VSampler 3 Online Help

(An "Unofficial" Publication)
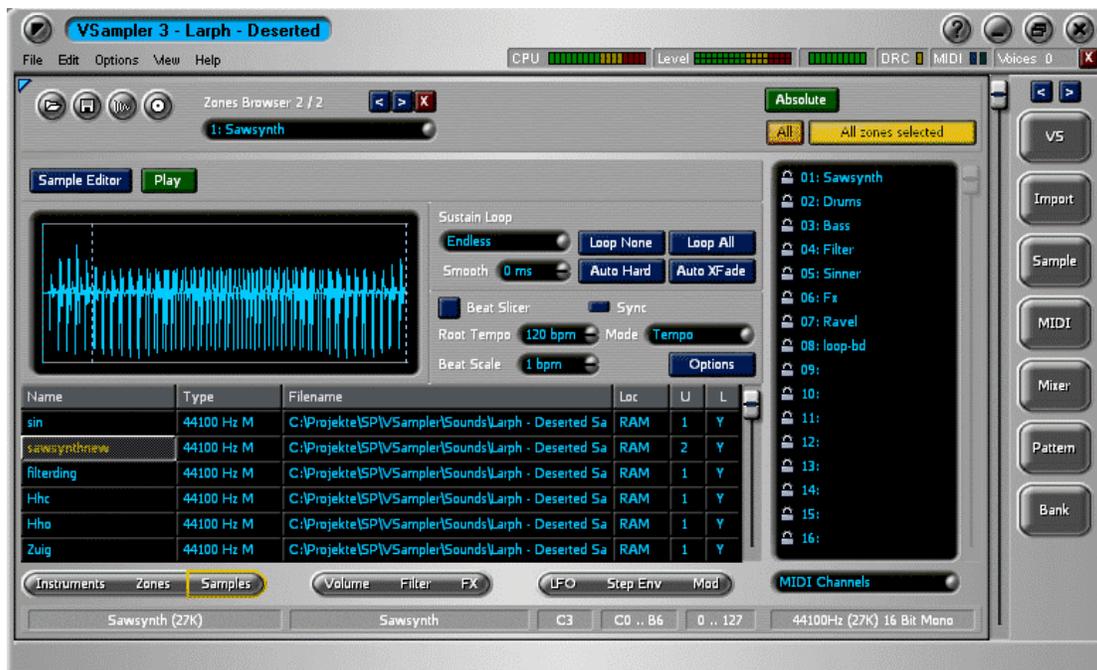
Please note: This document was produced from the VSampler 3 Online Help using a semi-automated process. Some parts of the help text may have been misplaced or lost. Please report any errors to the VSampler 3 forum on www.maz-sound.com.

Contents

Welcome to VSampler3

Thank you for choosing VSampler. Regarding virtual instruments VSampler sets new measurements for Steinberg VSTi, Propellerheads ReWire and Cakewalk DXi interfaces and offers many features not available in other "real world" samplers or on a software basis. With VSampler you can

- create sound banks or import existing sounds in many different formats in order to work with these sounds

- easily assign effects to sounds by using a great variety of included effects or external effect-plug-ins

- use a multitude of modulation sources for dynamic modulation of sound parameters which are available

What is VSampler?

VSampler 3 is a multitimbral software sampler and synthesizer. VSampler comes in a VSTi/DXi Plug-In-version and in a Standalone-version. Several instances of the VSTi/DXi Plug-Ins can be started simultaneously, where each instance can play up to 255 voices. VSampler supports up to 16 MIDI channels and up to 16 individual stereo-outputs for each instance. The outputs can be routed to mixer-channels (Plug-In version), or assigned to different sound cards (Standalone version).

VSampler supports all popular interfaces and standards:
- DirectSound (only Standalone-version)
- ASIO (only Standalone-version)
- VSTi (only Plug-In-version)
- DXi (only Plug-In-version)
- ReWire

The Plug-In-version supports the VSTi- (e.g. Steinberg Cubase VST), as well as the DXi- (Cakewalk SONAR) standard. The Plug-In-version of VSampler can be integrated in MIDI-sequencers. That makes sample-accurate timing possible (VSTi/DXi only) and gives you total control over Audio and MIDI.

The ReWire version of VSampler offers the same sample-accurate timing as the Plug-In-version by using a ReWire compatible host application (e.g. Steinberg Cubase VST or Cakewalk SONAR).

The Standalone-version outputs audio data via ASIO or DirectSound compatible sound cards.

Furthermore, a virtual MIDI cable connects the Standalone-version to any MIDI-sequencer or MIDI-device.

Registration

To use all features of VSampler, you have to register the software. After registration you will obtain a registration key, which enables you to use all features of VSampler. The standard Internet browser is used to open the registration page of VSampler for registration. The registration-key will be sent to you by email (registration can be found on the „Help|Register"). The corresponding dialog is shown with the first start of VSampler automatically.

For registration purposes VSampler creates a hardware-key. This hardware-key is worldwide

unique and identifies your machine. For creation of the hardware-key, information about different system components is used, which can influence the hardware-key if you re-install the operating system or exchange the main board (system changes).

The registration key only works in combination with the hardware key of your machine. That means it needs the correct hardware-information. If you hold a special VSampler licence (volume licence), you are able to repeat the registration with different hardware-keys as often as your licence indicates. Regular licences allow up to 2 different hardware-keys max. to be used for registration, this way you can install VSampler on 2 different systems (e.g. your desktop computer and your notebook).

The following sections give you more information on how to begin with VSampler:

The VSampler Interface
The Main Window
The Rack Windows
The Audio Engine
Import and Export of Sound Data
The Sample-Editor
Effects and Modulations
Work with Racks

More information is available within the VSampler owner's manual.

The Main Window

The Main Window is the most important window in VSampler. From here you can access all features of VSampler directly. Also the Main Window contains all docked Racks of VSampler as a container. The Main Window can be shown either in Editor- or in Compact View .; switching is possible either in the Main Menu ("View") or via the corresponding button in the upper right corner of the Main Window.

After the first start of VSampler the Compact View is activated:

After activating the Editor-View, extended functions of VSampler are enabled:

The Main Menu
The Main Menu holds important functions of VSampler. Following menu entries are available:

File - here you can load or save VSampler-data-libraries and other functions for file work.

Edit - here you find functions to manage templates and instrument-options or to adapt the VSampler Skins.

Options - holds options for the different VSampler modules.

View - holds functions to change the visual appearance of VSampler as well as extra tools.

Help - access to online-support for VSampler as well as registration

A detailed explanation of the functions of the Main Menu can be found in the VSampler owner's manual.

The MIDI-Input/Output Activity
This element shows the status of the MIDI-Inputs/-Outputs

The Level Display
This element shows the master level.

The "System-Menu" Button
This button shows a context menu which holds commands to minimize, close or dock the window etc. This button is only available for rack-windows.

The Titlebar
This element shows the title of the current window. For the VSampler- Main Window, in addition, the name of the currently loaded library is shown.

The "Help" Button
This button shows a context - sensitive help for each VSampler control element. After activating this button, the cursor switches into a question mark. After a mouse click on a VSampler control element, the help for the appropriate element is shown.

The "Minimize" Button
This button is used to minimize the window.

The "Close" Button
This button closes the current window.

The Statusbar
The status line shows current status information.

The Voice Activity
This element shows the currently active VSampler-voices.

The "Maximize" Button
This button maximizes the window or restores the last window size and-position. This button is not available in all racks. For the VSampler Main Window this button switches between Editor-View and Compact-View

The DRC-Aktivity
This element shows the DRC-activity.

The Rack-Navigation Buttons
These buttons are used for navigation within the VSampler Rack Window and activate the last, recent or next rack within the rack list (history function).

The Rack-Area
This is the place where docked Rack Windows appear. Windows outside the visible area can be scrolled into view by using the scrollbar right beside the rack area.

The Rack-Scrollbar
Rack Windows outside the visible area can be scrolled into view by using this scrollbar.

The Progress Bar
This display shows the progress for several actions.

The CPU Display
This element shows the activity of the CPU.

The MIDI Panic Button

The Host Tempo
This element shows the current tempo of the host application (sequencer). In the Standalone version you can enter a tempo (by double click) to simulate the external tempo of the sequencer.

The Rack-Windows

Many functions of VSampler are available in shape of so called "Racks". Racks are independent windows in VSampler with a certain function. A rack can be shown either within the VSampler Main Window (docked) or on the Windows desktop (undocked). After installation of VSampler a rack is docked by default.

Racks can be shown via the rack-buttons of the VSampler-Main Window or via the button "View" within the main-menu. The following racks are available:

The Bank Manager Rack - for managing Sound Banks, used with VSampler.

The Import Instrument Rack - to import instruments in VSampler.

The Keyboard Rack - this rack is a virtual keyboard to be used with VSampler.

The MIDI Rack - for managing MIDI-adjustments and to assign instruments to MIDI channels.

The Mixer Rack - for managing mixer- and volume adjustments on MIDI-channel level.

The Sample-Editor Rack - to edit sample data within VSampler.

The Pattern-Sequencer Rack - for managing the integrated pattern-sequencer of VSampler.

The VSampler Rack - is the central managing window of VSampler.

More information can be found under „Work With Racks".

The Rack-Buttons

The rack buttons are used to make certain Rack Windows of VSampler visible. The "Configure Toolbar" command within the context menu is used to manage the buttons visible here.

Working with Racks

Many functions of VSampler are available as so called Racks. Racks are independent windows in VSampler and have certain functions.

Racks can be shown via the rack buttons of the VSampler-Main Window or by using the button "View" within the main-menu.

Rack-States

A rack can either be shown within the VSampler Main Window (docked) or on the Windows desktop (undocked). After the installation of VSampler a rack is usually docked.
The state of a rack and the position/size are automatically saved when closing VSampler and are available at once when you start VSampler again.

Rack-Pages

Docked racks are shown in so called rack pages. VSampler creates a separate page for each rack by default:

VSampler - this rack page holds the VSampler-Rack

Mixer - this rack page holds the Mixer-Rack

Multi - this rack page holds the Multi-Rack:140000

Sample Editor - this rack page holds the Sample-Editor-Rack

Import - this rack page holds the Import-Rack

Bank Manager - this rack page holds the Bank-Manager-Rack

Pattern Sequencer - this rack page holds the Pattern-Sequencer-Rack

The "Configure Pages" command within the context-menu of the toolbar-buttons on the right side of the VSampler-Main-Window is used to manage and configure the rack-pages. You can assign as many racks as you want to a rack-page.

