# nord electro 6

## **USER MANUAL**

Nord Electro 6 English

OS version: 1.2x

Edition: D



#### **CAUTION - ATTENTION**

RISK OF ELECTRIC SHOCK

DO NOT OPEN
RISQUE DE SHOCK ELECTRIQUE

NE PAS OUVRIR

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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CONFIER L'ENTRETIEN AU PERSONNEL QUALIFE.

AVIS: POUR EVITER LES RISQUES D'INCIDENTE OU D'ELECTROCUTION, N'EXPOSEZ PAS CET ARTICLE A LA PLUIE OU L'HUMIDITET.





The lightning flash with the arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated voltage within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

Le symbole éclair avec le point de flèche à l'intérieur d'un triangle équilatéral est utilisé pour alerter l'utilisateur de la presence à l'intérieur du coffret de "voltage dangereux" non isolé d'ampleur suffisante pour constituer un risque d'èléctrocution.



The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Le point d'exclamation à l'intérieur d'un triangle équilatéral est employé pour alerier l'utilisateur de la présence d'instructions importantes pour le fonctionnement et l'entretien (service) dans le livret d'instructions accompagnant l'appareil.

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.

- 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

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.

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 être exposé à des égouttements d'eau ou des éclaboussures et de plus qu'aucun objet rempli de liquide tel que des vases ne doit être 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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# 1 INTRODUCTION

#### THANK YOU!

Thank you for choosing the Nord Electro 6!

The Nord Electro 6 combines our award-winning emulations of vintage electro mechanical and acoustic instruments in one ultra-portable package. With three independent sound sections, a new streamlined user interface and the addition of seamless transitions, we're proud to present the most powerful and flexible Electro ever.

#### **FEATURES**

The Nord Electro 6 has the following main features:

- Organ section with faithful reproductions of three classic organ models, B3, Vox and Farf, as found in our acclaimed C2D combo organ.
   There are also two Pipe organ models, each with its own distinct character.
- Physical drawbars on the 61 and 73 key D models. Digital LED drawbars on the 73 key HP model.
- Piano section with acoustic Grand and Upright pianos, tine and reed based Electric pianos, Digital piano sounds, Clavinet and Harpsichord sounds and a Layer category with rich sounding piano combinations. The memory capacity for the Piano section in the Electro 6 is 1 GB.
- Sample Synth section with 512 MB of sample memory and intuitive envelope and dynamics controls.
- Comprehensive Effects section.
- Seamless Transitions: Sustaining notes will not be cut off when changing programs.
- Keyboard split functionality with dual manual organ mode and optional split widths, allowing sounds to smoothly cross-fade over split point.
- Three models: Nord Electro 6D 73 and 6D 61 with semi weighted "waterfall" keybeds and physical drawbars, and Nord Electro 6 HP 73 with a lightweight hammer action keybed and digital LED drawbars

#### NORD ONLINE

On the website nordkeyboards.com you will find:

- » Information about the Nord Electro 6 and other Nord instruments
- » Latest Operating Systems for download
- » Free software: Nord Sound Manager, Nord Sample Editor 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, Twitter and YouTube. Feel free to tag your content with our official 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 various features in a musical context.

#### READING THE MANUAL IN PDF FORMAT

This manual is available as a digital PDF file. It can be downloaded, free of charge, from the Nord Electro 6 section on our website.

#### RESTORING THE FACTORY PRESETS

The factory programs, samples and pianos are available as individual Nord Sound Manager backup files 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 at some point.

#### OS UPGRADES

The latest OS (Operating System) version for the Nord Electro 6 is always available for download from our website. Please visit our website from time to time, to make sure you have the latest version in your unit.

#### FREE SOUNDS

Since the Nord Electro 6 is designed as an open system, each and every piano and sample in the Nord Electro 6 can be replaced. This is done using the *Nord Sound Manager* application which is available as a free download from our website.

The Nord Electro 6 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 of our website.

#### **DISCLAIMER**

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## OVERVIEW



#### THE FLECTRO 6 PANEL

The Nord Electro 6 is designed to be a musically inspiring yet easy-touse instrument. Let's have a quick look at all its panel sections:

#### ORGAN SECTION - PAGE 10

The dedicated *Organ* section, with its nine drawbars for real-time adjustments to the Organ sound, uses our latest B3 tonewheel Organ model, as found in the acclaimed Nord C2D 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 its virtual circuitry reacts not only to the panel settings but also to the real time performance, simulating important foldback, compression and energy robbing characteristics. The Rotary Speaker simulation is derived from the Nord C2D which brings the Electro 6's organs to life with remarkable realism.

Two carefully modelled emulations of famous transistor organs from the 1960's – the *Vox* and the *Farf* – are also included. Finally, there are two distinct *Pipe* Organ models including a "Principal" Pipe model with two variations that deliver a wide range of versatile pipe/church organ sounds.

Any Organ model can be used in a single or dual manual configuration, each manual having an additional preset for quick switching between two distinct sounds.

#### PIANO SECTION - PAGE 14

The Nord Electro 6 benefits from the ever-growing Nord Piano Library and includes a wide range of piano and keyboard sounds including Grand, Upright and Electric pianos as well as Digital piano and Layer sounds right out of the box. New sounds are regularly made available free of charge on the <a href="https://www.nordkeyboards.com">www.nordkeyboards.com</a> website.

Among the Piano section's panel controls are buttons for activating the

Advanced String Resonance feature (for acoustic pianos), adjusting the keyboard velocity response or quickly altering the sound character using the Piano and Clavinet Equalizer settings.

#### PROGRAM SECTION - PAGE 16

A program on the Nord Electro 6 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. All this is aided by the large OLED display, which also shows Organ drawbar settings and the name of any selected Piano and/or Sample sound.

#### SAMPLE SYNTH SECTION - PAGE 19

The Nord Sample Library gives Electro 6 owners access to a huge free library of world-class sounds, including the famous vintage Mellotron and Chamberlin sounds. A large selection of samples are included from the start and the *Sample Synth* section is where these are browsed and loaded. A number of functions for adjusting the character and response of the sample are accessed directly via the panel.

#### EFFECTS SECTION - PAGE 20

The *Effects* section puts a wide selection of classic effects at your fingertips:

The Effects 1 and 2 units provide essential modulation effects such as Tremolo, Chorus and Phaser – modelled after legendary stomp boxes and effects units. The *Delay* effect can be used for anything from subtle ambience or slap-back effects to almost endless soundscapes.

Classic amplifier simulations, the *Rotary Speaker* and a punchy *Compressor* effect are found in the Amp/Spkr section. A versatile EQ with sweepable Mid range frequency can be applied to any of the Electro 6 sound engines.

Finally, the lush *Reverb* – with an optional Bright mode – provides an array of small and large room simulations for instant atmosphere.

## **GETTING STARTED**

Let's spend a few minutes getting acquainted with the fundamental features of the Nord Electro 6. In this chapter some of the most common tasks and scenarios will be described in a stepwise fashion.

#### HOOKING IT UP

- (1) Connect the Nord Electro 6 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 Electro 6 first, before the sound system. Please be careful with the output volume!

For more information on all the connections of the Electro 6, see the Connections section on page 28.

#### PANEL CONTROLS

#### DIALS AND KNOBS



The dials on the Nord Electro 6 are knobs without fixed start and stop positions, used for navigating parameters and settings. The PROGRAM dial is one such example. In this manual, dials are sometimes also referred to as encoders.



Potentiometer-type *knobs* are used for many parameters on the Nord Electro 6. 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.

Hold the SHIFT button and turn a knob to view the stored setting of a parameter 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.



**ON/OFF** 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 double-tap to select the "next" source.

#### THE SHIFT BUTTON

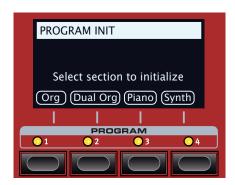


Many panel controls on the Nord Electro 6 have a secondary function, which is printed immediately below it. These additional functions are accessed by pressing and holding **SHIFT** while operating the control.

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

#### SOFT BUTTONS

One menu or settings page, or the Program Init window (shown below) may contain several related options in which case "soft buttons" are used for focusing a setting or performing a task. Soft buttons are placed at the bottom of the display and are controlled with the PROGRAM 1-4 buttons. As an example; in the scenario below, pressing the Program 3 button will initialize the panel to a Piano program.



#### **PROGRAMS**

The Program area is located at the center of the panel with an OLED display in the middle. One program contains complete settings of every parameter on the panel and is stored in the program memory of the Electro 6, with enough room for 416 programs.

Programs are organized into 26 banks, labeled A-Z. All programs can be edited and replaced as you wish.

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

#### SELECT A PROGRAM

- (1) Programs are selected by pressing any of the four **PROGRAM** buttons, located below the display. The PAGE  $\blacktriangleleft$  /  $\blacktriangleright$  buttons are used to navigate program pages - a page being a group of 4 programs. A Program bank on the Nord Electro 6 can contain 16 programs divided into 4 program pages.
- (2) Programs can also be navigated by turning the **PROGRAM** dial.

#### LIST VIFW

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

- 1 Press **SHIFT** and turn the **PROGRAM** dial to enter a list view of all the Programs.
- 2 Browse to any program, using the **PROGRAM** dial. All 26 program banks can be accessed when in List mode.



