VST Virus Editor™ 1.3.1 Manual

Windows 98, ME, 2000, XP, Vista

OS 9, OSX 10.4, OSX 10.5

Universal Binary

Table of Contents

Introduction

Thank you for choosing the reKon audio™ VST Virus Editor. The VST Virus Editor is a realtime MIDI synth editor that allows you full control of every parameter of the sound on the Access Virus™A, B, kB, Rack, C, kC, Rack XL, and Indigo™I & II synthesizers. Now you can utilize your Virus to its full potential and build lasting and meaningful patches that will bring new life to your Virus, and more importantly, your music. All this and more in a matter of minutes via a slick and friendly user-interface that actually adds features to your Virus 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 Virus to your music via the host sequencer.

The Access Virus™ synthesizer...
Access Music is a German company offering a fine line of professional virtual analog

synthesizers including the Virus A-C, Indigo, and now TI. Each letter series boasts more features than it's predecessor, yet retain backwards compatibility with them as well. With up to 173 adjustable parameters, a huge modulation routing matrix, and on-board effects, the Virus is loaded with just about every feature you could ask for in a modern day synthesizer. It even includes a healthy array of quality sound effects processors. This is the first "virtual-analog" synth reKon audio has made a VST Editor for. We believe the Virus 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 Virus 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 Virus 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 Virus
Very Important! There are two settings that must be enabled on your Virus to begin using the editor properly:

A. Set **'Control/MIDI/LoPage=cc'** .
B. Set **'Control/MIDI/HiPage=polypressure'**.
*neither setting should read 'sysex'.

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 or Cubase 4
To setup the reKon™ VST Virus Editor for Cubase SX 1-3 or Cubase 4:

1. Be sure to check your VST Instrument plugins folder to make sure the editor was installed.
2. Open Cubase SX or Cubase 4.
3. Create a new project.
4. Open your 'VST Instruments' panel and then select the 'reKon™ VST Virus Editor' VST in a VST slot.
5. Create a 'MIDI' track. Select this MIDI track. (this will be the MIDI track the VST Virus Editor is on).
6. On the I/O properties panel for this MIDI track, assign the MIDI input to the 'VST Virus Editor'. Assign the MIDI output to go to the MIDI port (and channel) that your Access Virus 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 Access Virus is on. (this will be the MIDI track to play and record your note/pitch/mod changes to the Access Virus).
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 Access Virus via the VST Virus Editor and your MIDI keyboard. Cool!

*NOTE- Setup for other hosts is similar. Please see the Host Support page on the reKon audio web site for more information.

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 Virus 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 Access Virus is on. assign the MIDI Output to the 'VST Virus Editor'.
4. Turn some knobs on the Virus. The editor should respond by visually showing the movement of this control in the editor.

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

1. Select the patch on the Virus that you wish to save into the editor.
2. Press the 'Control/MIDI/MIDITx/Single Controller Dump' button.
3. Press the 'STORE' button to send the data to the editor.
4. The editor will update all parameters to the values of the dumped patch.
5. 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 Virus Editor™ is designed for maximum ease of use, giving you easy access to all of the Access Virus™ 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.

Parameters and Versions

Virus A and B users should note that some parameters in the editor are not available in the synthesizer. These additional parameters are available in the Virus C models. In this case, the editor is still capable of exchanging patches with future and past version data.

The User Interface

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

Working With the VST Virus Editor

About Sound

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

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

The MIDI Channel Selector
This selects the MIDI channel that the VST Virus 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 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 Buttons ('C' and 'P')
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 'Copy' button (you will notice the button change color). Next, navigate to the preset number you wish to paste to. Now click the 'Paste' button (the 'Copy' button will change back to it's default state). Voila! You can also continue to paste the same preset data into other preset locations without having to re-click the 'Copy' button. 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 Virus Editor is the standard factory default bank A from Access 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.

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 Virus Models.