You can open a rack-page directly by using the context-menu on the right side of the VSampler-Main-Window (submenu "Pages"); otherwise VSampler opens a rack-page automatically when an appropriate rack within the page is shown.

Toolbar-Buttons for Racks

On the right side of the VSampler-Main-Window VSampler displays toolbar-buttons for commonly used racks. This list can be configured by using the "Configure Toolbar" command from the context-menu.

Undocking Racks

To undock a rack, use the „Undock" command from the system-menu in the upper left corner of the rack. You can also undock a rack by dragging it to a free area on your Windows desktop.

Docking Racks

To dock a rack, use the „Dock" command from the system-menu in the upper left corner of the rack. You can also dock a rack by dragging it from the Windows desktop to the appropriate rack-page.

More information can be found with the VSampler Owner's manual.

The VSampler Interface

The user interface of VSampler 3 is customizable in many ways. Different people have different preferences and backgrounds, different habits working with software. Some people like it compact and easy and don't care about the details, others prefer to jump between detailed tabbed pages inside one fixed size window, some prefer to have everything stacked into one big scrollable window, others love to have full control over multiple separate windows at once, using their hires 21" monitor or triple-monitor-system <http://www.matrox.com/mga/products/parhelia512/technology/triplehead.cfm>.

All at your fingertips thanks to the flexible interface of VSampler 3. We don't want you to change your practices to fit our software, we made the software able to fit your practices. On the fly. All window positions and states are stored between the sessions, when you come back everything will look like you never left, total recall. To further optimize your workflow by following the "less is more" principle you can hide the button bar (e.g. if prefer to use keyboard shortcuts instead of the mouse) or customize which buttons to show, same for the tabs of the VSampler main window. Never do sample editing inside VSampler? Hide the "Sample" button. You don't care about filters and LFO's and step sequencers and free envelopes and arpeggiators and VST synths inside VSampler? Hide the tabs "Filter", "LFO", "Ctrl", "Synth" and "Arp". They are just a (right) mouse click away once you need them again.

The user interface of VSampler 3 supports sound editing in many ways, for experts as well as for people who never touched a filter envelope before. It goes hand-in-hand with the semi-modular structure of the sound engine, you always see what's active and what's not. The interface is transparent in the deepest sense of the word: unused or inactive controls get a gray and transparent look, the logic of the sound-engine is perfectly linked to the visuals. And that's the important difference which we think makes our concept superior to other software samplers: we combine the flexibility of a semi-modular sampler engine with a simple but effective hardwired interface. Every page got a fixed layout, every control got a fixed position. Less clicks, less confusion, no hide and seek.

Whenever you see one of those gray transparent controls this means the control is not active at the moment and you can't change its settings. Example: you have a filter activated and move the points of the filter envelope around and back and forth, but you don't hear any difference. Why? You forgot to turn up e.g. the envelope-to-cutoff slider. VSampler 3 will automatically stop you from doing things like this :-) If the filter envelope got no target (cutoff or resonance) you won't be able to edit it, because it simply makes no sense. It will be displayed gray and transparent. Same logic for all other controls.

We got more transparency! :) The transparent envelope-displays do optionally layer the current envelope with the waveform view (incl. loop-points) and the shape of the other envelopes. This allows to visually sync different envelopes (e.g. filter and volume) or to visually sync an envelope with the shape of the waveform - a charm. Transparency at the Zones-page as well: all zones are slightly transparent, making overlapping zone areas visible.

VSampler 3 supports drag'n'drop of samples (WAV, AIF), instruments (SF2, LM4, AKP) and soundbanks (VSB, VSL, SF2, HALion, Gigasampler) from the Windows explorer, they can be dropped to the instruments pool or Zones-editor, or they can be assigned to a certain key by dropping at the onscreen keyboard.

There are lots of little helpers, like the context sensitive quickmenus at the right mouse key.You don't know where to find a certain function? Or which functions are available for a certain screen or control? Try the right mouse key before reading through manuals or searching the menu. When you move your mouse over a knob or slider and click right mouse you'll find e.g. a "MIDI learn" function to quickly assign an incoming MIDI controller number to this knob/slider. Or you'll find a Hz/BPM switch for speed-related knobs.

The Audio Engine

The VSampler-internal audio processing is done entirely in 32 bit floating point precision, resulting in pristine audio quality and clipping-free internal operation. For analog-like convenience the VSampler-internal mixer offers an optional softlimiter for output devices which can't handle levels bigger than 0 dB properly. The semi-modular structure of the VSampler 3 sampler engine allows complex instrument constructions and modulations as well as the simple reproduction of classical hardware-samplers.

VSampler's intelligent resource-management (DRC) optimizes the usage of main memory and processor time of your computer. Additionally VSampler 3 offers several effective techniques to optimize its general performance under real-life conditions (i.e. in a song), you can limit the polyphony of zone-groups, instruments or globally, you can tell a VSampler-instrument a dB-threshold when and how to stop released voices in addition to their volume envelope.

These elements are used to set options for envelopes.

Libraries

VSampler stores instruments in form of libraries (file extension .vs3 or .vc3). Each VSampler library can contain up to 16384 instruments divided into 128 banks á 128 programs.

Instruments

VSampler instruments consist of one or more zones. The zones of an instrument specify on which key of the keyboard a sound is heard. VSampler instruments are stored within a VSampler library.

VSampler zones are the smallest management unit within VSampler instruments. Each zone has individual settings including a sample.

Samples

VSampler stores sample-data within a sample-object. A sample can be assigned to multiple zones and is stored only once for identical sample-data.

Multis

VSampler multis are used to define assignments of instruments to the 16 MIDI-channels, thus defining which instrument is played on a certain MIDI-channel. VSampler can manage up to 64 multis.

Please click on a part of the picture below to get more information for the selected control element of VSampler. You get additional help by clicking the question mark symbol within the window and clicking on the desired element.

More information can be found within the VSampler user's guide. VSampler user's guide will be available on the

VSampler homepage in Q4 2003 or is part of your VSampler installation.

Rack

A rack can be displayed in docked state within the VSampler Main Window or undocked on the windows desktop. After installation of VSampler a rack is normally docked by default. The undocked view only differs from the docked view by additional title bar und frame.

More information can be found under "The rack windows".

Rack Picture Description

Please click on a part of the picture below to get more information for the selected control element of VSampler. You get additional help by clicking the question mark symbol within the VSampler main-window and clicking on the desired element.

More information can be found within the VSampler user's guide and under "Working with racks".

A limiter prevents signal levels above 0dB. This is done by smoothing input level and limiting to 0dB max.

DRC

VSamplers "Dynamic Resource Control" (DRC) is an intelligent technology to efficiently exploit the available main memory of the computer - you are not longer limited to the size of the physical main memory. Currently DRC is available at instrument level only and loads/swaps only these instruments into/from memory that are currently used by the multi settings. A sample level DRC is planned and will allow to load and play back instruments of unlimited size.

Effects and Modulations

VSampler 3 introduces a complete new level of effect plugin integration and parameter modulation not found in any other sampler. Your favourite VST effect plugins are seamlessly integrated into the voice architecture, providing 3 slots for zone-effects (e.g. a filter plugin controlled by a VSampler envelope) and 3 slots for instrument effects (e.g. a rotary speaker or delay/reverb). Their parameters can be modulated together with VSamplers own parameters and effects, making it the most expressive sampler instrument you´ve ever played. Your favourite effects are not longer limited to be just mixer inserts!
VSampler's onboard effects include reverb, delay, chorus, flanger, phaser, soft limiter, compressor and distortion (at the moment).
Effect-parameters can be dynamically modified in many ways.

The Sample-Editor

The integrated Sample-Editor of VSampler supports features to edit and maintain samples (e.g. automatically finding loop-points, crossfade-looping, sample-rate conversion, tempo and pitch scaling, ...). VSampler can use different types of sustain and release-loop per sample. Additionally you can split samples into so called "slices" and playback these slices by modifying tempo without modifying pitch or vice versa (Beat Slicer).

Contact

Please use the following links to contact MAZ-Sound or SpeedSoft:

register@maz-sound.com

www.vsampler3.com

The VSampler Rack

The VSampler Rack is the central window of VSampler.

This rack is activated by using the "VS" button on the right side of the VSampler-Main-Window or by using the menu command "View|Racks|Virtual Sampler" from the main menu or by using the keyboard shortcut "F2".

The Toolbar-Buttons
The toolbar-buttons are used to quickly access important features of VSampler.

These buttons are used to navigate within zones and to delete zones. Currently selected zones within the current instrument as well as selected zones and the active zone are displayed beneath the button.

Selecting Zones
These buttons are used to select zones. The buttons can be switched on/off independently. The "All" button selects all zones of the current instrument or restores the last selection. The right mouse button over the rightmost button opens a context menu to select or edit selection-, poly- or cycle-groups.

The "Zone Selection" List
This button is used to select the current zone from a list containing all zones available for the current instrument. By double clicking on this control, the name of the current zone is changed.

These elements are used to manage and apply templates to the current zone(s). Templates are stored settings for VSampler parameters. Templates are managed using the Instrument-Templates dialog or per page of the VSampler Rack. By double clicking on the selection field, the name of the template is changed. The buttons above this control are used to manage template-settings for the current page of the VSampler Rack. Additional options are available via the context menu.

Selecting the current Page
These elements are used to select the current page of the VSampler-Rack. The following pages are available:

Instruments
Zones
Samples
Volume
Filter
FX
LFO
Step Env
Mod

The statusbar
The status-bar shows current status information.

This area shows control elements for the current page. The selection of he current page is done with the buttons on bottom of the VSampler Rack. The following pages are available:

Instruments
Zones
Samples
Volume
Filter
FX
LFO
Step Env
Mod

The Instruments-Page

The Instruments-page of the VSampler-Rack is used to manage all instruments of the current VSampler Library. The instruments are displayed as a grid, where columns correspond to bank-numbers 1..128 and rows correspond to program-numbers 1..128. Therefore VSampler can manage up to 16384 instruments.

The Instrument-Grid

The instrument-grid shows all instruments of the current VSampler Library, where columns correspond to bank-numbers 1..128 and rows correspond to program-numbers 1..128. Therefore VSampler can manage up to 16384 instruments. VSampler supports a multitude of selection- und edit-capabilities for instruments:

Selection - Instruments are selected by mouse-click. By using the Ctrl- and Shift-keys, multiple elements are selected. By clicking on the fixed columns/rows of the instrument-grid, whole columns/rows are selected.