- 3 Try out the **Abc** and **Cat** soft buttons respectively. Note that in Abc mode, all programs are shown in a list sorted by name and in Cat mode as a list sorted by Category.
- 4 Press **SHIFT** again to **EXIT** the List view.
- List views for the Piano and Sample dials work in a similar 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:

- ① Dial up the first program (A:11, a piano based program) for this exercise.
- 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.

#### SELECT A NEW PIANO SOUND

- 2 Turn the **PIANO SELECT** dial to browse the piano sounds. Sounds are organized according to their type (for instance Grand and Upright).
- Try selecting a piano sound from the LIST view, accessed by pressing SHIFT and turning the PIANO SELECT dial. Use Shift again to EXIT the list view.

Note that changing any parameter on the panel causes an "E" to appear next to the program number in the display. This is to show that the program has been *edited* but not yet saved. If another program is loaded before a Store operation is performed, any edits are lost and the program will have its original settings the next time it is loaded.

#### TURN OFF MEMORY PROTECTION

When the Nord Electro 6 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.

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

- 2 Memory Protect is the first setting of the System menu. If the display shows a different setting, use the Page ◆ button to navigate to the Memory Protect setting.
- (3) Change this setting to Off by turning the PROGRAM dial.
- 4 Press **EXIT** (Shift button) to exit the *System* menu.
- This setting, like most other System settings, will be permanently stored until it is changed again.

Read more about menu settings on page 26.

#### STORE A PROGRAM

- 1 Press the **STORE** button to the left of the display once, to begin the process of storing the current program.
- 2 The **STORE** LED will begin to flash and the display will ask you for the location to which you want to store the program.



- If you want to store the edited version to the current location, replacing the original, simply press STORE again. If not, use the dial, PROGRAM and/or PAGE ◀ / ▶ 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 **STORE** again to confirm 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 16.

#### LIVE MODE

The eight **LIVE** programs, divided into two pages – A:1-4 and B:1-4 – differ from other programs in that all edits made to them are instantly stored, without the need for a manual Store operation.

- Press LIVE MODE and use the PROGRAM and PAGE buttons to navigate the eight Live programs.
- 2 Make an edit, such as activating one of the effects sections, to one of the programs.
- 3 Select a different Live program and then return to the one that was edited. Note that the edit was automatically stored.

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

If Live Mode is active and you wish 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). Conversely, programs can also be stored *into* any of the eight Live Mode memory locations by pressing **LIVE MODE** and selecting one of the Live program locations.

#### **ACTIVATE FFFCTS**

- 1 Activate the reverb by pressing the Reverb **ON** button.
- (2) Adjust the **DRY/WET** balance with the knob above the reverb selector.
- (3) Activate the delay effect by pressing the Delay **ON/OFF** button once.
- (4) The LEDs above the button indicate which sound engine is routed to the effect (**0** = Organ, **P** = Piano and **S** = Sample Synth). Press SHIFT and the Delay SOURCE button until the P LED is lit, if it is not already.
- Double-tapping the On Off / Source button is a shortcut for quickly changing the source for any effects unit.
- (5) Try the RATE, FEEDBACK and DRY/WET controls, to alter the character and intensity of the Delay effect.

#### ACTIVATING THE ROTARY SPEAKER

The Rotary Speaker – being most commonly used with the Organ – has its speed controls located next to that section. The effect itself is located in the SPKR/COMP unit however, and is activated and assigned just as the Delay effect described above.

Pressing the Rotary Speed control when the effect is off will automatically turn ON the Rotary Speaker and assign it to the left-most of the currently active sound engines.

#### CREATE A SPLIT

- (1) Make sure that the Piano section is turned on.
- (2) To activate Split mode, press the KBD SPLIT button, located in the top row above the Program area display.
- (3) To adjust the position of the Split point, press and hold the KBD SPLIT button.
- The "▼" symbol indicates that this button has functions which are accessed by keeping the button pressed down.



(4) There are two settings for the split point; position and width. Make sure that the Position setting is focused (by pressing the Pos soft button) and set the split point to C4 using the dial.

The keyboard is now divided into two zones, the split point being indicated with a green LED above the keyboard.

#### ASSIGN THE PIANO TO THE UPPER ZONE

(5) Hold **SHIFT** and press the Piano **ZONE SELECT** button so that only the **UP** LED is lit.

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

#### SET THE SAMPLE SYNTH TO THE LOWER ZONE

(6) Turn ON the Sample Synth section. Hold SHIFT and press Sample Synth ZONE SELECT so that the LO LED is lit. This will assign the Sample Synth to the lower half of the keyboard.

#### LOAD A SAMPLE

(1) Turn the **SAMPLE SELECT** dial and select a sample from the Sample bank, perhaps a bass sound. The location and name of the sample are shown at the bottom of the display.

When a sample is selected, preset settings for the Sample Synth envelope, Dynamics and Filter settings are also loaded. These parameters can subsequently be adjusted manually as desired. Descriptions of these controls are found in the Sample Synth reference chapter, starting on page 19.

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

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

- 2 Again, press and hold the KBD SPLIT button, located in the top row above the Program area display.
- Press the **Width** soft button. The Split width for each split point can now be adjusted.
- 4) Set the width value to "Lrg" (large) by turning the dial. Release the KBD SPLIT button.

Playing across the Split point will now "cross-fade" between the lower and the upper sound. Note that the split LED above the keyboard is lit with a red light, indicating that a large split width is being used. With a small width the LED will be yellow, and with width set to "off" the LED will be green.

#### CREATE A TWO MANUAL B3

Setting up an Organ split, with two independent manuals, can be done very quickly. Let's try out the Program Init feature which will configure the Organ section correctly, and turn off other active sound engines:

- 1 Press **PROG INIT** (Shift + Program 3 button). The display now presents four initialize options to choose from.
- 2 Press the **Dual Org** soft button (Program 2 button).
- (3) Make sure the **ORGAN MODEL** selector is set to **B3** and press the ROTARY Slow/Fast control to automatically turn on the Rotary Speaker effect.

A keyboard split has now been created, providing one Organ manual to the left of the split point - referred to as the Lower manual - and another to the right which is referred to as Upper. Both Organ KB Zone LEDs are now lit with a yellow color, meaning that the Organ is active across the whole keyboard, in a Dual Organ split configuration.

- (4) Set the drawbars, percussion, and other organ settings for the Upper Manual as desired.
- (5) Press the **EDIT LOWER** button to focus the Lower manual for editing and adjust the drawbars. Note that the display shows drawbar settings for both manuals, but that the non-focused ones are "grayed out".
- It is easy to set up a dual manual organ by using an external keyboard and the External Kb To Lo function. Read more about this on page 17.

# 4 ORGAN



The Nord Electro 6 features five organ models, all digitally modeled: A B3 tonewheel organ with a dedicated B3 Bass mode, two transistor organs and two Pipe organ models, including a "principal pipe" section.

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

The Organ section is turned On or Off by pressing its **ON/OFF** button. The **LEVEL** knob controls the output volume of the Organ.

Press **ZONE SELECT** (Shift + On/Off) to assign the Organ to either or both of the two keyboard zones. The **KBD ZONE** LEDs indicate the zones to which the Organ section is assigned.

#### OCTAVE UP/DOWN

Use **OCTAVE UP/DOWN** 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 give access to the entire range of the Organ.

To use Octave Up/Dn for the lower manual, in Dual Organ mode, Edit Lower mode needs to be active.

#### SUSTPED AND CTRLPED

SUSTPED (Shift + Octave Shift Up) activates an attached sustain pedal for the Organ section.

CTRLPED (Shift + Octave Shift Up) assigns an attached control pedal as volume control for the Organ section. When the B3 or B3 Bass model is

selected, the pedal will function as a traditional swell pedal, which does not lower the volume all the way to zero, and also changes the character of the sound – especially when the Rotary Speaker Drive is used.

Read more about how to configure pedals on page 26.

#### DRAWBARS AND BUTTONS

The Nord Electro 6D models use "real" mechanical drawbars. The drawbars on the Nord Electro 6HP model are represented by buttons and LED chain graphs.

When a program is loaded, the physical drawbars will in most cases not correspond to their stored settings. As soon as a drawbar is moved however, its setting will be the same as that of the physical position.

There is one exception to the behaviour described above: Any program stored with Manual Organ activated will use the actual drawbar positions when it is loaded.

The digital drawbars' behavior is similar to their mechanical counterparts. On the *B3*, *B3 Bass*, *Vox* and *Pipe* 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 Program section display always shows the current drawbar settings for the Organ section.

#### SELECTING AN ORGAN MODEL



Use the **ORGAN MODEL** selector button to select your preferred Organ model: **B3**, **VOX**, **FARF**, **PIPE1**, **PIPE2** or **B3 BASS**.

With the B3 Bass setting, its drawbars are placed on the "upper" manual in non-Dual Organ mode, making it possible to create B3 Bass and Piano/Sample Synth splits. In Dual Organ mode the bass drawbars

are found on the lower manual, with a standard set of B3 drawbars on the upper manual.

#### THE B3 MODEL

The B3 model is 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:

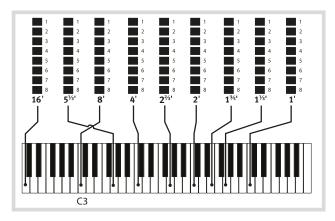
- An extremely accurate digital model of the original chorus and vibrato scanner.
- Modeling of the individual random contact bounces for each harmonic.
- Modeling of the unique frequency characteristics of the built-in pre-amplifier, which forms the "body" of the sound.
- Simulation of the energy robbing 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 B3 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 fixed 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 is a 5th above the fundamental harmonic (8') but in many situations is perceived as sounding below it.



