



VST Lead Editor™ 1.3.1 Manual

 Windows 98, ME, 2000, XP, Vista

 OS 9, OS X 10.4, OS X 10.5

 Universal Binary

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Introduction

Thank you for choosing the reKon audio™ VST Lead Editor. The VST Lead Editor is a realtime MIDI synth editor that allows you full control of every parameter of the sound on the Clavia Nord Lead™, and Lead Rack synthesizers. Now you can utilize your Nord to its full potential and build lasting and meaningful patches that will bring new life to your Nord, and more importantly, your music. All this and more in a matter of minutes via a slick and friendly user-interface that actually adds featured to your Nord such as the ability to name your patches in a way that makes them understandable. You also maintain all your patches in the VST itself without the hassle of manual dumps. All parameters are fully automatable in your favorite VST host giving you the ability to visually program the Nord to your music via the host sequencer.

The Clavia Nord Lead 2™ synthesizer...

Clavia is a Swedish borne company offering a fine line of professional virtual analog synthesizers including the original Nord Lead, Nord 2 and 2X, Nord 3 as well as many other fine synthesizers. Each series boasts more features than it's predecessor, yet retain some backwards compatibility with them as well. This is the third "virtual-analog" synth reKon audio

has made a VST Editor for. We believe the Nord has a sound quality and a following that is sure to last for years to come and we are proud to offer our editor and presets for this fine synth.

Installation

reKon audio software is now installed with a simple installer file. The installer will allow you to specify the location of your VST folder and sometimes, additional components to install.

Windows XP, Vista

Use the included .EXE installer file. The installer will allow you to specify the location of the VST Plugin folder to install the VST Lead Editor into and provide an adequate means to uninstall the software.

Mac OSX

Use the included .DMG installer file. The installer will allow you to specify the location of the VST Plugin folder to install the VST Lead Editor into and provide an adequate means to uninstall the software. *Note- All our plugins are UB (Universal Binary) compatible.

Setup

Assumptions

It is assumed that the user is familiar with the basic functionalities of the hardware synthesizer, it's operators manual and the basic concept of MIDI itself. Without this knowledge, utilizing the editor may be a bit more challenging to set up and use properly. By familiarizing yourself with the operators manual and the MIDI standards, and following the instructions in this manual, you should be able to get up and running in a short amount of time.

STEP 1: Setting Up the Lead

Make sure you have your midi ports and channels set up and matching properly and that all cables are working and connected properly.

STEP 2: Setting Up the Plugin for Your VST Host (DAW)

The setup procedure will vary from host. Each host may support VST's differently and more importantly, each host may support MIDI data from a VSTi differently, or not at all. Please refer to the 'Supported Hosts' list on the rekon audio web site at www.rekonaudio.com. Also, please refer to the setup instructions provided with your VST host application for setting up a VST instrument (VSTi).

Setup Example for Cubase SX 1-3 or Cubase 4.1.3

To setup the reKon™ VST Lead Editor for Cubase SX 1-3 or Cubase 4.1.3 **:

1. Be sure to check your VST Instrument plugins folder to make sure the editor was installed.
2. Open Cubase SX or Cubase 4.1.3+.
3. Create a new project.
4. Open your 'VST Instruments' panel and then select the 'reKon™ VST Lead Editor' VST in

- a VST slot.
5. Create a 'MIDI' track. Select this MIDI track. (this will be the MIDI track the VST Lead Editor is on).
 6. On the I/O properties panel for this MIDI track, assign the MIDI input to the 'VST Lead Editor'. Assign the MIDI output to go to the MIDI port (and channel) that your Clavia Lead is on.
 7. Create another 'MIDI track'. Select this track.
 8. On the I/O properties panel for this MIDI track, assign the MIDI input to your MIDI keyboard. Assign the MIDI output to go to the MIDI port (and channel) that your Clavia Lead is on. (this will be the MIDI track to play and record your note/pitch/mod changes to the Clavia Lead).
 9. Activate the little yellow 'speaker' icons for both MIDI tracks (this allows them to be played even if the track is not selected).
 10. Start tweaking and playing the Clavia Lead via the VST Lead Editor and your MIDI keyboard. Cool!

*NOTES- *Setup for other hosts is similar. Please see the Host Support page on the reKon audio web site for more information. **Note that MIDI messages were dropped from VSTi in Cubase SX 3.1.1+ and Cubase 4 versions 4.0 - 4.1.2 (a SB bug). Please refer to the Steinberg website for more details on MIDI support and versions in these hosts.*

STEP 3: Setting Up MIDI IN tracks

For MIDI Input into the editor:

1. Follow Steps 1 -4 above. * Be sure to disable any outgoing MIDI tracks from the editor to prevent a feedback loop!
2. Create a 'MIDI' track. Select this MIDI track. (this will be the MIDI track the VST Lead Editor is on).
3. On the I/O properties panel for this MIDI track, assign the MIDI input to the MIDI port (and channel) that your Clavia Lead is on. assign the MIDI Output to the 'VST Lead Editor'.
4. Turn some knobs on the Lead. The editor should respond by visually showing the movement of this control in the editor.