Edit - Instruments can be copied or moved within the instrument-grid by using drag&drop. Additionally by using drag&drop from the instrument-grid onto several other controls of VSampler, special actions are triggered. By double-clicking on an instrument, the name of the instrument is changed. The right mouse-button shows a context menu with additional options for the selected instrument(s).

These elements scroll the viewable area of the instrument grid. The cursor-keys as well as the "Pos 1", "End" and "Page Up/Down" keys can also be used for this purpose.

The Program Number Display

The fixed rows on the left side of the instrument grid display the current MIDI-program-number for the appropriate row.

The Bank Name Display

The fixed columns on top of the instrument grid display the current MIDI-bank-number for the appropriate column. By double-clicking on this element, the name of the bank is changed.

The Zones-Page

The zones-page of the VSampler-Rack manages zones for the current instrument of the VSampler Library. The zones are displayed either in Key-view (Key-zones) or Velocity-view (Velocity-zones).

The Zone PlayBack Mode

The zones playback-mode indicates the mode of the sample for the current zone. The following values are available:

Normal - The sample is played normally.

Tap On/Off - The sample starts playback on a note-on event (key pressed). The sample plays until the sample keys is pressed again, that means the note-off event is ignored. This mode is especially useful for drum- or bass-loops.

Tap On/Off Easy - This mode works exactly as "Tap On/Off" but plays the sample-loop (for looped samples) until its end before the voice is terminated.

OneShot - The sample is played until end regardless of note-off events. This mode is only available if the corresponding sample has no loop set.

Release-Triggered - This mode works exactly as the "One Shot" mode except that the sample starts playback on a note-off event (key released).

The Zone Keyboard Range

The keyboard-range of a zone indicates on which keys of the keyboard the zone is active. Each zone has a:

Start-key (Key Lo) - key on which the zone starts.

Root-key (Root) - key on which the sample of the zone plays with its original pitch (the pitch the sample was original sampled with).

End-key (Key Hi) - key on which the zone ends.

The end-key must always be larger or equal the start-key. The root-key can be any key across the keyboard. By using the link-switches between the elements, value changes can be synchronized, that means changes of a value simply changes to the other values. Key-ranges can overlap.

The velocity-range of a zone indicates for which velocity-range of the keyboard the zone is active. Velocity information is generated by velocity-sensitive keyboards and specify the strength of key-press. Each zone has a:

Start-Velocity (Vel Lo) - velocity on which the zone starts.

End-Velocity (Vel Hi) - Velocity on which the zone ends.

The end-velocity must be larger or equal the start-velocity. Velocity-ranges can overlap.

Zone Groups and Voices

By using zone-groups (Poly-groups), zones can be grouped. For each group a maximum note-count (polyphony) can be specified, this is usually used to create realistic representations of drum-instruments. The group of a zone is either "Off" or is assigned to one of the possible 31 poly-groups. The "…" button is used to manage poly-groups and to define exclusion-groups.

Selecting the Zone-View

This element is used to define the mode used for displaying zones:

Key - The key-ranges of zones are displayed.

Vel - The key- and velocity-ranges of zones are displayed.

These elements are used to magnify/scale zones within the zones-view or to move the visible area of the zones-view. When scaling in X-direction (key-range), the display of zones within the zones-view usually does not match the display within the virtual keyboard, this is reset by using the "K" button.

The Velocity Display

The velocity-display shows key- and velocity-ranges of the current zones. The velocity-display provides a multitude of selection and change-capabilities:

Selection - Zones are selected by mouse-click. Multiple zones are selected using the Ctrl- and Shift-keys. Additionally a selection rectangle can be drawn around the zones to be selected. Double clicking on an empty area of the zones-view selects all zones.

Edit - Zones are moved or re-sized by using the mouse. Additionally you can edit key- and velocity-crossfading. By using the right mouse-key, a context menu with additional options and commands is shown.

The Key Display

The key-display shows key-ranges of the current zones. The key-display provides a multitude of selection and change-capabilities:

Selection - Zones are selected by mouse-click. Multiple zones are selected using the Ctrl- and Shift-keys. Additionally a selection rectangle can be drawn around the zones to be selected. Double clicking on an empty area of the zones-view selects all zones.

Edit - Zones are moved or resized by using the mouse. Additionally you can change zone-ordering. By using the right mouse-key, a context menu with additional options and commands is shown.

This button restores original scaling of the zones-view, that means all zones are displayed normally (not scaled), matching the display of the virtual keyboard.

The Samples-Page

The Samples-page of the VSampler-Racks manages the samples of the current library.
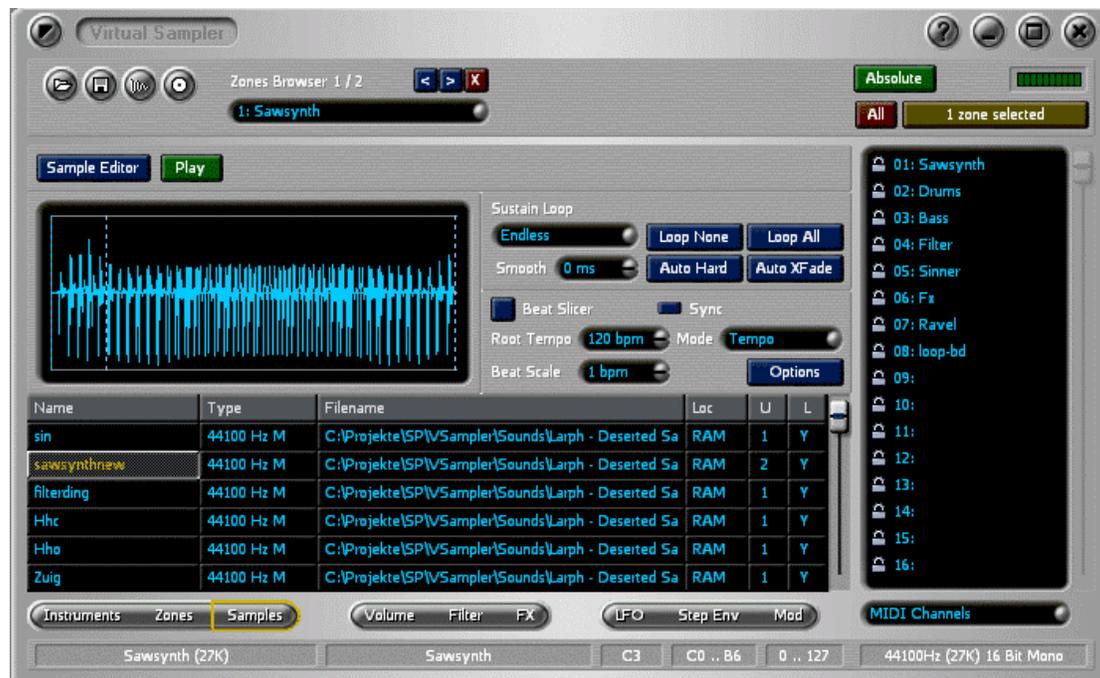
The "Sample Editor" Button
This button calls the Sample-Editor for the selected sample. Either the integrated VSampler-Sample-Editor or an external Sample-Editor is executed. You can change this settings using the right mouse-key.

This button starts/stops playback of the selected sample.

The Sample Display
This element displays the sample data of the current sample.

The Audio-Pool displays all samples currently loaded. The columns of the audio-pool display certain information:

Name - this column specifies the name of the sample. By double-clicking on this column, the name of the sample is changed.

Type - this column specifies the type of the sample. By double-clicking on this column, this setting is changed.

Filename - this column specifies the filename of the sample. You can exchange a sample by double-clicking on this column.

Loc - this column specifies the current storage location of the sample: "RAM" - the sample is loaded into memory;

"Disc" - the sample is located on hard-disc and is loaded if required; "DRC" - the sample is managed by DRC and is loaded into memory or located on hard-disc.

Use - this column specifies how often the sample is used within the current library. A dialog with detail information is shown if you double click on this column.

L/ E - this column displays the link or embed state of the sample. You can change this settings by double-click.

The Sustain-Loop Settings

These elements are used to specify settings for the sustain-loop of the sample.

The Beat-Slicer Settings

These elements are used to specify settings for the beat-slicer of VSampler.

The Volume-Page

The Volume-page of the VSampler-Rack manages general settings for zones like volume, pitch and velocity-settings.

The Envelope-Display

The envelope-display shows the volume-envelope for the current zone. Each point of the envelope is numbered and has a associated level and a time-stamp. The points are processed in order.

Each envelope starts at level 0 (point 0) and changes the level of the associated zone in the time and shape specified until point 1 of the envelope is reached. The process is repeated for the rest of the envelope's points until the sustain-point is reached. At the sustain-point, the level remains constant, until a note-off event (key released) occurs. After that the rest of the points is processed as explained above until the last point (level 0) is reached.

You can change values with the mouse or by numerical keyboard-input. When changing values with the mouse, you can move points graphically. Additionally you can change the shape of the envelope between two points. Changing values with the keyboard is done by double-clicking on an envelope-point.

The time until the envelope reaches point 1 is defined as "Attack"-time and displayed underneath the envelope-display.

The time from point 1 to point 2 of the envelope is defined as "Decay"-time and displayed underneath the envelope-display.

The time from point 2 to the release-point of the envelope is defined as "Hold"-time and displayed underneath the envelope-display.

The time from the sustain-point to the last point of the envelope is defined as "Release"-time and displayed underneath the envelope-display.

Optionally you can define a jump to a previous point when the sustain-point of the envelope is reached (sustain-loop) instead of keeping level constant, this function is available via context menu.

This control specifies the maximum level of the zone. This value is specified in dB and can be changed with the mouse or per double-clicking with the keyboard. The control underneath this element adds some randomization to the value of this control, thus allows "living" sounds.

The Sync Switch
This switch is used to synchronize envelope-times with the current sequencer tempo. The reference value for this operation is 120bpm. This settings is not available in the standalone-version of VSampler.

The Panning Settings
This control specifies the stereo-position (panning) of the zone. This value can be changed with the mouse or per double-clicking with the keyboard. The control underneath this element adds some randomization to the value of this control, thus allows "living" sounds.

This control is used to create a dynamic pitch-change (glide) between two notes. If this value is >0 ms, the pitch between to notes of this zone is changed from the current pitch to the destination pitch within the time specified. This value can be changed with the mouse or by double-clicking with the keyboard. The control underneath this element adds some randomization to the value of this control, thus allows "living" sounds.

The "Coarse Tune" Value
This element specifies the coarse-tuning of the zone. This value is measured in semitones.

The "Fine Tune" Value
This element specifies the fine-tuning of the zone. This value is measured in cents (100 Cents=1 semitone).