#### **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.

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.

#### **PERCUSSION**



Press the **PERCUSSION ON** 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 **SOFT** button toggles between Normal and Soft percussion level. The **FAST** button toggles between Slow and Fast decay times.

The **THIRD** 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 important audio artifact in the original B3 instrument and quickly became a desirable effect among musicians. The click level can be adjusted in the Sound menu, read more about this on page 27.

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.

#### THE VOX MODEL

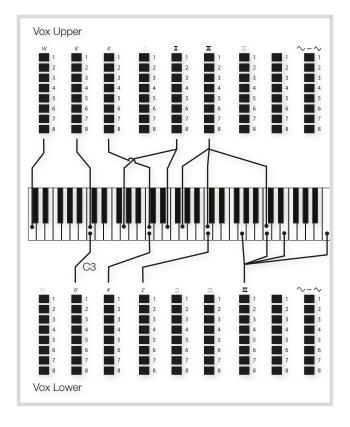
The original Vox organ is probably the most famous of all the transistor based combo organs that emerged in the early 60's. Transistor technology made it possible to manufacture compact and portable organ instruments. Compared to the mighty sound of tonewheel based organs, transistor organs generally sounded reedier and weaker, but this one had a distinctive sound character which together with the portability and cool design (inverse colored keyboard and chrome "Z-frame" stand) made the instrument massively popular at the time. The sound is timeless and recreated faithfully by the Nord Electro 6.

#### **VOX DRAWBARS**

The labels used for the Vox drawbars are printed on the row directly above the drawbar LEDs.

For basic drawbar operation, please refer to "Drawbars and Buttons" on page 10.

The seven drawbars to the left control the level of each partial. Each partial has a fixed harmonic interval relating to the played note. The illustration below shows the pitch interval of the drawbars when the key of C3 is played. The intervals vary for the upper and lower manual on the original instrument, and the Nord Electro 6 implements a combination of the two for both manuals.



The rightmost drawbar controls the mix between a filtered signal sounding soft and dark, and an unfiltered signal sounding bright and intense.

#### **VIBRATO**

There are several types of vibrato and choruses available for the Vox model, which is activated using the **ON** button in the Vibrato section. The **V3** setting is the one that is modeled after the original instrument.

#### THE FARE MODEL

The typical "buzzy" sound of this vintage instrument is one of the most distinct and easily recognizable organ sounds ever created; yet it is actually possible to get quite a wide range of sounds out of the instrument. Note that the voices aren't supposed to replicate the instruments they are named after, but rather to describe the basic tonal characteristic of the voice: Flute = soft, Oboe = reedy, Trumpet = brassy etc.

#### FARF REGISTERS

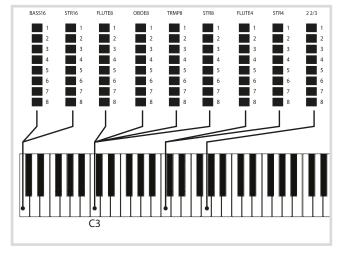
The labels used for the **FARF** drawbars/registers are printed on the upper row, above the drawbar LEDs or drawbars.

The drawbars act as on/off switches, or "register selectors" when the Farf model is selected. Instead of drawbars, the original instrument used rocker switches for selecting instrument voices (in reality different filter settings) in various footage (octave) ranges. On the Electro 6 HP model, drawbar LEDs 5-8 are lit up for an activated voice, and LEDs 1-4 are for a deactivated voice. On the Electro 6 D models, pulling the drawbars more than half way out will activate the corresponding register.

As usual, the Program section display will show current drawbar settings for the Organ section. The table below shows the original register name.

Drawbar	Voice	Panel Name
1	Bass 16	BASS16
2	Strings 16	STR16
3	Flute 8	FLUTE8
4	Oboe 8	OBOE8
5	Trumpet 8	TRMP8
6	Strings 8	STR8
7	Flute 4	FLUTE4
8	Strings 4	STR4
9	A bright voice, an octave and a fifth above the fundamental	2 2/3

The illustration below shows the pitch interval between each voice when the key of C3 is played. Though some voices have the same pitch, they differ in tonal character.



#### **VIBRATO**

The original instrument has two basic vibrato modes; "Light" and "Heavy", with different rates for each mode. There are several types of vibrato and choruses available for the Farf model on the Nord Electro 6, which are activated using the **ON** button in the Vibrato section.

The V1, V2 and the V3 settings are the ones that are modeled after the original instrument's.

#### PIPF ORGANS

#### PIPF 1

The **PIPE1** organ model is not designed to imitate any existing instrument, but rather to be a useful and appealing "all-purpose" organ, which works equally well with or without Rotary speaker. In some ways its sound is similar to that of the B3 organ – but without any of its electromechanical behaviors and artifacts.

#### PIPF 2

The **PIPE2** organ model faithfully recreates a *principal* pipe section - the sets of metal pipes, or ranks, that commonly make up the backbone of a pipe or church organ. While other ranks may attempt to recreate the sounds of other instruments (flutes, trumpets, strings etc.) the principal sound is non-imitative and unique to the pipe organ.

#### PIPF 1&2 CHORUS

Activating **VIBRATO/CHORUS** for the Pipe 1 or 2 model will switch to a variation which is tuned with less precision. This produces chorus-like effects, slight dissonances and arguably more realism when combining registers.

#### PIPE 1&2 REGISTERS

The pipe lengths available for both Pipe models correspond to those of the B3 model, ranging from 16 feet to 1 foot.

#### **PRESET**



There are two sets of drawbars available for each Organ manual – the default drawbar set (Preset LED not lit) and the Preset. This provides a quick way of changing between two organ sound variations, without having to change programs.

To switch between the two drawbar settings press the **PRESET** button. The Preset LED being lit indicates that the Preset is active.

In order to modify the Preset, press down on the button – as indicated by the " $\neg$ " symbol – while adjusting the drawbars and other settings.

When in the non-Preset mode, the current drawbar positions can be stored to the Preset by pressing **COPY TO PRESET** (Shift + Preset).

#### MANUAL ORGAN



The **MANUAL ORGAN** (Shift + Octave Down) can be thought of as a separate – program independent – organ, the settings of which are in always sync regardless of which program it is loaded from. Additionally the actual positions of the drawbars are always used when Manual Organ is activated or loaded from a program.

By using Manual Organ and the External KBD to Lo feature (see page 17), a separate keyboard could be used to control the organ on a per-program basis in a manner where the current drawbar positions are always used, and all other organ settings remain the same, regardless of which program is loaded.

#### **DUAL ORGAN**



Press **DUAL ORGAN** (Shift + Edit Lower Manual) to instantly create a double manual organ setup, with the keyboard split into two zones. The lower (**LO**) manual will be on the left side of the split point and the upper (**UP**) manual to the right.

To adjust the keyboard split position, press down on the **KBD SPLIT** button in the Program area and use the dial. See page 16 for more information on this.

#### **EDIT LOWER MANUAL**

Press the **EDIT LOWER MANUAL** button to focus the lower manual for editing and drawbar interaction. To return to the upper manual, simply press the button again. In Dual Organ mode the drawbar representations in the display will show which manual is currently focused by "graying out" the other one. The example below shows a Live program set up as a Dual Organ split in B3 Bass mode, with the upper manual focused for editing.



The Edit Lower Manual control is only available in Dual Organ mode.

#### **ROTARY SPEAKER**

The Rotary Speaker controls are logically placed next to the Organ section. Its settings are described in detail in the Effects chapter on page 21.

# 5 PIANO



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

The Piano section is turned On or Off by pressing its **ON/OFF** button. The **LEVEL** knob controls the volume of the Piano sound.

Press **ZONE SELECT** (Shift + On/Off), to assign the Piano to one or both of the two keyboard zones. The **KBD ZONE** LEDs indicate the zones to which the Piano section is assigned. Read more about Split set-ups on page 16.

#### OCTAVE UP/DOWN

Use **OCTAVE UP/DOWN** to transpose the Piano 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 only one zone the available transpose values will vary, but always provide access to the entire range of the Piano.

#### SUSTPED AND CTRLPED

**SUSTPED** (Shift + Octave Up) activates any attached sustain pedal for the Piano section. Read more on how to configure an attached pedal in the Menus chapter, on page 26.

**CTRLPED** (Shift + Octave Up) assigns an attached control pedal as volume control for the Piano section.

Both the sustain and control pedal can be active at the same time, indicated by both LEDs being lit.

#### ABOUT THE PIANO SOUNDS

The Pianos in the Nord Electro 6 are organized into six *categories*. Each category can contain several instrument *models*. New piano sounds can

be downloaded from the www.nordkeyboards.com website and added to the Nord Electro 6 by using the Nord Sound Manager.

Right out of the box, the Nord Electro 6 features a fine collection of carefully selected acoustic and electric pianos, digital piano sounds and piano layers. A lot of effort was made to ensure a nuanced response and sound, matching the original models as closely as possible.

The available memory size for piano sounds is 1 Gigabyte.