Data 1	Data 2	Control	Display	Range	List
5	0	Portamento Time	0-127	0 to 127	
10	64	Panorama	0-127	-64 to +63	
17	127	OSC1 Shape	0-127	-64 to +63	Wave, Saw, Virus
18	80	OSC1 Viruswidth	0-127		
19	0	OSC1 Wave Select	0-64		Sine, Triangle, Wave 3-64
20	64	OSC1 Semitone	0-127	-64 to +63	
21	96	OSC1 KeyFollow	0-127	-64 to +63	
22	127	OSC2 Shape	0-127	-64 to +63	Wave, Saw, Virus
23	57	OSC2 Viruswidth	0-127		
24	0	OSC2 Wave Select	0-64		Sine, Triangle, Wave 3-64
25	64	OSC2 Semitone	0-127	-64 to +63	
26	100	OSC2 Detune	0-127		
27	0	OSC2 FM Amount	0-127		
28	0	OSC2 Sync	0-1	On - Off	
29	127	OSC2 Filter Env Amount	0-127	-64 to +63	
30	29	FM Filter Env Amount	0-127	-64 to +63	
31	96	OSC2 Keyfollow	0-127	-64 to +63	
33	64	OSC Balance	0-127	-64 to +63	
34	0	SubOsc Volume	0-127		
35	0	SubOsc Shape	0-1		Square, Triangle
36	64	OSC Main Volume	0-127		
37	0	Noise Volume	0-127		
38	0	RingMod Volume	0-127		
39	64	Noise Color	0-127	-64 to +63	
40	56	Cutoff	0-127		

41	29	Cutoff 2	0-127	-64 to +63	
42	65	Filter 1 Resonance	0-127		
43	72	Filter 2 Resonance	0-127		
44	0	Filter 1 Env Amount	0-127		
45	0	Filter 2 Env Amount	0-127		
46	127	Filter 1 KeyFollow	0-127	-64 to +63	
47	127	Filter 2 KeyFollow	0-127	-64 to +63	
48	64	Filter Balance	0-127	-64 to +63	
49	6	Saturation Curve	0-6		Off, Light, Soft, Middle, Hard, Digital, Shaper
51	0	Filter 1 Mode	0-3		LP, HP, BP, BS
52	1	Filter 2 Mode	0-3		LP, HP, BP, BS
53	3	Filter Routing	0-3		Ser4, Ser6, Par4, Split
54	127	Filter Env Attack	0-127		
55	127	Filter Env Decay	0-127		
56	127	Filter Env Sustain	0-127		
57	127	Filter Env Sustain Time	0-127	-64 to +63	Fall, Infinite, Rise
58	127	Filter Env Release	0-127		
59	0	Amp Env Attack	0-127		
60	127	Amp Env Decay	0-127		
61	99	Amp Env Sustain	0-127		
62	127	Amp Sustain Time	0-127	-64 to +63	Fall, Infinite, Rise
63	127	Amp Env Release	0-127		
67	66	LFO1 Rate	0-127		
68	1	LFO1 Shape	0-5		
69	0	LFO1 Env Mode	0-1		
70	0	LFO1 Mode	0-1		
71	64	LFO1 Symetry	0-127		
72	5	LFO1 Keyfollow	0-127		
73	0	LFO1 Keytrigger	0-127		Off, 1-127 Keytrigger Phase
74	64	OSC1 LFO1 Amount	0-127	-64 to +63	
75	54	OSC2 LFO1 Amount	0-127	-64 to +63	
76	56	PW LFO1 Amount	0-127	-64 to +63	
77	127	Resonance LFO1 Amount	0-127	-64 to +63	
78	64	Filter Gain LFO1 Amount	0-127	-64 to +63	
79	73	LFO2 Rate	0-127		
80	1	LFO2 Shape	0-5		
81	0	LFO2 Env Mode	0-1		
82	0	LFO2 Mode	0-1		