This element specifies the scale-tuning for the zone. This value is measured in cents. Scale-tuning determines how many cents are added/subtracted per semitone. Normally this value is set to 100 cents which indicates normal scaling. A value of 0 does not change pitch according to keys, that means each key plays at the root-key of the sample.

The "Velocity Scaling" Button
This button displays a dialog for managing velocity-scaling.

The "Velocity Sens" Value
This control specifies the velocity sensitivity for the zone. A value of 100% indicates linear change of volume with velocity, a value of 0% does not change volume with different velocity values. This value can be changed with the mouse or by double-clicking with the keyboard. The control underneath this element adds some randomization to the value of this control, thus allows "living" sounds.

This button displays a dialog for managing keyboard-scaling.

The "Octave-Shift" Value
This element specifies the octave-tuning for the zone. This value is measured in octaves (1 octave=12 semitones).

The Envelope Controls
These elements have impact on the envelope-display:

"S" button - This button displays the current sample-data into the envelope-display.

"F" button - This button displays the current filter-envelope into the envelope-display.

Scrollbar - This element scales or moves the visible area of the envelope-display.

"-" button - This button decreases the envelope scaling (Zoom Out)

"A" button - This button restores the envelope scaling and makes the whole envelope visible (Zoom All).

"+" button - This button increases the envelope-scaling (Zoom In)

The Filter-Page

The Filter-page of the VSampler-Rack manages filter-settings of VSampler. You can define up to two filters per zone with different filter types (Lowpass, Highpass, Bandpass, ...).
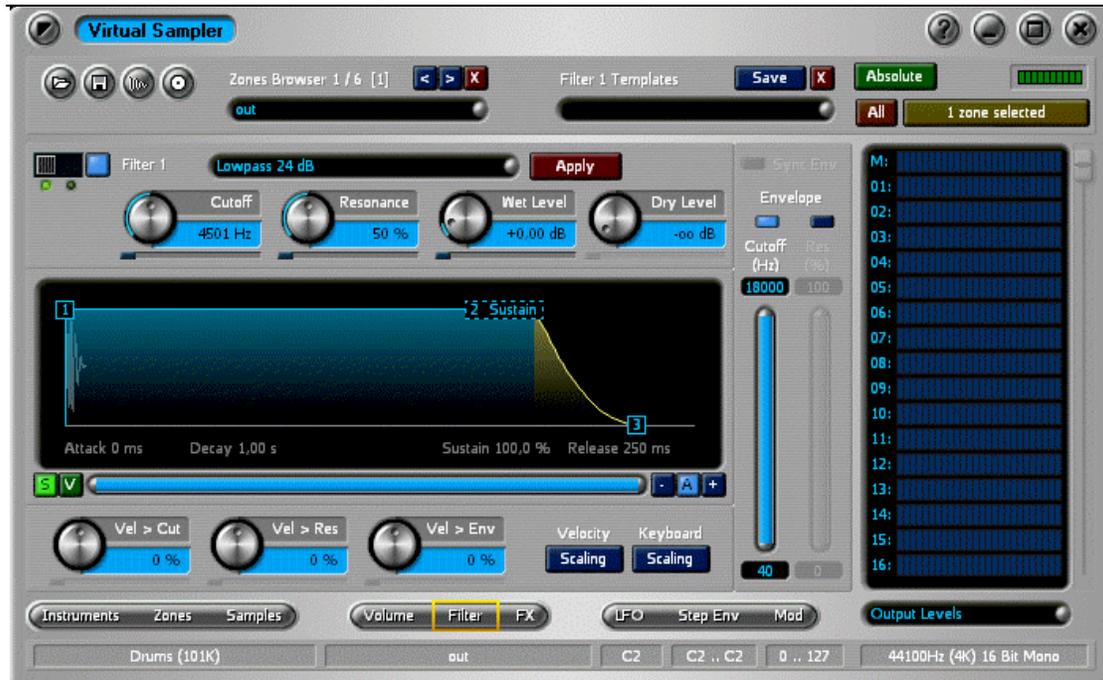
The Filter-Envelope-Display

The filter-envelope-display shows the filter-envelope for the current zone. Each point of the envelope is numbered and has an associated level and a time-stamp. The points are processed in order.

Each envelope starts at value 0 (point 0) and changes filter parameters of the associated zone in the time and shape specified until point 1 of the envelope is reached. The process is repeated for the rest of the envelope's points until the sustain-point is reached. At the sustain-point, the value of the envelope remains constant, until a note-off event (key released) occurs. After that the rest of the points is processed as explained above until the last point (value 0) is reached.

You can change values with the mouse or by numerical keyboard-input. When changing values with the mouse, you can move points graphically. Additionally you can change the shape of the envelope between two points. Changing values with the keyboard is done by double-clicking an envelope-point.

The time until the envelope reaches point 1 is defined as "Attack"-time und displayed underneath the envelope-display.

The time from point 1 to point 2 of the envelope is defined as "Decay"-time und displayed underneath the envelope-display.

The time from point 2 to the release-point of the envelope is defined as "Hold"-time und displayed underneath the envelope-display.

The time from the sustain-point to the last point of the envelope is defined as "Release"-time und displayed underneath the envelope-display.

Optionally you can define a jump to a previous point when the sustain-point of the envelope is reached (sustain-loop) instead of keeping the filter-parameter constant, this function is available via context menu.

The "Filter Cutoff" Value

This control specifies the filter cutoff-frequency of the zone. This value is measured in Hz and can be changed with the mouse or by double-clicking with the keyboard. The control underneath this element adds some randomization to the value of this control, thus allows "living" sounds.

This element specifies the filter-type.

The "Filter Resonance" Value

This control specifies the filter resonance (Q) of the zone. This setting can be changed with the mouse or by double-clicking with the keyboard. The control underneath this element adds some randomization to the value of this control, thus allows "living" sounds.

Selecting and Activating the current filter
These elements select the active filter and are also used to enable/disable filters.

This button applies the filter to the appropriate sample, thus changing sample-data.

The "Filter Keybord Scaling" Button
This button displays a dialog for managing keyboard-scaling for the filter.

The "Envelope to Cutoff" Controls
These elements specify how filter frequency depends on the filter-envelope.

These elements specify how filter resonance depends on the filter-envelope.

The "Filter Wet Level" Value
This control specifies the filter amount (filter signal) within the output signal of the current filter. This setting is measured in dB and can be changed with the mouse or by double-clicking with the keyboard. The control underneath this element adds some randomization to the value of this control, thus allows "living" sounds.

The "Filter Dry Level" Value
This control specifies the amount of the original sound (dry signal) within the output signal of the current filter. This setting is measured in dB and can be changed with the mouse or by double-clicking with the keyboard. The control underneath this element adds some randomization to the value of this control, thus allows "living" sounds.

This control specifies how filter frequency depends on the keyboard velocity for the active filter of the current Zone. This setting can be changed with the mouse or by double-clicking with the keyboard. The control underneath this element adds some randomization to the value of this control, thus allows "living" sounds.

The "Filter Velocity Scaling" Button
This button displays a dialog for managing velocity scaling for the filter.

The "Filter Velocity to Resonance" Value
This control specifies how filter resonance depends on the keyboard velocity for the active filter of the current Zone. This setting can be changed with the mouse or by double-clicking with the keyboard. The control underneath this element adds some randomization to the value of this control, thus allows "living" sounds.

This control specifies how the maximum filter-envelope level depends on the keyboard velocity for the active filter of the current Zone. This setting can be changed with the mouse or by double-clicking with the keyboard. The control underneath this element adds some randomization to the value of this control, thus allows "living" sounds.

The "Filter Env Sync" Option
This control is used to synchronize envelope-times to the current sequencer tempo. The reference value for this operation is 120 bpm. This settings is not available in the standalone-version of VSampler.

The Filter-Envelope Controls
These elements have impact on the filter-envelope-display:

"S" button - This button displays the current sample-data into the filter-envelope-display.

"V" button - This button displays the current volume-envelope into the filter-envelope-display.

Scrollbar - This element scales or moves the visible area of the filter-envelope-display.

"-" button - This button decreases envelope scaling (Zoom Out)

"A" button - This button restores envelope scaling and makes the whole envelope visible (Zoom All).

"+" button - This button increases envelope-scaling (Zoom In)

The FX-Page

The FX-page of the VSampler-Rack manages effect-settings for the current instrument or the current zone. VSampler distinguishes between instrument- and zone-effects. Instrument-effects apply to all zones of an instrument and are started once when the instrument is selected to a MIDI-channel. Zone-effects only apply to certain zones and are restarted with each voice. Usually for most effects instrument-effects should be used, since heavily relying on zone effects can lead to serious performance degradation.

Selecting Effect-Plugins
This element selects an effect-plugin for the appropriate slot. There are a lot of VSampler internal effects as well as external VST plugin-effects available.

Activating/Deactivating Effects
This element activates or deactivates the effect for the selected slot.

This button calls the editor for the selected effect.

The "Apply" Button
This button applies the selected effect to the selected zone(s), thus permanently changes sample data for the underlying sample.

The "Effekt-Send" Value
This element is used to specify the effect-amount within the output signal for the selected slot.

This element selects the effect-program for the selected slot. By double clicking on this element, the name of the effect-program is changed.

The "Load" and "Save" Buttons

These buttons are used to load or save effect-settings. Effect-settings are either saved as effect-bank (extension .fxb) or effect-program (Extension .fxp). Effect-banks contain settings for all programs of the selected effect. Effect-programs only contain settings for the selected effect-program.