How to load a Lead patch into the editor:

Once you have completed the MIDI input steps above, you can now receive a 'Single Controller Dump' from the Lead to 'recreate' the patch in the editor. Here's how:

1. Select the patch on the Lead that you wish to save into the editor.
2. Press the 'Shift+Dump One' button.
3. The editor will update all parameters to the values of the dumped patch.
4. Rename the patch in the editor to the name of the hardware patch. Save the patch as an .fxp file.

The Graphical User Interface

Using The Graphical User Interface

The graphical user interface of the VST Lead Editor™ is designed for maximum ease of use, giving you easy access to all of the Clavia Lead™ controls right on one screen. You are also able to rename, modify and browse the patches right inside the editor itself. All control elements are handled via either a Knob, Combo box, Button or Text Edit Box.

The User Interface

The following screen shot will help familiarize the controls of the VST Lead Editor™ v. 1.3.1:



Working With the VST Lead Editor

About Sound

The VST Lead Editor™ is a VSTi (synth) plug-in that deals only with MIDI data. As a result it makes no sound of its own. The sound comes from the actual hardware synth itself... Which is what you want (pure hardware generated sound, but with VST control). The VST Lead Editor™ is not a VST MIDI Effect plug-in, it is a VSTi instrument without audio processing functions.

Using the Controls

Most controls on the VST Lead Editor™ are self explanatory as to their use. The VST Lead Editor is designed to 'mimic' the look and feel of the actual hardware. There are two types of knobs, those that have their 'zero' or lowest value set to the far left, and the other has the 'zero' position set in the absolute middle. The display readouts will vary based on the related ranges and values for that particular control.

Resolution of the Controls

To obtain a finer resolution control of the knobs in the VST Lead Editor™, hold down the shift key while adjusting the knob. This will allow you to 'fine-adjust' the values of the knob.

Resetting the Default Value of a Control

To reset a control to its default value, hold down the 'CONTROL' key while clicking on the control.

Receiving MIDI Continuous Controller Data

The VST Lead Editor™ can receive and interpret MIDI Continuous Controller (cc) messages. All controls respond to their correlated MIDI CC number as listed in the MIDI Continuous Controller Chart of this manual. Automation of all parameters can be achieved via these MIDI Messages or via your sequencer host.

The MIDI LED Indicators

When the VST Lead Editor™ receives or transmits MIDI data, the corresponding MIDI LED will blink to notify you. The VST Lead Editor™ responds to MIDI Note On/Off, Pitchbend, Modulation, Continuous Controller MIDI messages.

The MIDI Channel Selector

This selects the MIDI channel that the VST Lead Editor™ receives and transmits MIDI data on. This value is independent of the preset and will not be stored with the preset. This allows you to browse presets on individual MIDI channels.

The MIDI SEND and RECEIVE Buttons

These buttons determine whether or not to send/receive MIDI Program changes. When activated, Program change messages will be sent/received between the editor and the hardware synth.

The MIDI In Button

This button determines whether or not to receive MIDI into the editor. When activated, MIDI messages will be received between the editor and the hardware synth. Use this as an alternative to the hosts 'midi in' activation button. Ideal for when turning on/off midi in quickly, for example controller dumps. MIDI in should be disabled to prevent feedback loops, when using the MIDI Out simultaneously.

The About Screen

To view the About screen, click on the reKon audio™ logo button.

Working With Presets

The Presets Section

The preset section allows you to control and manage your presets or 'patches' as they are referred to in the synthesizer world. The display readout shows the current preset name and number. The arrow buttons will allow you to move up and down through the presets. The 'loader bar' indicates MIDI data being sent to your synth to set the patch dynamically.

Changing the Current Preset

Use the arrow buttons to change the currently selected preset.

Renaming the Current Patch

To rename your preset, simply click on the name in the display readout and type the new name of your patch, then hit the 'Enter' key. Patch names are limited to 24 characters.

Using the Copy/Paste Button

You can easily copy and paste presets to and from the currently selected preset. First select the preset you wish to copy by navigating to it with the preset select arrow buttons. Now, click the red 'Copy/Paste' button (you will notice the button change color). Next, navigate to the preset number you wish to paste to. Now click the 'Copy/Paste' button again (the 'Copy' button will change back to its default state). Voila! This tool is invaluable for creating variations of your favorite presets and allows you to quickly build your preset library up.