When you download piano instruments with the Nord Sound Manager, these will always automatically be placed into their corresponding category.

A program "knows" which piano to use by referencing to the category and the model number. If a program references a piano that isn't currently downloaded onto the Nord Electro 6, the display will read "Piano not found". If this happens; either navigate to another instrument model from the same or another category (using the Piano Select dial) and select to use this piano instead, or use the Nord Sound Manager application to download the missing instrument to the Electro 6.

#### ABOUT PIANO SIZE

Nord Piano Library sounds come in up to four different sizes. Below is an overview of how they differ in functionality:

	Sml	Med	Lrg	XL
Stereo sampled	1	1	1	1
Detailed velocity mapping	1	1	1	1
String resonance for middle range		1		
String resonance for entire range			1	1
Fully mapped keyboard				1

Small (Sml) piano files use the least amount of space in the piano memory as they do not contain any pedal-down String Resonance samples at all.

The *Medium* (Med) versions include pedal-down String Resonance samples for the important middle region of the range.

The Large (Lrg) versions have the pedal-down String Resonance samples all across the keyboard.

Many pianos are also available in an Extra Large (XL) version. These are "fully mapped" across the keyboard, meaning that each key on the Nord now matches its exact equivalent on the original instrument. This naturally imposes a substantial increase in size.

#### PIANO SELECT

#### CATEGORY AND MODEL

Use the **PIANO SELECT** dial to choose which piano sound you want to use. These are the six categories into which all piano sounds are placed:

CATEGORY	DESCRIPTION
Grand	Acoustic and electric grand pianos
Upright	Upright pianos
Electric	Electric Pianos (tine and reed based)
Clav/Hps	Clavinets and Harpsichords
Digital	Digital piano sounds
Layer	Layered piano sounds

Pianos can not be moved from one category to another.

The name of the selected model is shown at the bottom of the Program section display, indicated by a keyboard icon.

#### ABOUT THE CLAVINET

On the original Clavinet D6, different pick-up combinations were selected by pressing a number of rocker switches. This functionality is faithfully simulated by the Nord Electro 6, which means that all original Clavinet D6 pickup selections are available.

#### PICK-UP TYPE DESCRIPTION

Clav Model A: Only the "neck" pick-up; a warmer, less bright sound. Clav Model B: Only the "bridge" pick-up; a bright sound. Clav Model C: Both pick-ups on and in phase; a very full sound. Clav Model D: Both pick-ups 180 degrees out of phase; the fundamental is almost cancelled out and the sound becomes thin.

#### LIST VIEW

Pressing SHIFT and turning the PIANO SELECT dial activates the LIST view for piano sounds.



The list itself shows the currently selected model, indicated by a rectangle, as well as the preceding and following models.

The Piano list top row displays the current category name ("Grand" in this case), the number of models of that type (5), and the index of the currently selected model (2). The default sort order is numerical, but pianos can also be browsed alphabetically or by category, by pressing the Abc or Cat soft button respectively.

#### **KBD TOUCH**

KBD TOUCH

Pianos from the Nord Piano Libary typically have a very wide dynamic range, and their dynamic response can be adjusted according to what fits your personal style or the context of your performance.

The default KBD TOUCH setting (all LEDs being off) facilitates playing softly yet expressively. With each increment of the Kbd Touch setting (1, 2 and 3) less effort is required to play loudly.

#### PIANO INFO

Pressing PIANO INFO (Shift + Octave Down) will display some additional info about the currently selected model, such as its version number and its exact size.

#### MONO

In MONO mode (Shift + KBD Touch) all stereo sampled pianos will be played back in mono. The mono versions of our piano sounds are specially designed to provide optimal sound, even in mono.

#### STRING RES AND SOFT RELEASE

#### STRING RESONANCE

String Resonance refers to the acoustic phenomenon that occurs when strings, or parts of strings, resonate at their fundamental or harmonic frequencies when other strings are played.

When STRING RES is turned on, all notes you play will affect each other to reproduce the wonderful acoustics that occurs inside an acoustic grand or upright piano.

Also, when the sustain pedal is pressed down the fact that all dampers are being lifted will further add to the resonance effect.

The sound level of the string resonance effect can be set in the Sound menu, see page 27.

If a piano is selected that isn't compatible with the String Resonance feature, this function will be disabled. This applies to e.g. small (Sml) versions of the grand pianos and uprights, and the electric, digital and layer pianos.

#### SOFT RELEASE

Activating SOFT RELEASE will add a slightly longer and less pronounced release to the piano sound. This is equivalent to what happens when you adjust the damper tension in an acoustic or an electromechanical instrument. The added release is individual for every note and responds dynamically to the force with which you play.

Some Piano types, such as Clavinets and Harpsichords do not support the Soft Release feature. In these cases the button will be disabled.

#### **FQUALIZER**

#### PIANO FO SETTINGS



The **EQUALIZER** is used for instantly altering the frequency content and character of the selected piano sound:

The SOFT setting filters out much of the high frequencies and emphasizes the lower range, resulting in a subdued and mellow sound.

The MID mode de-emphasizes both high and low frequency ranges, making for a focused and cutting sound with a prominent mid-range.

The BRIGHT mode emphasizes the high frequency range, producing a bright, brilliant sound which is also useful for bringing out the "ping" in electric pianos.

#### **CLAV EQ SETTINGS**

An original Clavinet is equipped with 4 additional rocker switches, which control the onboard EQ. Most of these settings combinations are available on the Nord Electro 6. Use the EQUALIZER button to select your preferred combination of the filter settings.

# 6 PROGRAM



The **PROGRAM** section provides access to performance functions such as loading and storing programs, access to Live programs, keyboard split functionality and more. This is also where menus containing *System* and *Sound* settings are found. The menus and their settings are covered in a separate chapter, starting on page 26.

#### **STORE**



The **STORE** button is used for storing an edited program to any location in the program banks. Storing a program will overwrite the existing data in the selected memory location.

• When the Nord Electro 6 is shipped from factory its memory is protected, to avoid accidental overwriting of programs. To be able to store Programs, the Memory Protect parameter needs to be set to "Off" in the System menu. Read more about this on page 26.

#### STORING A PROGRAM

Here is how to store a program without changing its name:

1 Press the **STORE** button once. The Store LED will start blinking, and the display will show the name of the program and its location.



- To select a different store location use the dial and/or PROGRAM 1-4 and PAGE ◀ / ▶ buttons. A program can also be stored to one of the Live program locations by pressing the LIVE MODE button and then selecting the desired Live program. The program at the selected destination can always be auditioned by playing the keyboard.
- To cancel an ongoing Store operation, press EXIT.
- 3 When a suitable location has been selected, press **STORE** again to confirm the operation.

#### NAMING A PROGRAM (STORE AS...)

- 1 To store and name your program press **STORE AS...** (Shift + Store).



- 3 To assign your program a category hold down the **Cat** soft button and select any of the 20 categories from the list.
- 4 Press **STORE** to bring up the *Store Program To* screen. Use the dial and/or **PAGE** 4 / and Program buttons to select a location.
- (5) When a suitable location has been selected, press STORE again.
- Naming programs can also be done with the Nord Sound Manager.

#### **KBD SPLIT**



The Nord Electro 6 keyboard can be split into two zones, referred to as **LO** (Lower) and **UP** (Upper), separated by the *split point*. Each sound engine (Organ, Piano or Sample Synth) can be assigned to either or both of these zones.

A single press on the **KBD SPLIT** button will simply turn the split on or off. After a split has been activated, use the **ZONE SELECT** buttons (Shift + KBD Zone) in each instrument section to assign it to one or more zones. The **LO** and **UP** Zone LEDs above the Zone Select button indicates the current assignment.

#### KEYBOARD SPLIT SETTINGS

Pressing down on the **KBD SPLIT** button, as indicated by the "▼" symbol, will open up the Keyboard Split settings page in the display.

#### **CHOOSING A SPLIT POSITION**

Use the dial to choose one of the 6 keyboard split positions, *C3-F5*, on the Keyboard Split position page. LEDs are provided above the keyboard, indicating which split position is active.

#### SPLIT WIDTH SETTINGS

Normally the transition between two keyboard zones is immediate, with no overlap between the sounds selected for each zone. By setting a *Width*, sounds can instead be mixed or "cross-faded" across the split point, creating a smoother transition between the sounds.

To adjust split Width, keep the **KBD SPLIT** button held down and press the **Width** soft button, corresponding to the **PROGRAM 2** button. There are three different settings, selectable by turning the dial:



**Off**: With the *Off* setting there is no cross-fade between sounds.

**Sml**: The *Sml* setting represents a total width of 12 semitones. The sound *below* the split point fades out across 6 notes *above* it and sounds *above* the split point will similarily reach 6 notes *below* it.

**Lrg**: The *Lrg* setting provides a width of 24 semitones, 12 below the split point and 12 above it.

#### EXTERNAL KBD TO LO

The **EXTERNAL KBD TO LO** feature allows for playing and controlling the Electro 6 sound engines from an external keyboard connected to its MIDI input. This can be handy in live situations where a secondary keyboard can be used as a controller for parts of the Nord Electro 6, on a per-program basis.

• When a sound engine is in External KBD to Lo mode its KB Zone LEDs will be lit with a red light - indicating that it is not controlled from the internal keyboard.

In External KBD to Lo mode the  ${\bf UP}$  keyboard zone corresponds to the entire Nord Electro 6 keyboard.