The LFO-Page

The LFO-page of the VSampler-Rack is used to manage LFOs (LFO=Low Frequency Oscillator) of VSampler. Usually LFOs are used to dynamically change certain zone- or instrument-parameters (see also "The Mod Page"). VSampler supports up to 4 LFOs per zone/instrument. Each LFO can be restarted with every voice or can produce signals continuously.
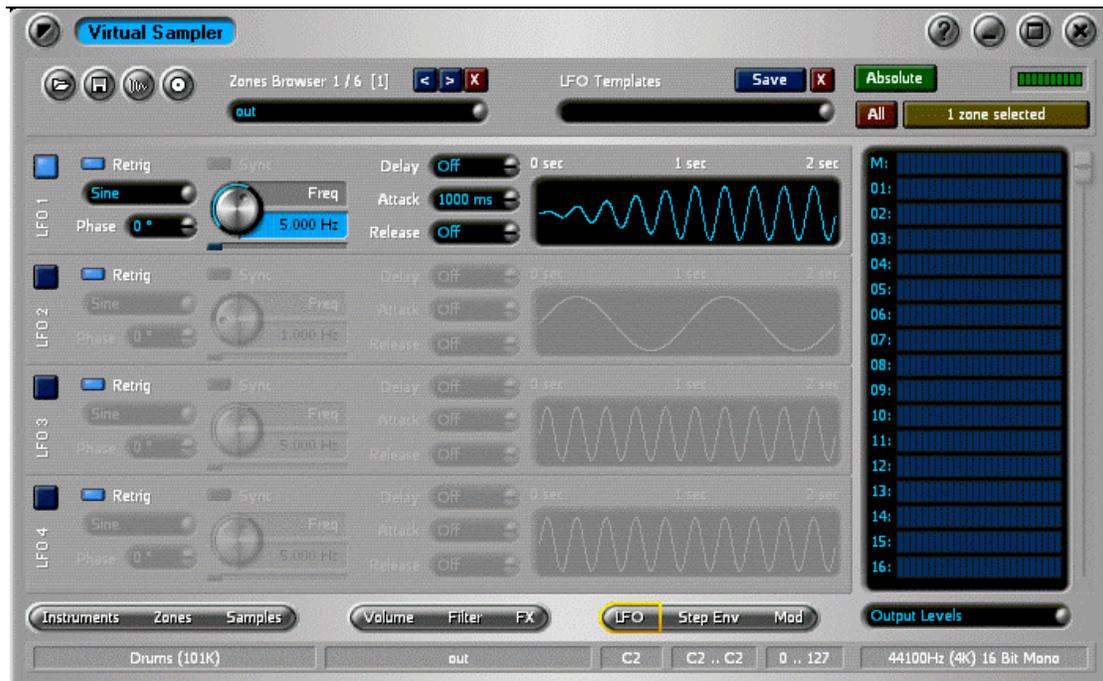
The "LFO Waveform" Value

This element specifies the waveform for the selected LFO. The following values are available:

Sine - a sine wave

HalfSine - a sine wave that only contains the positive values from the sine wave

Pulse15 - a 15% square wave

Pulse30 - a 30% square wave

Pulse50 - a 50% square wave

SawUp - a saw wave (direction: up)

SawDown - a saw wave (direction: down)

Triangle - a triangle wave

Random - a random wave

Noise S&H - a noise wave (Sample&Hold)

The "LFO Frequency" Value

This element specifies the frequency of the selected LFO. Display can be switched between Hertz and BPM via the context menu.

This element specifies a delay time for the selected LFO. The LFO starts generating values after the specified time interval has elapsed.

The "LFO Phase" Value

This element specifies the phase shift for the selected LFO waveform.

The "LFO Sync" Value

This element is used to synchronize the LFO frequency of the selected LFO with the tempo of the sequencer application. This setting is not available for the standalone version of VSampler.

This element displays the first 2 seconds of the specified LFO waveform and can be used to check LFO settings.

Activating/Deactivating LFOs

This element is used to enable or disable a LFO. You can also activate LFOs with pre-defined actions via context menu.

The "LFO Retrig" Value

This setting specifies if the selected LFO is re-started with each new voice (Retrig activated) or if the LFO is started once and continuously generates signals (Retrig deactivated).

This element is used to specify an attack-time for the selected LFO. Attack time starts when the voice is created. The level of the LFO changes within the specified time from 0% to 100%.

The "LFO Release" Value

This element is used to specify a release-time for the selected LFO. Release time starts when the voice enters the release phase (Note-off event). The level of the LFO changes within the specified time from 100% to 0%.

The Step-Env-Page

The Step-Env-page of the VSampler-Rack manages the free envelopes and step-sequencer of VSampler. These elements are commonly used to dynamically change zone-/instrument-parameters (also see "The Mod Page"). VSampler supports up to 4 free envelopes and 4 step-sequencers per zone/instrument. Each free-envelope/step-sequencer can either be restarted with each voice or can continuously generate signals.
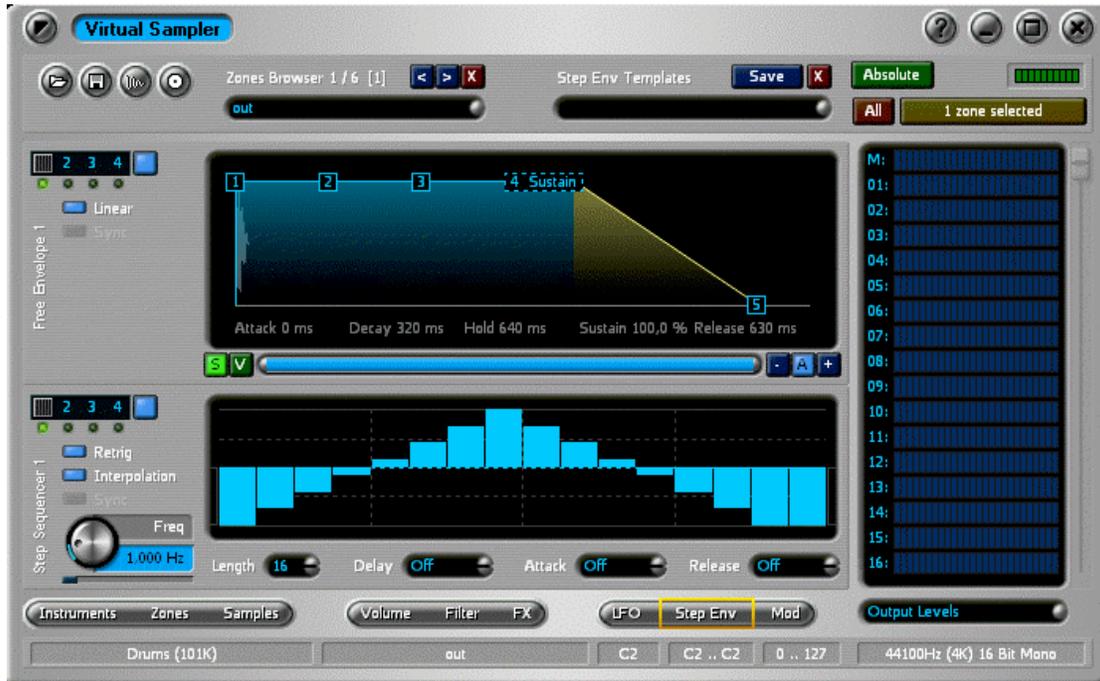
The Free-Envelope Selector
This element is used to select the current free-envelope.

The free-envelope-display displays the selected free-envelope for the current zone. Each point of the envelope is numbered and has a associated level and a time-stamp. The points are processed in order.

Each envelope starts at value 0 (point 0) and changes the parameter(s) of the associated zone in the time and shape specified until point 1 of the envelope is reached. The process is repeated for the rest of the envelope's points until the sustain-point is reached. At the sustain-point, the value of the envelope remains constant, until a note-off event (key released) occurs. After that the rest of the points is processed as explained above until the last point (value 0) is reached.

You can change values with the mouse or by numerical keyboard-input. When changing values with the mouse, you can move points graphically. Additionally you can change the shape of the envelope between two points. Changing values with the keyboard is done by double-clicking on an envelope-point.

The time until the envelope reaches point 1 is defined as "Attack"-time and displayed underneath the envelope-display.

The time from point 1 to point 2 of the envelope is defined as "Decay"-time and displayed underneath the envelope-display.

The time from point 2 to the release-point of the envelope is defined as "Hold"-time and displayed underneath the envelope-display.

The time from the sustain-point to the last point of the envelope is defined as "Release"-time and displayed underneath the envelope-display.

Optionally you can define a jump to a previous point when the sustain-point of the envelope is reached (sustain-loop) instead of keeping the value constant, this function is available via context menu.

Activating/Deactivating the Free-Env
This element is used to activate or deactivate the current free-envelope.

This element is used to select the current step-sequencer.

Activating/Deactivating the Step-Seq
This element is used to activate or deactivate the current step-sequencer.

The "Step-Seq Retrig" Value
This element specifies, if the selected step sequencer is restarted with each voice (Retrig activated), or if the step sequencer continuously generates signals (Retrig deactivated).

This element is used to synchronize the speed of the selected step-sequencer with the sequencer tempo of the host-application. This setting is not available for the VSampler standalone-version.

The "Step-Seq Interpolation" Value
This element specifies, whether VSampler interpolates between subsequent steps of the selected step-sequencer or not. For interpolated values, usually a continuous signal output is generated, otherwise signal dropouts may occur.

The "Step-Seq Frequency" Value
This element is used to specify the frequency of the selected step-sequencer. Using the context menu, the display is switched between Hertz and BPM (beats per minute).

This element is used to specify the length of one interval of the step sequencer, that means the steps available.

The "Step-Seq Delay" Value
This element specifies a delay-time for the step-sequencer. The step sequencer generates signals, after the specified time has elapsed.

The "Step-Seq Attack" Value
This element specifies an attack-time for the step-sequencer. Attack-time starts when a new voice is created. The level of the step sequencer changes from 0% to 100% within the time period specified.

This element is used to specify a release-time for the step-sequencer. Release-time starts when the voice enters its release-phase (Note-off event). The level of the step sequencer changes from 100% to 0% within the time period specified.

The Step-Seq Display
This element displays the steps of the step sequencer. Values can be changed using the mouse. Additionally predefined patterns are available via context menu. You also can use a WAV-file as source for the step-sequencer.

The "Free Env Sync" Value
This element is used to synchronize the speed of the selected free-envelope with the sequencer tempo of the host-application. This settings is not available for the standalone-version of VSampler.

This setting specifes whether the vertical scale (level) of the free envelope is displayed logarithmically or not.

The Mod-Page

The Mod-page of the VSampler-Rack manages modulation sources and -targets of VSampler. VSampler supports a multitude of capabilities to dynamically change VSampler parameters via modulation. For this purpose up to 6 instrument-modulations-slots and up to 6 zone-modulation-slots are available. Instrument-modulation apply to all zones of an instrument and are started only once. Zone-modulation applies to the selected zone(s) and are restarted with each new voice.

The Modulation Sources

This element specifies a modulation source for the selected slot. The output signal of the modulation source is multiplied with the modulation factor and results in the value for the modulation target (destination).