83	64	LFO2 Symetry	0-127	-64 to +63	
84	0	LFO2 Keyfollow	0-127		
85	0	LFO2 Keytrigger	0-127		
86	64	OSC Shape LFO2 Amount	0-127	-64 to +63	
87	64	FM Amount LFO2 Amount	0-127	-64 to +63	
88	68	Cutoff1 LFO2 Amount	0-127	-64 to +63	
89	58	Cutoff2 LFO2 Amont	0-127	-64 to +63	
90	84	Panorama LFO2 Amount	0-127	-64 to +63	
91	91	Patch Volume	0-127		
93	64	Transpose	0-127	-64 to +63	
94	0	Key Mode	0-5		Poly. Mono 1 -4
97	0	Unison Mode	0-15		Off, Twin 3-16
98	48	Unison Detune	0-127		
99	127	Unison Panorama Spread	0-127		
100	64	Unison LFO Phase	0-127	-64 to +63	
101	0	Input Mode	0-2		Off, Dynamic, Static, To Effects
102	1	Input Select	0-8		
105	58	Chorus Mix	0-127		
106	73	Chorus Rate	0-127		
107	9	Chorus Depth	0-127		
108	92	Chorus Delay	0-127		
109	84	Chorus Feedback	0-127	-64 to +63	
110	1	Chorus LFO Shape	0-5		Sine, Triangle, Saw, Square, S&H, S&G
112	1	Delay Reverb Mode	0-25		Off, Delay, Reverb, Reverb + Feedback1
113	0	Effect Send	0-127		
114	76	Delay Time	0-127		
115	65	Delay Feedback	0-127		
116	68	Delay Rate / Reverb Decay Time	0-127 / 0-127		
117	12	Delay Depth / Reverb Room Size	0-127 / 0-3		0:Ambience 1:SmallRoom 2:LargeRoom 3:Hall
118	1	Delay LFO Shape / Reverb Damping	0-5 / 127		Sine, Triangle, Saw, Square, S&H, S&G
119	45	Delay Color	0-127	-64 to +63	
122	0	Keyboard Local	0-1		Off, On
123	1	All Notes Off			

MIDI Poly Pressure (Channel Aftertouch) Messages

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

Data 1	Data 2	Control	Display	Range	List
1	0	Arp Mode	0-6		Off, Up, Down, Up&Down, AsPlayed, Random, Chord
2	0	Arp Pattern Select	0-39	1 - 40	
3	0	Arp Octave Range	0-3		
4	0	Arp Hold Enable	0-1		Off, On
5	64	Arp Note Length	0-127	-64 to +63	
6	0	Arp Swing	0-127	50% to 75%	
7	92	LFO3 Rate	0-127		
8	1	LFO3 Shape	0-5		
9	0	LFO3 Mode	0-1		
10	0	LFO3 Keyfollow	0-127		
11	1	LFO3 Destination	0-5		
12	0	OSC LFO3 Amount	0-127		
13	0	LFO3 Fade In Time	0-127		
16	57	Clock Tempo	0-127		63-190BPM
17	4	Arp Clock	1- 17		1/64, 1/1
18	0	LFO1 Clock	0-19		Off, 1/64 - 4/1
19	0	LFO2 Clock	0-19		Off, 1/64 - 4/1
20	0	Delay Clock	0-16		Off, 1/64 - 3/4
21	0	LFO3 Clock	0-19		Off, 1/64 - 4/1
25	1	Control Smooth Mode	0-3		Off, On, Auto, Note
26	66	Bender Range Up	0-127	-64 to +63	
27	62	Bender Range Down	0-127	-64 to +63	
28	1	Bender Scale	0-1		Linear, Exponential
30	1	Filter 1 Env Polarity	0-1		Negative, Positive