All parameter controls for externally controlled sound engines are still accessible from the Nord Electro 6. This means that Organ drawbars, Piano settings etc. can be adjusted as usual. The External KBD to Lo setting is stored with a Program, along with all other panel settings.

• The MIDI Channel for the External Keyboard feature is set in the System menu. Read more on page 27.

#### SHIFT / EXIT BUTTON



Many controls have a *secondary* function which is accessed by holding **SHIFT** and pressing the button or turning the dial. Shift functions are always printed *below* the corresponding control. For example, holding Shift and

pressing the Program 2 button will open up the Sound Menu. The Shift button is also used to **EXIT** menus, or for cancelling Store operations.

#### LIVE PROGRAMS



The Nord Electro 6 has eight easy-to-access Live programs. These programs are special in that edits to them are *automatically stored*. When exiting a Live Program or powering off the machine all edits are saved, without the need for a manual Store operation. To select a Live Pro-

gram, press **LIVE MODE** and then any of the *1-4* buttons in the Program area. Use the **PAGE** buttons to navigate between the two Live pages.

A Live program can be stored to a location in the program banks using the standard methods. Conversely, a regular program can also be stored into a Live program location.

#### TRANSPOSE ON/SET

The Nord Electro 6 can be transposed in +6/-6 semitone steps on a per-program basis. Hold down **TRANSP** (Shift + Live Mode) and set the value by turning the dial. Pressing **TRANSP** turns off or on a transposition. Transpose settings are saved and recalled as part of a program.

To set up a transpose that affects **all** programs, use the Global Transpose parameter in the System Menu.

#### PROGRAM BUTTONS

The **PROGRAM 1-4** buttons give you immediate access to a range of four programs – a *Page* – within the current program bank. They are also used as *soft buttons* when operating menu settings. Read more about soft button functionality on page 7.

#### WHAT IS A PROGRAM?

A *Program* contains references to the selected piano and/or sample sounds, and all settings made on the panel except for Master Level. A program does *not* store settings made in the System or Sound menus.

#### SYSTEM AND SOUND MENUS

Press **SYSTEM** (Shift + Program 1) or **SOUND** (Shift + Program 2) to enter the System or Sound menu. The System menu is also home to all MIDI settings. To read more all available menu settings, turn to page 26.

#### **PROG INIT**

The **PROG INIT** (Shift + Program 3 button) functions can be used to quickly initialize the panel to one of four basic configurations:

**Org/Piano/Synth**: Activates the selected sound engine, and sets it as Source for all effects. Other sound engines are deactivated.

**Dual Org** (Organ Split): Activates the Organ section and KBD Split, and turns on the Dual Organ function. It also sets Source to **0** (Organ) for all effects. All other sound engines are deactivated.

#### PROGRAM DIAI



The **PROGRAM** dial to the right of the Display is used to select programs, to set parameter values and to enter characters in program names. Pressing **SHIFT** while turning the dial activates the **LIST** function, which will display all programs in a list.

#### PROGRAM LIST, ABC AND CAT

The **LIST** (Shift + Program dial) view provides great overview when browsing programs linearly (**Num** selected in the display) but also presents two additional sort modes: **Abc** (Program 2) and **Cat** (Program 3).

Abc sorts the list alphabetically while Cat will display all programs of the selected category. To select a specific character or category, hold down the **Abc** or **Cat** soft button respectively (as indicated by the "▼" symbol) and use the dial.



• The List sort mode is remembered until List view is entered again.

#### NUMERIC PAD NAVIGATION MODE

There are two distinct options for how programs and banks are navigated: The default "Page based" mode and the *Numeric Pad* mode. Which mode is used is determined in the System Menu (see page 26).

In Numeric Pad mode the Program 1-4 buttons are used for entering any program number (11-44) within the current bank, rather than directly switching between the 4 programs on a page. As an example, to select program 12 within the current bank, first press Program button 1 (to select page 1) and then Program button 2 (to select program 2 within that page). Here are some additional points to keep in mind:

- In Numeric Pad mode the PAGE buttons switch between banks.
- The Program dial can be used for switching programs incrementally, just as in Page Based mode.
- A "num" symbol in the top right corner of the display indicates that Numeric Pad navigation is active.



In this example, the Program 1 button has been pressed. The dash (-) indicates that another digit can be entered, to select program 11-14.

#### MIDI LED INDICATOR



The **MIDI** LED, located in the top right corner of the Program section, blinks as incoming MIDI messages are received by the MIDI In port, or over USB.

#### PAGE BUTTONS



Program pages – or banks, when in Numeric Pad navigation mode – are navigated with the PAGE ◀ / ▶ buttons. Each bank (A-Z) holds 4 pages, with 4 programs in each page. They are also used for navigating menu settings, and for moving between categories/characters when browsing lists in Cat or Abc mode.

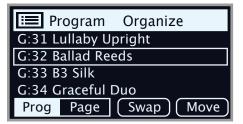
#### **ORGANI7F**

The **ORGANIZE** (Shift + Program 4) view allows for moving or "swapping" programs within the program banks. This can be done either on a per-program basis when the **Prog** view is focused, or an a page basis – handling sets of 4 programs at a time – when **Page** view is selected.

Page operations are especially useful when preparing a set list or similar, as *groups* of programs that are used within the same song can then be arranged in a specific order.

#### ENTER THE ORGANIZE VIEW

Press **ORGANIZE** (Shift + Program 4) and then press either **Prog** (Program 1) or **Page** (Program 2), depending on what sort of operation should be performed.



#### SWAP PROGRAMS OR PAGES

A Swap operation interchanges the positions of two programs or pages.

- 2 Use the dial to select the program or page location which should be swapped with another and press **Swap**.
- In Page view, the program range, i.e. "G:31-34", is displayed but only the name of the **first** program is shown for each page.
- 3 Use the dial to select the destination and press **Ok** to complete the Swap operation. Pressing **Undo** will instead cancel the operation.



#### MOVE A PROGRAM OR PAGE

- 4 Use the dial to select a program or page which should be moved to another location and press **Move**
- 5 Select the *destination* location for the operation, using the dial and press **Ok**. Pressing **Undo** will instead cancel the operation.



- △ Note that programs between the source and destination locations are shifted one step up or down, changing which programs are part of each page within the affected range.
- Programs can also be organized using the Nord Sound Manager.

# SAMPLE SYNTH



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

The Sample Synth section is turned On or Off by pressing its ON/OFF button. The **LEVEL** dial controls the volume of the Sample Synth. Press **ZONE SELECT** (Shift + On/Off) to assign the Sample Synth to any of the active keyboard zones. The KBD ZONE LEDs indicate the zones to which the Sample Synth is assigned. Read more about this on page 16.

#### OCTAVE UP/DOWN

Use OCTAVE UP/DOWN to transpose the Synth 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 only one zone the available transpose values will vary, but always provide access to the entire range of the synthesizer.

#### SUSTPED AND CTRLPED

SUSTPED (Shift + Octave Up) activates any attached sustain pedal for the Synth section.

CTRLPED (Shift + Octave Up) assigns any attached control pedal as a volume control for the Synth section.

Read more on how to configure attached pedals on page 26.

#### ABOUT THE SAMPLE SYNTH

The versatile Sample Synth section can hold up to 512 MB of samples and comes with a large selection right out of the box. Additional samples can be found in the Nord Sample Library section of the www.nordkeyboards.com website, and are downloaded to the instrument using the Nord Sound Manager software. To further the possibilities, custom samples can be created from any sound source using the Nord Sample Editor application, also found on the Nord website.

#### SELECTING A SAMPLE

Use the **SAMPLE SELECT** dial to scroll through the available samples. The position and name of the selected sample is shown in the Program area display. This selection is stored in the program when a Store operation is performed.

#### LIST VIEW

Pressing SHIFT while turning the SAMPLE SELECT dial allows for browsing all samples in a list. The Abc and Cat soft buttons can be used for displaying samples based on name or category. To filter out only the samples from a certain category, press down on the Cat soft button and select the desired category using the PROGRAM dial.



#### SHAPING THE SOUND

There are several ways to fine-tune the sound and behaviour of a loaded sample, in order to make it more or less dynamic and responsive. Each sample comes with *preset* values for the parameters below, which are automatically loaded when a sample is selected. Of course, all controls can still be adjusted manually as desired.

#### **DYNAMICS**

With the **DYNAMICS** control four different levels of velocity response can be selected. If this funcion is turned off (no LED being lit) samples will always play back at full velocity. When active, the 1, 2 and 3 settings provide increasing degrees of dynamic range.

#### **FILTER**

Press FILTER (Shift + Dynamics) to apply a velocity sensitive low pass filter to the Sample Synth. The filter reacts to how hard the key is being played and gives the sound a more dampened quality when played softly and a brighter character when more force is applied to the key.

#### ATTACK, SUSTAIN AND DECAY/RELEASE

These controls allow for setting the contour, or envelope, of the Sample Synth sound:

ATTACK controls the time it takes for the sample to reach its full level while **DECAY/RELEASE** determines how quickly the sample fades after having been triggered. At 12 o'clock the sound is in SUSTAIN mode, meaning that a sample will sound as long as the key is being pressed. Settings past 12 o'clock give samples an increasingly long tail after the key has been released.