The following modulation sources are available:

LFO1..LFO4 - the output of the selected LFO

Free Env1..Free Env 4 (only zone-modulation) - the output of the selected free-envelope

Step Sequencer1..Step Sequencer 4 - the output of the selected step-sequencer

Volume Amount Ctrl - the MIDI-controller for volume (#7)

Panning Amount Ctrl - the MIDI-controller for the stereo position (#8)

Pitch Wheel - the value of the MIDI Pitch-Bend-wheel

Mod1 Wheel Ctrl - the MIDI-controller for modulation wheel #1 (#1)

Mod2 Wheel Ctrl - the MIDI-controller for modulation wheel #2 (#2)

Channel Aftertouch - the value of the MIDI-channel-aftertouch controller

Filter Cutoff Amount Ctrl - the MIDI-controller for the cutoff frequencies of the filters (#74 and #78)

Filter Resonance Amount Ctrl - the MIDI-Controller for the resonance of the filters (#71 and #75)

User Controller 1.. User Controller 6 - the values of the free user controllers from MIDI-preferences

Factor 1 .. Factor 8 - a freely usable factor

This element specifies the modulation factor for the selected slot. The output signal of the modulation source is multiplied with the modulation factor and results in the value for the modulation target (destination).

The following modulation factors are available:

LFO1..LFO4 - the output of the selected LFO

Free Env1..Free Env 4 (only zone-modulation) - the output of the selected free-envelope

Step Sequencer1..Step Sequencer 4 - the output of the selected step-sequencer

Volume Amount Ctrl - the MIDI-controller for volume (#7)

Panning Amount Ctrl - the MIDI-controller for the stereo position (#8)

Pitch Wheel - the value of the MIDI Pitch-Bend-wheel

Mod1 Wheel Ctrl - the MIDI-controller for modulation wheel #1 (#1)

Mod2 Wheel Ctrl - the MIDI-controller for modulation wheel #2 (#2)

Channel Aftertouch - the value of the MIDI-channel-aftertouch controller

Filter Cutoff Amount Ctrl - the MIDI-controller for the cutoff frequencies of the filters (#74 and #78)

Filter Resonance Amount Ctrl - the MIDI-Controller for the resonance of the filters (#71 and #75)

User Controller 1.. User Controller 6 - the values of the free user controllers from MIDI-preferences

Factor 1 .. Factor 8 - a freely usable factor

The Modulations Targets

This element specifies the modulation target for the selected slot. The output signal of the modulation source is multiplied with the modulation factor and results in the value for the modulation target (destination).

The following modulation targets are available:

Pitch - this modulation target changes the pitch of the sound

Filter Cutoff - this modulation target changes the cutoff frequencies of the filters

Filter Resonance - this modulation target changes the resonance of the filters

Filter Send - this modulation target changes the effect amount of the filters

Effect Send - this modulation target changes the effect amount of the effects

Factor 1 .. Factor 8 - this modulation target changes one of the modulation factors dynamically

Zone Factor 1 .. Zone Factor 8 (instrument-modulation only) - this modulation target changes one of the zone modulation factors dynamically

LFO 1 .. LFO 4 Frequency - this modulation target changes the frequencies of the LFOs

Step Seq 1 .. Step Seq 4 Frequenz - this modulation target changes the frequencies of the step-sequencers

Sample Play Start (zone-modulation only) - this modulation target changes the sample start position

Sample Play End (zone-modulation only) - this modulation target changes the sample end position

Volume Env (zone-modulation only) - this modulation target changes different values of the volume-envelope

Filter Env (zone-modulation only) - this modulation target changes different values of the filter-envelope

Free Env (zone-modulation only) - this modulation target changes different values of the free-envelope

Activating/Deactivating Modulations
This element is used to activate/deactivate a modulation-slot.

This button calls a dialog for extended modulation settings and monitoring of modulation activity.

The Slot-Activity
This element displays modulation activity for the appropriate slot.

The Treeview

The treeview shows different information depending on the selected mode. Mode selection is done with the control underneath the "treeview. The following modes are available:

Banks and Instruments
Instruments of Library
Zones of Instrument
Samples of Library
Disc Browser
MIDI Channels
Output Levels

The "Banks and Instruments" Treeview
This display shows all banks, Instruments and Zones of the current VSampler Library in form of a treeview. If an element is activated, the corresponding instrument or zone becomes the active element. Multiple elements are selected using the Ctrl- or Shift-keys and mouse click. By using drag&drop, elements can be moved to the VSampler instrument-grid on the "Instruments"-page.

The "Instruments of Library" TreeView
This display shows all instruments of the current VSampler Library as a list. If an element is activated, the corresponding instrument becomes the active instrument. Multiple elements are selected using the Ctrl- or Shift-keys and mouse click. By using drag&drop, instruments can be moved to the VSampler instrument-grid on the "Instruments"-page. The right mouse-button opens a context menu with advanced settings for the selected instrument(s).

The "Zones of Instrument" TreeView
This display shows all zones of the current instrument of the VSampler Library as a list. If an element is activated, the corresponding zone becomes the active zone. Multiple elements are selected using the Ctrl- or Shift-keys and mouse click. By using drag&drop, elements can be moved to the VSampler instrument-grid on the "Instruments"-page. The right mouse-button opens a context menu with advanced settings for the selected zones.

The "Samples of Library" TreeView
This display shows all samples of the current VSampler Library as a list. If an element is activated, the corresponding zone becomes the active zone. The right mouse-button opens a context menu with advanced settings for the selected sample.

The "Disc Browser" TreeView
The Disc-Browser displays files on hard-disc or external/network drives as hierarchical treeview. For bank-files (e.g. VSampler Libraries or SF2-files), a double-click on an entry shows the instruments for the selected bank-file. Multiple elements are selected using the Ctrl- or Shift-keys and mouse click. By using drag&drop, instruments can be moved to the VSampler instrument-grid on the "Instruments"-page (e.g. to import instruments or WAV-files).

The "MIDI Channels" TreeView

This display shows current assignment of instruments to MIDI-channels as a list. By using drag&drop, instruments from the VSampler instrument-grid on the "Instruments"-page can be assigned to a MIDI-channel. More settings for MIDI-channels are found in the MIDI-Rack.

The "Output Levels" TreeView

This display shows the current output-levels for each of the 16 MIDI-channels. More settings are found in the Mixer-Rack.

This switch indicates whether changes to zone-settings are applied absolute or relative. In "Absolute"-mode, all changes are applied absolute, that means changing a value updates all zones with this value. In "Relative"-mode, all changes are applied relative to the current value of the appropriate parameter within the current zone.

The Bank-Manager Rack

The Bank-Manager Rack is used to manage Sound-Libraries for VSampler.

This rack is activated by using the "Bank" button on the right side of the VSampler Main-Window or by using the menu command "View|Racks|Bank Manager" from the main menu or by using the keyboard shortcut "F9".
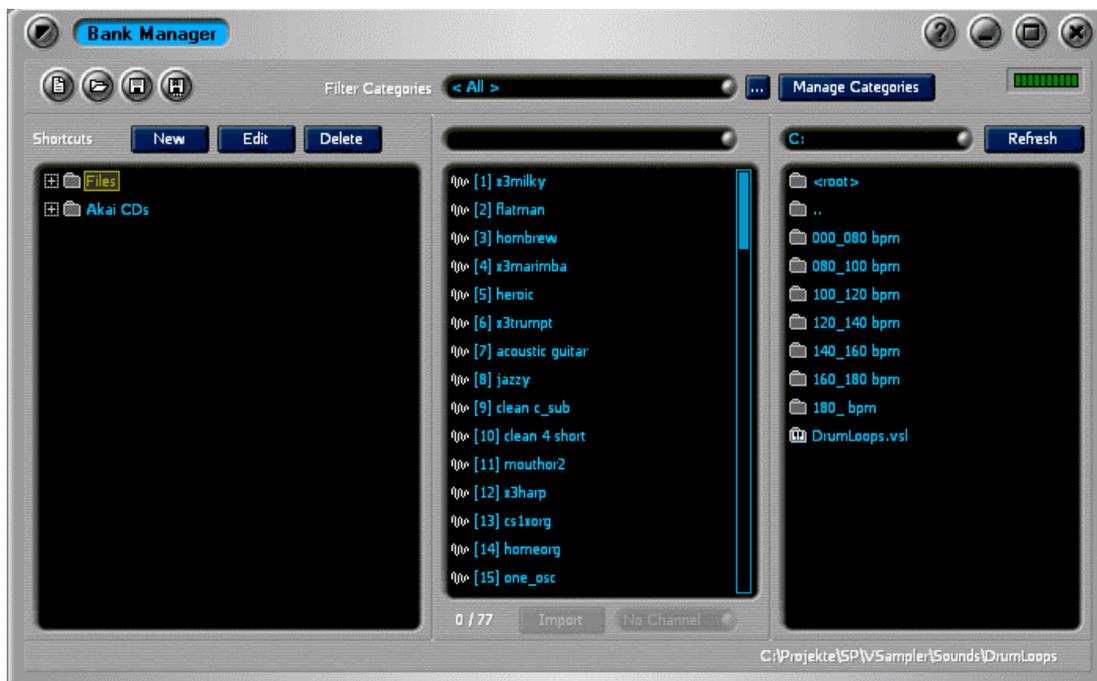
The "New" Button
This button creates a new Shortcut-database.

This button opens a Shortcut-database.

The "Save" Button
This button saves the Shortcut-database.

The "Save As" Button
This button saves the Shortcut-database under a different filename.

This display shows the progress for several actions.

The "New Shortcut" Button
This button creates a new Shortcut.

The "Edit Shortcut" Button
This button changes the name of the current Shortcuts.

This button deletes the selected Shortcuts.

The ShortCut List
The list of Shortcuts contains links to sound-banks. Supported Sound-banks are in VSampler-format or in one of the supported 3rd party formats including Akai-CDs. The hierarchical display is used for better handling of huge data.

The Instrument List
The instrument-list shows all instruments of the sound-banks that are selected within the Shortcut-list. The category-filter and the name-filter are used to create sub-queries.

The name-filter reduces the elements within the instrument-list by filtering with different search-criteria. The * character can be used as wildcard as usual. For example the search pattern *snare* only displays instruments that contain the term "snare". The search pattern is always case-insensitive. If you leave this field empty, all instruments will be displayed.

The Selection State
The selection-state counts selected as well as total instruments within the instrument-list.

The "Import" Button
The „Import"-button imports the selected instrument into the current VSampler library. If you select a channel within the list beneath this element, the instrument is assigned to the appropriate MIDI-channel. This operation is only available if exactly one instrument is selected.

The channel selector indicates which MIDI-channel is used for the imported instrument.

The Category Filters
The category-filter reduces the elements within the instrument-list by filtering with different search-criteria. Depending on the selected category, only instruments that are assigned to this category (see context-menu of the instrument-list) are displayed. The following list-entries have a special meaning:

All - All instruments are displayed.