31	1	Filter 2 Env Polarity	0-1		Negative, Positive
32	0	Filter 2 Cutoff Link	0-1		Off, On
33	36	Filter Keytrack Base	0-127		C-1 to G9
34	0	OSC FM Mode	0-12		Pos-Tri, Tri, Wave, Noise, In L, In L&R,…
35	0	OSC Init Phase	0-127		Off, 1-127
36	0	Punch Intensity	0-127		
38	0	Input Follower Mode	0-9		Off, In L, In L&R,…
39	0	Vocoder Mode	0-12		Off, Osc, OscHold, Noise, In L, In L+R
41	0	OSC 3 Mode	0-67		Off, OSC2 Slave, Saw, Virus, Sine, Triangle, …
42	64	OSC 3 Volume	0-127		
43	64	OSC 3 Semitone	0-127	-64 to +63	
44	40	OSC 3 Detune	0-127		
45		Low EQ Freq	0-127		
46		High EQ Freq	0-127		
47	64	OSC1 Shape Velocity	0-127	-64 to +63	
48	64	OSC2 Shape Velocity	0-127	-64 to +63	
49	64	VirusWidth Velocity	0-127	-64 to +63	
50	64	FM Amount Velocity	0-127	-64 to +63	
51		Soft Knob 1 Short Name			
52		Soft Knob 2 Short Name			
54	64	Filter 1 Env Amount Velocity	0-127	-64 to +63	
55	64	Filter 2 Env Amount Velocity	0-127	-64 to +63	
56	64	Resonance 1 Velocity	0-127	-64 to +63	
57	64	Resonance 2 Velocity	0-127	-64 to +63	
58	0	Second Output Balance	0-127		Off, 1-127: Off, Front, Center, Rear

60	64	Amp Velocity	0-127	-64 to +63	
61	64	Panorama Velocity	0-127	-64 to +63	
62	70	Definable 1 Single			
63	69	Definable 2 Single			
64	3	Assign 1 Source			
65	43	Assign 1 Destination			
66	81	Assign 1 Amount	0-127	-64 to +63	
67	3	Assign 2 Source			
68	69	Assign 2 Destination 1			
69	104	Assign 2 Amount 1	0-127	-64 to +63	
70	0	Assign 2 Destination 2			
71	64	Assign 2 Amount 2	0-127	-64 to +63	
72	3	Assign 3 Source			
73	24	Assign 3 Destination 1			
74	104	Assign 3 Amount 1	0-127	-64 to +63	
75	56	Assign 3 Destination 2			
76	127	Assign 3 Amount 2	0-127	-64 to +63	
77	67	Assign 3 Destination3			
78	98	Assign 3 Amount 3	0-127	-64 to +63	
79	0	LFO1 Assign Destination			
80	64	LFO1 Assign Amount	0-127	-64 to +63	
81	0	LFO2 Assign Destination			
82	64	LFO2 Assign Amount	0-127	-64 to +63	
84	3	Phaser Mode	0-6		Off, Pahser Stages 1-6
85	0	Phaser Mix	0-127		
86	36	Phaser Rate	0-127		
87	112	Phaser Depth	0-127		
88	48	Phaser Frequency	0-127		
89	64	Phaser Feedback	0-127	-64 to +63	
90	127	Phaser Spread	0-127		

92		Mid EQ Gain	0-127		
93		Mid EQ Q Factor	0-127		
94		Low EQ Gain	0-127		
95		High EQ Gain	0-127		
97	57	Analog Boost Intensity	0-127		
98	23	Analog Boost Tune	0-127		
99	0	Input RingModulator	0-127		
100	0	Distortion Curve	0-6		Off, Light, Soft, Middle, Hard, Digital, …
101	0	Distortion Intensity	0-127		
102		Assign 4 Source			
103		Assign 4 Dest			
104		Assign 4 Amount	0-127		
105		Assign 5 Source			
106		Assign 5 Dest			
107		Assign 5 Amount	0-127		
108		Assign 6 Source			
109		Assign 6 Dest			
110		Assign 6 Amount	0-127		
112		Single Name 1			
113		Single Name 2			
114		Single Name 3			
115		Single Name 4			
116		Single Name 5			
117		Single Name 6			
118		Single Name 7			
119		Single Name 8			
120		Single Name 9			
121		Single Name 10			
122		Filter Select	0-2		0:Filt1 1:Filt2 2:Filt1*2

123	3	Category 1	0-16		Off, Lead, Bass, Pad, Decay, Plug, Acid, Classic, Arpeggiator, Effects, Drums, Percussion, Input, Vocoder, Favorite 1, Favorite 2, Favorite 3
124	0	Category 2	0-16		Off, Lead, Bass, Pad, Decay, Plug, Acid, Classic, Arpeggiator, Effects, Drums, Percussion, Input, Vocoder, Favorite 1, Favorite 2, Favorite 3

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