## 8 EFFECTS



#### **ACTIVATING EFFECTS**

To enable an effect, press its **ON/OFF** button. The LEDs above the button indicate which sound engine the effect is assigned to;  $\mathbf{0} = \text{Organ}$ ,  $\mathbf{P} = \text{Piano}$  and  $\mathbf{S} = \text{Sample Synth}$ . Press **SOURCE** (Shift + On/Off) to change the sound engine assignment.

Source can also be changed by double-clicking the Source button.

#### **EFFECT 1**

The **EFFECT 1** unit offers six different types of modulation effects. Use its Selector button to switch between the available settings.

#### TREM (TREMOLO)

**TREM** (Tremolo) provides a volume modulation that continuously varies the volume of the output signal. Tremolo is a very common effect to use with electric pianos.

There are three intensities, **TREM 1**, **2** and **3** (1+2) to choose from.

#### PAN (AUTO PAN)

**PAN** is an automatic panning modulation that smoothly moves the signal between the left and right sides of the stereo panorama.

There are three different intesities, **PAN 1**, **2** and **3** (1+2) to choose from.



#### WAH

The **WAH** (Wah-Wah) effect gives the sound a characteristic, "Quack"-like character and can be extremely useful on electric pianos and Clavinets. The Wah-Wah modulation is a lowpass type of filter that can be swept across the frequency range using the Effect 1 knob. During the sweep, the filter's characteristics also changes.

The Wah effect uses the signal's amplitude to control the filter sweep range, making the effect "velocity sensitive" (technically referred to as an "envelope follower").

This effect can also be used as a traditional Pedal Wah with an expression pedal connected to the Control Pedal jack, if the CTRLPED mode for Effect 1 is engaged.

#### RM (RING MODULATION)

Ring Modulation (RM) is a type of modulation where two signals are multiplied with each other, resulting in an in-harmonic "bell like" sound. On the Nord Electro 6 the instrument signal is multiplied with a sine wave.

The Ring Modulation amount is fixed, and its rate is controlled by the Effect 1 knob.

#### **CTRLPED**

All effects in the Effect 1 section can be controlled by a pedal connected to the Ctrl Ped input jack, achieved by pressing **CTRLPED** (Shift + Effect 1 selector). For the Tremolo and Pan effects, the pedal controls the effect *amount* – something which can not be done from the panel.

For Wah and RM, the pedal mirrors the Effect 1 knob which in case of the Wah makes it behave as a traditional Pedal Wah, and with the RM effect provides pedal control of the modulation rate.

#### EFFECT 2

**EFFECT 2** provides a selection of modulation effects, including two types of Phaser, a Flanger, two Chorus types and a Vibe effect. Each effect has its *rate* controlled by the Effect 2 knob.

#### PHASER 1 & 2

The **PHASER** effect produces a characteristic "sweep" effect, commonly used with electric piano sounds. The digital models for the phasers of the Nord Electro 6 are inspired by classic units such as the Bi Phase and the Small Stone.

#### **FLANGER**

The **FLANGER** produces a dramatic comb filter effect, giving the sound a "swooshy" and resonant quality.

#### CHORUS 1 & 2

The versatile **CHORUS** effect gives the impression of "widening", or with more extreme settings severely detuning, the sound – achieved by blending a number of modulated copies of the audio signal. There are two Chorus types, the second being more bold in character.

#### **VIBE**

The **VIBE** effect draws its inspiration from a classic foot pedal effect and produces a sound with both pitch-bending and phasing qualities. The effect is created through a digital model of a staggered series of phasing filters, unlike the usually aligned filters of a normal phasing effect.

#### **DEEP**

Engaging **DEEP** mode (Shift + Effect 2 selector) increases the modulation *amount* for any Effect 2 selection.

#### DFI AY

The **DELAY** unit produces echo/repeat effects. The Delay time is set by tapping the **TEMPO** button, or by pressing down on it and **SET** the tempo using the Program section dial.

The **FEEDBACK** button determines the number of delay repeats, or taps. At the lowest setting (LED unlit) only the initial tap is heard, while the **1**, **2** and **3** settings give an increasingly long feedback tail.

The **DRY/WET** knob adjusts the balance between the dry signal and the delay repeats.

#### PING PONG

Press **PING PONG** (Shift + Tempo) to activate Ping Pong mode. This causes delay repeats to alternate

between the left and right channels. If short delay times are used, these repeats will be "asymmetrical" and produce delays that are more like early reflections in reverb units.



#### TEMPO TAP

Use **TAP** to set a delay time matching the tempo of a song. Simply tap the Tempo button in the tempo you wish the delay to sync to a number of times, and the delay time will be adjusted automatically.

#### SPKR/COMP

The **SPKR/COMP** unit combines sophisticated amplifier and speaker cabinet simulations – including the Rotary Speaker – with a useful compressor effect.

#### DRIVE/COMP

When no Amp Model or Comp is selected the **DRIVE** knob provides a tube style overdrive effect or, if an amp is selected, controls the amount of overdrive for that Amp model. If the Drive LED is lit, it indicates that overdrive is active.

# SPRE / COMP 4 5 6 7 8 1 9 10 10 P SMALL OFF

#### AMP MODEL

The three different amplifier/speaker simulations – four if counting the Rotary – are selected with the Selector button in the Amp Model section:

Amp Model	Description
JC	A simulation of a classic solid-state amplifier and speaker cabinet.
SMALL	A simulation of the built-in tube amp and speakers of a reed-based electric piano.
TWIN	A simulation of a classic twin speaker tube amplifier and cabinet.

#### **ROTARY**

The **ROTARY** effect accurately reproduces the sound of the rotating horn and bass rotor, as well as the characteristics of the built-in amplifier of the original rotary construction.

- As a nice shortcut, the Rotary effect is automatically activated when the Rotary speed control (SLOW/STOP, FAST) to the left of the Organ section is operated – if the Spkr/Comp unit is turned off. The source for the Rotary effect will be set to the leftmost of the active sound engines.
- Switch between fast and slow rotor speeds by pressing the SLOW/ STOP, FAST button.
- To stop the rotors, press the STOP MODE button and set the speed
  to SLOW/STOP (this does not deactivate the Rotary Speaker it only
  stops the rotors). When the Slow/Stop button is pressed again the rotors will accelerate to the Fast speed setting. This functionality mimics
  the behavior of an early, one speed rotary speaker.
- The rotor acceleration rate, the time it takes to go from slow to fast and vice versa, can be adjusted on the Sound menu, read more on page 27. The **DRIVE** knob in the Spkr/Comp section controls the amount of overdrive. This simulates the pre-amplifier overdrive of the original rotary speakers.

A sustain pedal or a foot switch that is connected to the Rotor pedal input can control the rotor speed. On the Nord Electro 6 *D* models, the optional Nord Half Moon Switch can be used for switching Rotary speed in an even more traditional fashion.

The Rotary Drive is dependent on the level of the input signal. If the instrument routed to the Rotary is set to a very low level, the amount of available drive will be significantly reduced. This is also how it works with the "real articles" – when the organ level is raised, e.g. by using a swell pedal, the amount of distortion also increases.

#### **ROTARY MENU SETTINGS**

There are several parameters in the Sound Menu that allow for detailed adjustments of the behaviour and sound of the Rotary Speaker. Read more about on this on page 27.

#### **COMP**

The **COMP** (Compressor) effect reduces the dynamic range of the sound, making low level signals louder and high level signals more quiet. This produces a tight, punchy sound and makes the overall level easier to control in a live mix situation.

#### **EQUALIZER**



The 3-band equalizer features bass, sweepable midrange and treble controls. The **BASS** frequency is 100 Hz, the **TREBLE** frequency is 4 kHz and the **MID** frequency can be set between 200 Hz to 8 kHz, using its **FREQ** knob. The boost/cut range is +/- 15 dB.



Select which sound engine the Equalizer should be assigned to by pressing **SOURCE** (Shift + On/Off) until the LED for the desired source (Organ =  $\mathbf{0}$ , Piano =  $\mathbf{P}$  and Sample Synth =  $\mathbf{S}$ ) is lit.

#### **REVERB**

The **REVERB** unit simulates the natural sound reflections in various acoustic environments. The Reverb is a "global" effect, which is to say that it will always be applied to *all* active sound engines.

The **HALL** reverb has the response and character of a spacious hall, with a long decay. The **STAGE** reverb has a medium decay time while the **ROOM** reverb is a smaller ambience with a short decay time.

In **BRIGHT** mode (Shift + Reverb selector) more high frequency content is preserved in the Reverb signal.

The **DRY/WET** control sets the balance between the unprocessed and the processed signal.

If using the Rotary effect, a "copy" of the Reverb will be routed into the Rotary speaker, and applied to the sound source using the Rotary effect.



#### **PANIC**

The **PANIC** function (Shift + Reverb On) is not related to the Reverb effect, but will terminate all currently sounding notes - including those received over MIDI.

# 9 MIDI

#### MIDI FUNCTIONS

The Nord Electro 6 can be used as a master keyboard to control other hardware units or software sound sources, and it is also possible to control all or only parts of the Nord Electro 6 from a separate keyboard or MIDI device.

#### **GLOBAL MIDI**

The Global MIDI channel is used both for transmitting and receiving MIDI information, at the same time. It allows for external control over every aspect of the Nord Electro 6 – much like playing its own keyboard – and is used for sending keyboard, pedal and panel actions to another MIDI device or sequencer.