None - Only instruments without any category assigned are displayed.

Complex Filters
This button opens the filter-dialog that is used to define more complex category-filters. You can compose category-expressions by using "AND" or "OR" boolean operations.

This button opens the dialog for managing instrument-categories.

The Drive Selection
This list is used to select the current drive for the file-browser.

The "Refresh" Button
This button is used to update the file-browser display.

The file-browser contains directories and files for the current folder (see status bar) that can be used by VSampler. You can move files or directories via drag&drop directly to the appropriate position on the shortcut-list.

The current Directory
This element displays the current directory for the file-browser.

The Import-Instrument Rack

The Import-Instrument Rack is used to import instruments into VSampler.

This rack is activated by using the "Import" button on the right side of the VSampler-Main-Window or by using the menu command "View|Racks|Import Instrument" from the main menu or by using the keyboard shortcut "F8".

The Progress Bar
This display shows the progress for several actions.

These buttons initiate a new import. The different buttons import several sound formats supported by VSampler:

* - This button can import all supported import formats.

VS3 - This button is used to import VSampler Libraries.

VSB - This button is used to import VSampler 2.x libraries.

SF2 - This button is used to import SF2-files (Soundfonts).

AKP - This button is used to import Akai-programs.

DLS - This button is used to import sounds in "Downloadable Sounds"-format.

LM4 - This button is used to import Steinberg LM4-files.

HALion - This button is used to import Steinberg HALion-files.

AKAI - This button is used to import CDs in AKAI-Sampler-format.

GIG - This button is used to import Gigasampler-files.

WAV - This button is used to import WAV-files.

The Multi-Grid
The multi-grid displays the state of the 16 MIDI-channels for the current Multi. A preview-instrument can be loaded

automatically to a multi channel by using the "Autoload to Multi-Channel" option. Instruments are imported to a multi-channel by drag&drop from the instrument-grid to a multi-channel.

The instrument-grid lists all Instruments of the selected import type where the columns represent the bank numbers 1..128 and the rows represent the program numbers 1..128. The instrument-grid supports different methods to select and import instruments:

Selection - Instruments are selected by mouse-click. The Ctrl- and Shift-keys on the keyboard are used to multi-select instruments. By single clicking on a fixed column/row of the instrument-grid, the whole column/row is selected. By activating the "Autoload to Instrument-Slot" option, the current instrument is loaded as preview-instrument and can be played instantly. Additionally a preview-instrument can be automatically assigned to a multi-channel by activating the "Autoload to Multi-Channel" option. Double clicking on an instrument or using the "Import" buttons makes the import of the selected instrument(s) permanent, otherwise the current preview-instrument is automatically deleted when another instrument is selected.

Import - Instruments can be imported by drag&drop to a multi-channel. The right mouse button displays a context menu holding additional options for the selected instruments.

The Akai Partition List
This list is used to select a partition on a Akai-CD for the "Akai CD" import type. "All" displays all partitions within the instrument-grid.

The "Autoload MIDI Channel" Option
This option automatically loads the current preview-instrument into the appropriate MIDI channel of the current Multi.

These options specify, how VSampler behaves if an instrument is assigned to a occupied MIDI channel slot. The following options are available:

Use next free slot - this option always uses the next free MIDI channel slot for the operation.

Replace current slot - this option overwrites the current MIDI channel slot.

Always ask - this option always asks for the desired operation (next free slot or overwrite).

The "Autoload Instrument" Option
This option temporarily imports the selected Instrument as preview-instrument. This can be used to quickly test instruments. The slot within the VSampler Instrument-Grid used for the preview-instrument is displayed in brackets beneath this element. A preview-instrument is automatically deleted whenever a new instrument is selected. To permanently import instruments double click on the instrument-grid or use the "Import"-button.

The "Instrument Slot used" Option
These options specify, how VSampler behaves if a file is imported into an already used instrument-slot of VSampler. The following options are available:

Use next free slot - this option always uses the next free instrument slot for the operation.

Replace current slot - this option overwrites the instrument on the current slot and replaces it with the imported instrument.

Always ask - this option always asks for the desired operation (next free slot or overwrite).

This option is used to shift the octave setting for the selected instrument up or down.

The "1\:1 Copy" Button
This button creates a 1:1 copy of an Akai-CD in form of a CD-image on hard disc.

The "Import" Button
This button imports the selected Instruments.

The Keyboard Rack

The Keyboard-Rack displays a virtual keyboard for use with VSampler.

This rack is activated by using the "Virtual Keyboard" button on the right side of the VSampler-Main-Window or by using the menu command "View|Racks|Virtual Keyboard" from the main menu or by using the keyboard shortcut "F3".
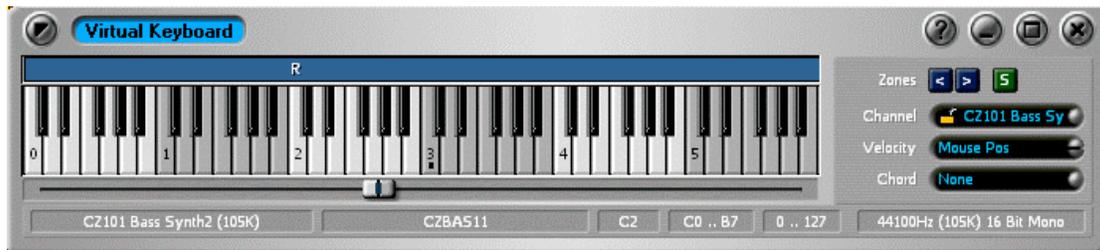
The Zones Display
The zones-display indicates which keys of the keyboard are occupied by a sample. The "R"-character marks the root-key of the associated zone. By using drag&drop you can load sound banks or copy WAV-files to single keys and automatically create zones within the current instrument.

The OnScreen Keyboard
The screen-keyboard simulates an external MIDI-keyboard and can be used to test sound banks. By using drag&drop you can load sound banks or copy WAV-files to single keys and automatically create zones within the current instrument.

This scrollbar is used to scroll the visible area of the keyboard.

The Keyboard-Channel
The keyboard-channel selects a MIDI-channel that is used by the keyboard to simulate MIDI-events. If a MIDI-channel is selected that has an associated instrument, this instrument becomes the active instrument. Also, when activating an instrument, the appropriate MIDI-channel is automatically adjusted. The first entry of the list has a special meaning: if this entry is selected, VSampler always plays the current instrument.

Navigating Zones
By using this buttons the next or previous zone of the current instrument is activated.

The keyboard velocity selects a MIDI-velocity value that is used by the screen-keyboard. You can assign values between 1 and 127. The value 0 or "Mouse Position" calculates the velocity used by examining the position of the mouse cursor when pressing a key (topmost = 1, bottom = 127).

The "Solo" Button
If this option is activated, only the current zone is played with the keyboard. The solo-button is available only if the keyboard-channel is set to the first entry in the list (the current instrument is played).

The Chord Selection
This combo box is used to assign chords for the current keyboard-channel. The chords are generated for the screen-keyboard and for external keyboard as well.

This field displays the name of the current instrument.

The current Zone
This field displays the name of the current zone.

The Root Key
This field displays the root-key of the current zone.

This field displays the keyboard-range of the current zone.

The Velocity Range

This field displays the velocity-range of the current zone.

The current Sample

This field displays the sample-name, sample rate, sample-size and sample-format of the current zone.

The MIDI Rack

The MIDI Rack is used to manage MIDI-settings and assignments of instruments to MIDI-channels.

This rack is activated by using the "MIDI" button on the right side of the VSampler-Main-Window or by using the menu command "View|Racks|MIDI Multi Settings" from the main menu or by using the keyboard shortcut "F5".
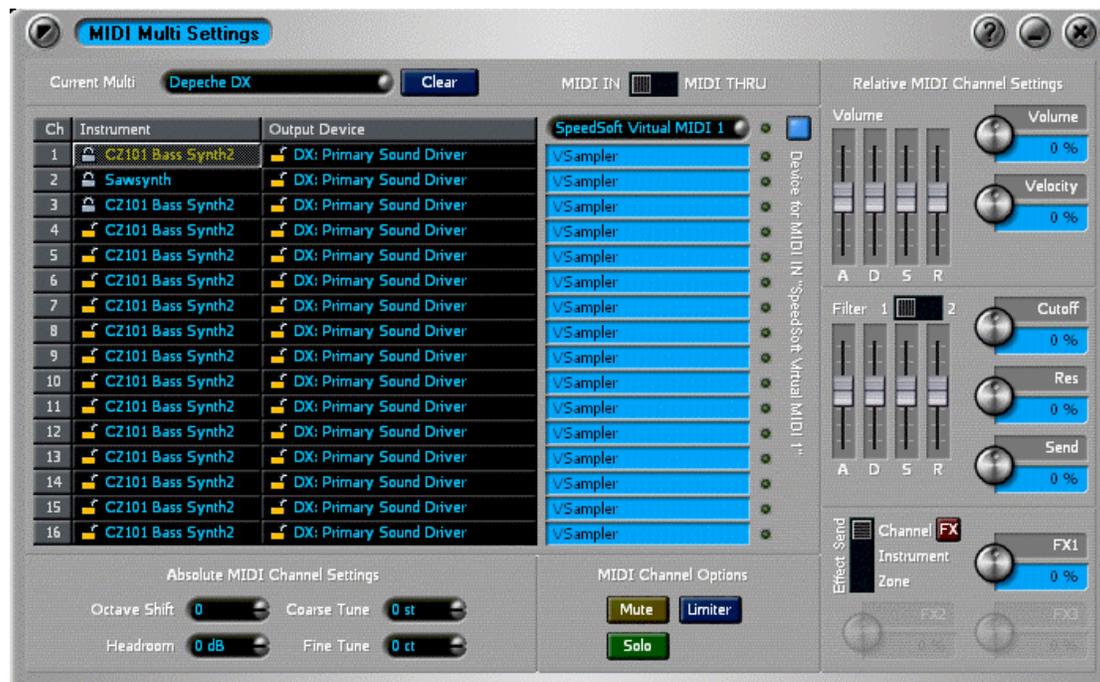
The "Clear" Button

This button deletes the current multi-assignment of instruments to MIDI-channels.

The MIDI Selector

This control is used to switch the MIDI-port display between „MIDI In" and „MIDI Out/Thru".

This display shows the assignment of instruments and output-devices to the appropriate MIDI-channels.

The Port Selector

This list selects a „MIDI In" or „MIDI Out/Thru" port (driver). The assignment of the 16 MIDI channels for the selected port is displayed underneath. Each MIDI port (driver) has an associated device for „MIDI In" and „MIDI Out/Thru" for each of its channels.

