knob to select the meter subdivision (or note values) that the arpeggio should play. The setting is shown in the Program area display as the knob is being turned. Notice how 1/4 is half the "speed" of 1/8. A "T" after a numerical value indicates triplets. Set the subdivision to 1/8.

Turn on the effect and make sure that the source is set to Synth by pressing the button repeatedly until the Synth LED lights up.

If you carefully adjust the delay time, you could match it to t the rhythm of the arpeggio, but there is another way. Let's synchronize the delay to the same clock as the arpeggio.

Holdand turn the Delayknob to activate MasterClock for the Delay. TheLED lights up.



Turn the Delay knob and again refer to the Program area display to monitor the setting.

Try 1/16, which will be half the note value or twice the "speed" of the arpeggio. Turn up the Amount knob up to but not beyond 12 o'clock to hear the delay taps together with the arpeggiated notes.

The arpeggio, the LFO on the synth, the Delay and the Effect 1 rate can be synchronized to the Master Clock in this fashion.

What's more, the Master Clock operates on both panels simultaneously so you can control arpeggios, LFOs and effects on both Panel A and B.

Some of the units have division settings that are larger than 1/1 that allows for sweeps that are longer that one bar. And you can of course synchronize some functions, while leaving others free-running if you like.

# ORGAN



The Nord Stage 3 features ve organ models, all digitally modeled; a tonewheel/B3 organ, two transistor organs (Vox and Far sa) and two Pipe Organ models, including a "Principal Pipe" section. Different organ models can be selected for Panel A and Panel B, allowing splits and layers using different organ types to be realized.

The Rotary effect – although conveniently located next to the Organ section – is covered in the Effects chapter, see page 48.

#### ON/OFF, LEVEL AND ZONE SELECT

The Organ section is turned On or Off by pressing its button. The morphable encoder controls the sound output level of the Organ.

Press (On/Off) with , to assign the Organ to any of the active keyboard zones. The green LEDs indicate which of the zones the Organ section is assigned to. Read more about Split setups and keyboard zones on page 27.

#### OCTAVE SHIFT

Use to transpose the Organ section up or down by octaves (+/- 12 semitones). When assigned to the entire keyboard it can be transposed one octave up or down. When assigned to a smaller zone the available transpose values will vary, but always provide access to the entire range of the Organ.

#### PSTICK AND SUSTPED

(Shift + Octave Shift left/down button) turns on pitch stick func-

tionality for the Organ, in which case the Organ sound can be bent 2 semitones up and down, using the pitch stick.

(Shift + Octave Shift right/up button) activates any attached sustain pedal for the Organ section. Read more on how to con gure an attached pedal in the Menus chapter, on page 54.

# DRAWBARS AND BUTTONS

The drawbars on the Nord Stage 3 88 and 76 key versions are represented by buttons and LED chain graphs. The 73 key Compact version uses "real" mechanical drawbars.

The digital drawbars behave similarly to their mechanical counterparts. On the B3, Vox, Pipe and Sine models you "pull out" and "push in" the drawbars using the drawbar buttons. With the Farf model, drawbar buttons act as rocker switches, toggling each register on or off.

The buttons are special in the way that they auto-increment/decrement the drawbar value when they are held down. If you hold a drawbar button the corresponding drawbar setting will continue to increment or decrement (within its range) until you release the button.

The drawbars can be Morph controlled, if you want to make dramatic changes with for example the Wheel or a control pedal.

While holding a drawbar button, you can press its "sibling" button to momentarily auto-increment/decrement in the opposite direction.

The Program section display also shows the current drawbar settings for the Organ section - especially useful on the Compact model where there are no drawbar LEDs.

#### SELECTING AN ORGAN MODEL



Use the selector button to select your preferred Organ model. The Pipe1 and Pipe2 settings are indicated by the upper and lower LED pairs being lit respectively.

# THE B3 MODEL

The B3 model is based on a digital model of the classic electro-mechanical tonewheel organ. This simulation utilizes innovative and advanced methods to capture every nuance of the original sound. Here are some examples:

- An extremely accurate digital model of the original chorus and vibrato scanner.
- Modeling of the individual random contact bounces for each harmonic.
- Modeling of the unique frequency characteristics of the built-in pre-ampli er, which forms the "body" of the sound.
- Simulation of the energy robbing on the tone wheels that results in the typical "compressed" sound.
- Authentic tuning of the tonewheels according to the original design.
- Extremely fast keyboard response.
- Full polyphony.

#### **B3 DRAWBARS**

The harmonic intervals for the tonewheel organ are printed on the panel below the drawbars.

For basic drawbar operation, please refer to "Drawbars and Buttons" on the previous page. Each drawbar represents a partial with a xed harmonic interval in relationship with the played note.

The illustration below shows the pitch interval among the nine drawbars when the key of C3 is played. Note that the 5 +' drawbar actually is a 5th above the fundamental harmonic (8') but in most situations is perceived as sounding below it.



VIBRATO / CHORUS		
	C2 V3 C3 C2 V3 C3 C3 C4 C4 C4 C4 C4 C4 C4 C4 C4 C4	
	$\supset$	

Three different types of choruses (C1 - C3) and three different types of vibratos (V1 - V3) are available. Select one of these types by pressing the Vibrato/Chorus selector button. The effect can be activated/deactivated for both panels individually by pressing the Vibrato/Chorus button for the Panel A and Panel B "manuals".

#### PERCUSSION

Press the button to add an extra attack to the B3 sound by having a single envelope generator controlling either the 2nd or 3rd harmonic.

The envelope "opens up" for a short moment in the beginning of the sound when you press the key(s). The percussion is a single-triggered non-legato effect. By "single-triggered" we mean that the percussion is only present when you hit the keys when no other note is sounding. In other words, if you play a note or a chord and then add more notes without releasing the previously pressed keys, there will be no percussion effect in the new notes. You have to release all keys to be able to play new notes with the percussion effect.



The button toggles between Normal and Soft percussion level. The button toggles between Slow and Fast decay times.

The button toggles between using the 2nd or 3rd partial as the source for the percussion effect.

The Percussion effect is only available for the B3 organ model.

#### **KEY CLICK CONTROL**

The key click produced by the random contact bounces is an impor tant audio artifact in the original B3 instrument. This quickly became a desirable effect amongst musicians. The click level can be adjusted in the Sound menu, read more about this on page 55.

Do not forget to try out the three tonewheel modes that are also available in the Sound menu. These will dramatically change the sound of the B3 model from a squeaky clean unit to a battered, old workhorse.

#### **VIBRATO & CHORUS**

The original vibrato and chorus scanner in a tonewheel organ consists of a modulated delay line in combination with a rotating scanner. For the Vibrato effect, phase shift is applied to the signal. For the Chorus effect, the phase-modulated signal is added to the original signal.