Global MIDI can be turned off in the System menu.

## RECORDING AN ELECTRO 6 PERFORMANCE TO A MIDI SEQUENCER OR DAW

Here is how to record a Electro 6 performance including any pedal actions and parameter adjustments to a DAW or MIDI sequencer.

- 1 Set the DAW or sequencer track to route back incoming MIDI on the Global channel.
- (2) Set Local in the System menu to Off on the Nord Electro 6.
- (3) Select the Program on the Nord Electro 6 that you wish to use.
- 4 Start the recording on the sequencer.

The MIDI output on the Global channel will not care about any splits; it will produce MIDI note numbers from the entire keyboard.

If any Transpose value is applied, either by the on-panel Transpose function or the Global Transpose setting in the System menu, its effect on MIDI depends on the "Transpose MIDI at" setting, also in the System menu. This setting is further described on page 27.

#### EXTERNAL KEYBOARD TO LO

With this function it is possible to use an external keyboard to control sound engines and/or one of the Organ manuals, which in turn will *not* be controlled from the Nord Electro 6 keyboard. These settings are stored per program which makes it an ideal feature for live usage. Below is an example of how to set it up.

- 1 Press **EXTERNAL KBD TO LO** (Shift + KBD Split).
- 2 Connect an external MIDI keyboard to the MIDI In jack of the Nord Electro 6.
- 3 Set the External Keyboard MIDI channel to that of the transmitting MIDI device, in the Nord Electro 6 System menu (see page 26 for details). The default setting is channel 16.
- (4) Select one or more sound engines to control from the external key-

board by assigning it to the **LO** KBD Zone (Shift + On/Off). Sound engines set to **UP** are controlled as usual from the Nord Electro 6.

△ If the Electro 6 is transposed using the on-panel Transpose, the incoming MIDI on the External Keyboard channel will also be transposed – regardless of how the "Transpose MIDI at" setting is configured in the System menu.

Below are two examples of how this functionality can be used in practice - in this case using a Nord Lead A1 as the external controller:

Ex. 1: Nord Electro 6 in Dual Organ mode with ext. keyboard Organ KBD Zone: *LO+UP* (Dual Organ), Piano & Synth: *Off* 



Ex. 2: Nord Electro 6 for Organ, ext. keyboard for Piano and Synth Organ KBD Zone: *UP*, Piano & Synth KBD Zone: *LO* 



#### MIDI MESSAGES

The following MIDI messages can be transmitted and received by the Nord Electro 6:

#### NOTE ON/OFF

• Note On and Note Off messages are transmitted and received.

#### CONTROLLERS

From the System menu it can be determined whether the Nord Electro 6 should transmit and/or receive Control Change messages.

- If a Control/Expression pedal is connected to the Control Pedal Input, this is transmitted and received as Controller 11 (Expression).
- If a sustain pedal is connected to the Sustain Pedal Input, this is transmitted and received as Controller 64 (Sustain Pedal).

• Almost all other controls (knobs and buttons) on the front panel are also transmitted and received as Control Change messages. This can be used for recording front panel actions into a MIDI sequencer. For a full list of which parameters correspond to which Controller number, refer to page 29.

#### KEYBOARD VELOCITY

The Nord Electro 6 transmits and receives Keyboard Velocity messages. Organ sounds will always be played back at nominal level regardless of incoming MIDI Velocity data. Release velocity is transmitted, but ignored on MIDI In.

#### PROGRAM CHANGE

Loading a program, Live program, Piano or Sample will send a Program Change message on the global MIDI channel, each content type identified by its Bank MSB value. Conversely, incoming Program Change messages will select the corresponding content on the Electro 6. The message consists of three parts, as defined in the table below:

	Program	Piano	Sample	Live
Bank MSB (CC# 0)	0	3	4	6
Bank LSB (CC# 32)	0-3	0-5	0-X	0
Program Change	0-127	0-X	0-49	0-7

X = the amount of relevant values depends on the number of pianos/ samples in memory.

#### ABOUT PROGRAM BANKS AND MIDI

Each Bank LSB value is used for addressing a total of 8 program banks on the Electro 6. As an example, sending Bank LSB 0 and a Program Change message between 0-15 will address programs in bank A. Program Change messages between 16-31 address bank B, and so on up to bank H. Changing the Bank LSB value to 1, programs in banks I-P are reached on the Electro 6.

In the System Menu, you can select if the Nord Electro 6 should send and/or receive Program Change messages on the Global channel. See page 26 for further details.

#### LOCAL CONTROL ON/OFF

If Local Control is set to Off, the keyboard and the panel on the Nord Electro 6 will be "disconnected" from its sound engines. Use the Off setting when the instrument is set up in a MIDI loop, for instance when using it in conjunction with a DAW or seqencer.

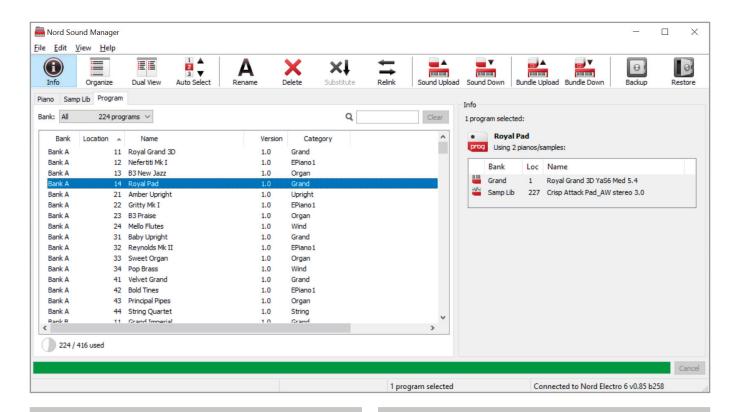
If Local Control is set to On, together with a MIDI loop, "double-triggered" notes would occur when playing – one triggered directly by the internal keyboard and the other one being echoed back to the Electro 6 over MIDI. Local Control On/Off is set in the System menu, which is described on page 26.

#### PANIC



If hanging notes are experienced when using the Nord Electro 6 in a MIDI setup, or if all sound should be terminated for some other reason, use the **PANIC** (Shift + Reverb On) function. This will execute an internal "All Notes Off" message, and reset incoming CC messages.

## 10 NORD SOUND MANAGER



#### ABOUT NORD SOUND MANAGER

Nord Sound Manager is an essential application for any Nord Electro 6 owner, and allows for organizing, altering and backing up content within the various memory areas on the Nord Electro 6. These are some of the common tasks performed through the Nord Sound Manager:

- Organizing and naming Programs
- Downloading new Piano sounds to the Piano partition
- Downloading new Samples to the Sample partition
- Uploading Programs from the Nord Electro 6 to a computer
- Uploading bundles containing programs and their associated piano and sample files
- Performing backups of the entire instrument
- Restoring the entire instrument to a previous state

The Nord Sound Manager and the user manual for the application can be found at the www.nordkeyboards.com website, in the Software area.

#### SYSTEM REQUIREMENTS

Mac OS X 10.6 or later

Windows XP, Windows Vista, Windows 7, Windows 8 and Windows 10.

Nord USB Driver version v3.0 or later required for Windows.

## 11 MENUS

Any settings that are made in the *System* and *Sound* menus will take immediate effect, and will be stored until they are changed again.

• The MIDI Local On/Off setting is an exception and will always revert to Local On when the Nord Electro 6 is powered up.

Enter a menu by holding **SHIFT** and pressing **SYSTEM** or **SOUND**, (Program buttons 1 and 2). Menus are navigated with the **PAGE** ◀ and ▶ buttons and settings are changed with the **PROGRAM** dial. Soft buttons are used to access additional settings, where applicable. Exit a menu by pressing **EXIT** (Shift).

#### SYSTEM MENU

#### 1 - MEMORY PROTECT

The memory protection setting is On when a Nord Electro 6 leaves the factory, preventing accidental overwriting of programs. Setting this to Off enables Store operations. Menu settings and Live programs are not affected by this setting.

Range: On (default), Off

#### 2 - NUMPAD PROGRAM SELECT

Program selection can be set up to work in two distinct ways. By default, the standard "page based" mode is used, but selection can also be done by using "numeric pad" input. With NumPad Program Select turned *On*, the Program 1-4 buttons are used for numeric input, giving access to all 16 programs (11-44) within the current bank. In this mode, the Page buttons function as Bank buttons. With NumPad Program Select turned *Off* the 1-4 Program buttons correspond to the four programs within the current page.

Range: Off (default), On

#### 3 - SEAMLESS PROGRAM LOAD

This setting determins how transitions are handled when changing programs. When set to *On*, sustaining notes and effects tails will be preserved when changing programs. With the *Off* setting, all ongoing sound is terminated when changing programs.

Range: Off, On (Default)

#### 4 - GLOBAL TRANSPOSE

This setting allows for transposing the entire Nord Electro 6 in semitone steps. This setting will be *added* to any on-panel transpose value stored with a program.

Range: +/- 6 semitones (default value is "none")

#### 5 - FINE TUNE

Fine Tune can be used to fine tune the pitch of the Nord Electro 6 in finer increments.

Range: +/- 50 Cents (+/- half a semitone). Default value is "0"

#### 6 - OUTPUT ROUTING MODE

In Stereo mode, all sounds are sent to both audio outputs. When set to Main: L Organ: R, Piano and Sample Synth sounds are set to the Left output and Organ sounds to the Right.