Default Preset Banks

The default preset bank in the VST Lead Editor is the standard factory default bank A from Clavia Music. If you modify the default bank and wish to restore the default bank, you can easily load the bank from the 'fxb' folder. Also included is a default blank bank that has all presets values set to zero. This results in a preset that makes no sound on the synthesizer. This is sometimes a good bank to start your projects with which you can copy patches into without worry of overwriting other patches.

Sysex Patches and Banks

The VST Lead Editor can also load and save standard sysex (system exclusive) patch and bank files. This makes importing your existing patch libraries very easy. Use the Sysex menu to select either a patch or bank load or save method. Once you have loaded a sysex patch or bank, you should give the patch(es) a unique name and then save them as a .fxb/.fxp file.

MIDI Continuous Controller (CC) Messages

The following MIDI Continuous Controller messages are transmitted (Tx) and Received (Rx) by the editor to set the patch. *NOTE- Not all parameters are available to all Lead Models.

| Nord Lead Parameter | Range | CC# | Value Labels |
|---------------------------------|-------|-----|-----------------------------------------------------------|
| Gain | 0-127 | 7 | |
| Oct Shift | 0-4 | 17 | -2, -1, 0, 1, 2 |
| Mod Wheel Destination | 0-4 | 18 | Filter, FM Amount, OSC2, LFO1, Morph |
| Unison | 0-1 | 16 | Off, On |
| Poly/Legato/Mono | 0-2 | 15 | Mono, Legato, poly |
| Portamento Auto | 0-1 | 65 | Off, On |
| Portamento Time | 0-127 | 5 | |
| LFO 1 Rate | 1-127 | 19 | |
| LFO 1 Waveform | 0-2 | 20 | square, saw, tri |
| LFO 1 Destination | 0-3 | 21 | osc 1+2, osc 2, filter, pulse width |
| LFO 1 Amount | 0-127 | 22 | |
| LFO 2/Arpeggio Rate | 0-127 | 23 | |
| LFO 2 Destination/Arpeggio Mode | 0-6 | 24 | filter, arp up, arp up+down, amp, osc 1+2, rand arp, echo |
| LFO 2 Amount/Arpeggio Range | 0-127 | 25 | |
| Modulation Envelope Attack | 0-127 | 26 | |
| Modulation Envelope Decay | 0-127 | 27 | |
| Modulation Envelope Destination | 0-2 | 28 | osc2, fm amt, off |
| Modulation Envelope Amount | 0-127 | 29 | |
| Osc 1 Waveform | 0-2 | 30 | square, saw, tri |
| Osc 2 Waveform | 0-3 | 31 | square, saw, tri, noise |
| Osc 2 Semitones | 0-120 | 78 | m60 to 60 |
| Osc 2 Fine Tune | 1-127 | 33 | |
| Oscillator FM Depth | 0-127 | 70 | |
| Osc 2 Keyboard Tracking | 0-1 | 34 | |
| Oscillator Pulse Width | 0-127 | 79 | |
| Oscillator Sync | 0-1 | 35 | off, on |
| Oscillator Mix | 0-127 | 8 | osc1 - osc2 |
| Amplifier Envelope Attack | 0-127 | 73 | |
| Amplifier Envelope Decay | 0-127 | 36 | |
| Amplifier Envelope Sustain | 0-127 | 37 | |

| | | | |
|----------------------------|-------|----|--------------------------------------|
| Amplifier Envelope Release | 0-127 | 72 | |
| Filter Envelope Attack | 0-127 | 38 | |
| Filter Envelope Decay | 0-127 | 39 | |
| Filter Envelope Sustain | 0-127 | 40 | |
| Filter Envelope Release | 0-127 | 41 | |
| Filter Mode | 0-4 | 44 | LP12dB, LP24dB, HP24dB, BP, Notch+LP |
| Filter Cutoff | 0-127 | 74 | |
| Filter Resonance | 0-127 | 42 | |
| Filter Envelope Amount | 0-127 | 43 | |
| Filter Velocity | 0-1 | 45 | Off, On |
| Filter Keyboard Track | 0-1 | 46 | Off, On |

MIDI Implementation Chart

The following MIDI data is transmitted (Tx) and Received (Rx) from the editor...

| Message | Tx | Rx | Notes |
|-----------------------|----|----|--------------------|
| Channel | x | o | 1-16 |
| Mode | x | x | Omni mode |
| Note On/Off | - | o | note numbers 0-127 |
| Velocity | - | o | 0-127 |
| Aftertouch | - | o | 0-127 |
| Poly Pressure | - | o | 0-127 |
| Pitchbend | - | o | 0-127 |
| Modulation | - | o | 0-127 |
| Continuous Controller | o | o | 0-127 |
| Program Change | x | x | 0-127 |
| System Common | x | x | |
| System Realtime | x | x | |
| System Exclusive | x | x | |

x = no
o = yes