Range: Stereo (Default), Main:L Organ:R

#### 7 - SUSTAIN PEDAL

#### TYPF

This allows you to select the type of pedal connected to the **SUSTAIN PEDAL** jack, in case the functionality of the pedal is reversed (when the pedal is up, sustain is on and vice versa). The Auto setting can automatically determine the pedal type.

Range: Open, Closed, Auto (Default)

#### FUNC (FUNCTION)

A connected sustain pedal can be used for controlling both sustain and Rotary speed. The three possible settings are; Sustain only, Sustain + Rotor Hold (fast rotor speed when the pedal is *down*) and Sustain + Rotor Toogle (toggles between fast and slow with each pedal press).

Range: Sustain (Default), Sus+Rotor Hold, Sus+Rotor Toggle

#### 8 - ROTOR PEDAL

#### TYPE

This allows for changing the type/polarity of a switch pedal connected to the **ROTOR PEDAL** input, to reverse its functionality. On the Nord Electro 6D models, this can also be set to *Half Moon Switch*. The Auto setting can automatically determine the pedal type.

Range: Open, Closed, Half Moon Switch (on D models), Auto (Default)

#### FUNC (FUNCTION)

This allows for changing the functionality of a connected rotor pedal. With *Rotor Hold* the rotor speed is *fast* as long as the pedal is down, going back to *slow* when the pedal is released. *Rotor Toggle* means that the fast/slow rotor speed is switched with each pedal depression.

Range: Rotor Hold (default), Rotor Toggle

#### 9 - CONTROL PEDAL

#### **TYPE**

The Nord Electro 6 accepts many of the most commonly available control pedals through its **CONTROL PEDAL** input. Select a setting here that matches the pedal being used.

if a connected pedal is operated while in this menu, a percentage indicating the range of the connected pedal is displayed.

Range: Roland EV7 (default), Yamaha FC-7, Korg, Fatar/Studiologic

#### **GAIN**

This setting allows for adding some gain to the pedal signal. This can be useful if an attached pedal does not reach its maximum level or setting.

Range: 1 - 10

#### 10 - LOCAL CONTROL

MIDI Local Control determines if the Nord Electro 6 keyboard and panel will control internal sound engines and programs or only transmit MIDI. Local Control *On* is the normal "play mode". When Local Control is in *Off* mode, front panel and keyboard actions are transmitted via MIDI only.

Range: On (Default), Off

 Local always defaults back to "On" every time the Nord Electro 6 is powered on

#### 11 - CHANNEL

#### GLOBAL

This sets the transmitting and receiving MIDI channel for the Global Channel. The Global Channel transmits all keyboard, pedal and panel actions as MIDI signals. It can also be used as a receiving channel with full control of the entire Electro 6.

Range: 1-16, Off (Default 1)

#### EXTERNAL KBD

This sets the channel for receiving MIDI from an external keyboard when using the "External KBD to Lo" function - see page 17.

Range: 1-16, Off (Default 16)

#### 12 - CONTROL/PROGRAM CHANGE MODE

#### CC (CONTROL CHANGE)

This allows you to set if you want your Nord Electro 6 to transmit and/or receive MIDI Controller Messages or not on the Global channel.

Range: Off, Send, Receive, Send & Receive (Default)

#### PC (PROGRAM CHANGE)

This setting determines whether your Nord Electro 6 transmits and/or receives MIDI program Change Messages, on the Global channel.

Range: Off, Send, Receive, Send & Receive (Default)

#### 13 - TRANSPOSE MIDI AT

When set to In, active transpose values (global and/or set per program) are not applied to outgoing MIDI, but only to incoming MIDI data. In Out mode sent MIDI notes are transposed but not incoming ones.

Range: In (Default), Out

#### SOUND MENU

#### 1 - PIANO STRING RES LEVEL

Sets the level of the String Resonance feature that can be turned on for selected pianos (acoustic Med, Lrg and XL sizes).

Range: +/- 6 dB (0 dB default)

#### 2 - B3 ORGAN TONEWHEEL MODE

Sets the level of tonewheel crosstalk and cable leakage artifacts of the B3 organ model.

Range: Clean, Vintage 1 (default), Vintage 2

#### 3 - B3 ORGAN CLICK LEVEL

This sets the level of the Key Click for the B3 organ model.

Range: Low, Normal (default), High

#### 4 - B3 ORGAN KEYBOARD TRIGGER POINT

This setting allows for changing how the Nord Electro 6 keyboard triggers the B3 sound. When "High" is selected, it will be triggered before the key is fully depressed, which is more similar to how a real B3 works.

Range: High, Low (Default)

#### 5 - ROTARY SPEAKER

There are two available settings for the 122 Rotary speaker. With the 122 setting the "virtual microphones" are placed further away, while with 122 Close they are placed closer to the cabinet.

Range: 122 (Default), 122 Close

#### 6 - ROTARY BALANCE

This parameter determines the sonic balance, expressed as a percentage, between the bass rotor and the treble horn of the Rotary Speaker.

Range: 70/30, 60/40, 50/50 (default), 40/60, 30/70

#### 7 - ROTARY ROTOR

#### SPD (SPEED)

This determines the speed of the rotary speaker woofer rotor.

Range: Low, Normal (default), High

#### ACC (ACCELERATION)

This determines the acceleration and deceleration time of the rotary speaker woofer rotor.

Range: Low, Normal (default), High

#### 8 - ROTARY HORN

#### SPD (SPEED)

This determines the speed of the rotary speaker treble horn.

Range: Low, Normal (default), High

#### ACC (ACCELERATION)

This determines the acceleration and deceleration time of the rotary speaker treble horn.

Range: Low, Normal (default), High

## 12 CONNECTIONS



#### **AUDIO CONNECTIONS**

General guide on audio connections: Before turning on your amplifier, make all audio connections. Always turn on the amplifier last, and when shutting down, always turn off your amplifier or active speakers first.

 Using your Nord Electro 6 at high volumes can damage your hearing.

#### **HEADPHONES**

1/4 inch stereo headphone jack. Audio is always output through the Headphones output, regardless of Output Routing settings.

#### **LEFT & RIGHT OUT**

1/4 inch unbalanced line level outputs for amplifier or recording equipment. The Nord Electro 6 is a stereo instrument with separate signal paths for left and right audio channels.

When shipped, the Nord Electro 6 is configured to output all audio through the Left & Right outputs. Refer to the System Menu section on page 26 for other possible settings.

#### MONITOR IN

1/8 inch jack for connecting devices such as smartphones, tablets or computers to the Nord Electro 6. This is useful for playing and rehearsing to pre-recorded music or a metronome, or to use an additional sound source on stage. The Monitor In signal is routed to the Headphones and Left & Right outputs.

The Nord Electro 6 Master Level control does not affect the level of the Monitor In signal.

#### MIDI CONNECTIONS

#### MIDI IN

The 5 pin MIDI In connection is used for receiving MIDI data sent from external devices such as controller keyboards, sequencers and computers.

#### MIDI OUT

The 5 pin MIDI Out connection will send MIDI data to devices such as external sound modules and computers.

#### **USB CONNECTION**

The USB port is used for connecting the Nord Electro 6 to a computer. The connection can be used for transferring MIDI, for OS updates and for connecting to applications such as the Nord Sound Manager or Nord Sample Editor. These applications, and the latest OS version can always be found for download at www.nordkeyboards.com.

MIDI over USB and standard 5 pin MIDI connectors are both active at the same time. There is no need to choose between the two options in a menu or similar.

#### PEDAL CONNECTIONS

#### SUSTAIN PEDAL

1/4 inch connector for all common types of sustain pedals. Sustain pedal polarity can be detected automatically or set manually in the System menu, see page 26.

#### CONTROL PEDAL

1/4 inch connector for an expression pedal of continuous type, used for controlling volume, B3 swell and/or Effect 1. Most of the common expression pedal makes and models are supported, and can be selected in the System menu, see page 26.

#### **ROTOR PEDAL**

1/4 inch connector for a switch or sustain type pedal used for controlling the Rotary Speed parameter. On the Nord Electro 6 *D* models, this is where the optional Nord Half Moon Switch is attached. The connected pedal or switch can be configured in the System menu, see page 26.



## APPENDIX: MIDI CONTROLLER LIST

Nord Electro 6 Parameter	MIDI CC #
Bank Select MSB Program	0
Bank Select MSB Live	6
Bank Select MSB Piano	3
Bank Select MSB Sample	4
Bank Select LSB	32
Volume	7
Pan	10
Sustain	64
Ctrl Pedal (Expression)	11
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## FCC Information (U.S.A.)

#### 1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Clavia may void your authority, granted by the FCC, to use the product.

- **2. IMPORTANT:** When connecting this product to accessories and/ or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.
- **3. Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment is found to be the source of interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
  - Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.

This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

#### **NOTICE**

This Class B - digital apparatus complies with Canadian ICES-003.

#### **AVIS**

Cet appareil numérique de la classe B - est conforme à la norme NMB-003 du Canada.

## **DECLARATION OF CONFORMITY Compliance Information Statement**

Model Name: Nord Electro 6D 73, Nord Electro 6D 61, Nord Electro 6 HP

Type of Equipment: Digital Organ and piano

Responsible Party: Clavia DMI AB

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