The MIDI Channel Selector

This element is used to assign a MIDI device to the selected port on the selected channel.

If the MIDI-switch is set to „MIDI In", this list contains all devices that can operate with MIDI input signals (e.g. VSampler or the pattern sequencer). If VSampler detects a MIDI event on the appropriate channel for the selected port (a MIDI driver that receives MIDI signals), this event is routed to the selected device and processed there.

If the MIDI-switch is set to „MIDI Out/Thru", this list contains all devices that receive MIDI signals (e.g. a MIDI input port). If VSampler detects a MIDI event on the appropriate channel, this event is routed to the selected port (a MIDI driver that can generate MIDI signals by itself) and processed there. Normally this feature is used to forward MIDI events to other MIDI equipment (e.g. an external hardware sampler). Note, that normal MIDI input processing for the selected port (see above) is done as well, that means an incoming MIDI signal can be played by VSampler or the pattern sequencer AND can be forwarded to another MIDI-port.

These leds display the MIDI activity for the appropriate MIDI-channel.

The Port Description
This button activates the selected MIDI-port (driver).

The "Octave Shift" Value
This element defines the octave-tuning (shift) of the MIDI-channel. This value is measured in octaves (1 octave=12 semitones).

This element adjusts the relative volume of the MIDI-channel.

The "Coarse Tune " Value
This element defines the coarse tuning of the MIDI-channel. This value is measured in semitones (1 semitone=100 cents).

The "Fine Tune" Value
This element defines the fine tuning of the MIDI-channel. This value is measured in cents (100 cents=1 semitone).

The Mixer Rack

The Mixer Rack is used to manage Mixer- and Volume-Settings for MIDI-channels.

This rack is activated by using the "Mixer" button on the right side of the VSampler-Main-Window or by using the menu command "View|Racks|Virtual Mixer" from the main menu or by using the keyboard shortcut "F6".

The "Mute" Button
This button mutes the channel.

The "Limiter" Button
This button activates the channel-limiter that limits the signal of the channel to 0 dB.

This button mutes all channels except the current channel.

The "Panorama" Knob
This control adjusts the stereo position for the MIDI-channel.

The Instrument Name
This element displays the name of the instrument that is associated to the MIDI-channel.

This element displays the volume of the MIDI-channel in dB.

The "Master Mute" Button
This button mutes all 16 MIDI-channels.

The "Master Limiter" Button
This button activates the Master-Limiter which limits the master level to 0 dB.

This element adjusts the stereo position of the sound.

The "Record" Button
This button starts recording sound. After finishing recording, the recorded material can be saved as WAV-file.

The "Clear Peaks" Button

This button clears the peak-level displays (peaks above 0dB) for the MIDI-channel.

This button clears the peak-level displays (peaks above 0dB) for all MIDI-channels.

The Master Strip

The master strip is used to adjust master-volume and to display the current output level. The master-volume affects all 16 MIDI-channels.

The Channel Strips

The channel strips are used to adjust channel volume and to display the current output level on the appropriate MIDI-channel.

The Sample-Editor Rack

The Sample-Editor Rack is used to edit sample data within VSampler.

This rack is activated by using the "Sample" button on the right side of the VSampler-Main-Window or by using the menu command "View|Racks|Sample Editor" from the main menu or by using the keyboard shortcut "F4".
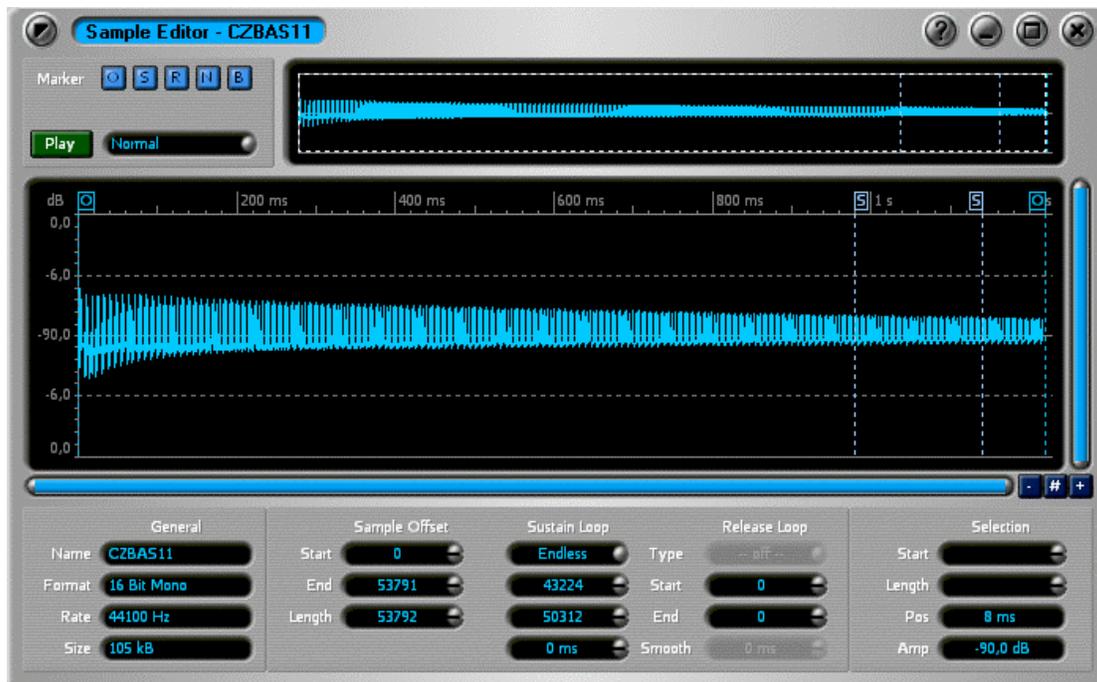
The Overview Display

This overview displays the complete sample of the active zone. The left mouse is used to select parts of the sample that are displayed in the detail-view. The right mouse is used to move the selection.

The "Show Play Offset Marker" Button

This button indicates if the "Play Offset" markers are shown within the detail-view of the sample.

This button indicates if the "Sustain Loop" markers are shown within the detail-view of the sample.

The "Show Release Loop Marker" Button

This button indicates if the "Release Loop" markers are shown within the detail-view of the sample.

The "Show Normal Marker" Button
This button indicates if markers are shown within the detail-view of the sample.

This button indicates if "Beat" markers are shown within the detail-view of the sample.

The "Play" Button
This button starts playback of the selected portion of the sample.

The Play Selector
This list specifies which part of the sample is played when pressing the „Play"-button.

The detail-view displays the selected portion of the current sample.

The horizontal scrollbar
This element is used to specify the horizontal dimension (time-axis) of the sample.

The vertical scrollbar
This element is used to specify the vertical dimension (level-axis) of the sample..

This button decreases the size of the sample within the detail-view (zoom out).

The "Zoom Free" Button
This button is used to dynamically change the size of the sample within the detail-view. If you move the mouse up while pressing the left mouse button, the display size is increased (zoom in), if you move the mouse down, the display size is decreased (zoom out).

The "Zoom In" Button
This button increases the size of the sample within the detail-view (zoom in).

This element holds the name of the current sample.

The Sample Format
This element holds the format of the current sample.

The Sample Rate
This element holds the sample-rate of the current sample.

This element holds the size of the current sample.

The Play Offset Start
This element holds the „Sample Start-Offset" of the current zone. Zone playback starts at this position.

The Play Offset End
This element holds the „Sample End-Offset" of the current zone. Zone playback ends at this position.

This element displays the length of the playable part of the sample (sample length decreased by start- and end-offsets).

The Sustain Loop Type
This element holds the sustain-loop type for the current zone. The following values are valid:

Endless - The loop repeats until the voice is terminated.

Once - The loop is played exactly one time.

Until Release - The loop repeats until the key is released.

The Sustain Loop Start
This element holds the starting-position of the sample „Sustain-Loop" for the current zone.

This element holds the ending-position of the sample „Sustain-Loop" for the current zone.

The Sustain Loop Smooth
This element holds the „Smooth"-value of the sample „Sustain-Loop" for the current zone. This parameter is used to fade sample volume between loop-end and loop-start.

The Release Loop Type
This element holds the release-loop type for the current zone. The following values are valid:

Endless - The loop repeats until the voice is terminated.

Once - The loop is played exactly one time.

This element holds the starting-position of the sample „Release-Loop" for the current zone.

The Release Loop End
This element holds the ending-position of the sample „Release-Loop" for the current zone.

The Release Loop Smooth
This element holds the „Smooth"-value of the sample „Release-Loop" for the current zone. This parameter is used to fade sample volume between loop-end and loop-start.

This element holds the starting position of the selected portion of the sample.

The Selection Length
This element holds the length of the selected portion of the sample.

The current position
This element holds the sample position at the mouse cursor.

This element holds the sample level at the mouse cursor.

The Pattern-Sequenzer Rack

The Pattern-Sequencer Rack is used to manage the integrated pattern sequencer of VSampler.

This rack is activated by using the "Pattern" button on the right side of the VSampler-Main-Window or by using the menu command "View|Racks|Pattern Sequencer" from the main menu or by using the keyboard shortcut "F7".

The "New Pattern" Button
This button initializes the current pattern-preset with default-values.

This button opens a file-selection dialog, the current pattern is initialized with the settings of the file selected.

The "Save Pattern" Button
This button saves the current pattern-preset to a external file.

The "Save Pattern As" Button
This button saves the current pattern-preset to a file. You can choose a location where the data is saved.

This button starts playback of the current pattern-preset. When playing, the current repeat-count and the pattern list (next pattern) are automatically evaluated. Playback is stopped by pressing this key again.

The "Record" Button
This button starts playback of the current pattern-preset. The output of the pattern sequencer is recorded and can be saved to a external WAV-file.

The "Mute" Button
This button mutes the pattern sequencer.

These buttons are used to assign the current pattern-preset to a MIDI-channel. The pattern preset is played, if a MIDI note-on event is recognized for the appropriate channel. To re-direct MIDI signals to the pattern sequencer, you must assign "Pattern Seqencer" to the playback device of the appropriate MIDI-channel on the multi-rack (automatically done when pressing the buttons).

The Progress Bar
This element displays MIDI activity.

The Bank List
This list contains the pattern banks available. VSampler maintains up to 8 pattern banks with up to 8 pattern programs.

This list contains the pattern programs available. VSampler maintains up to 8 pattern banks with up to 8 pattern programs.

The "Clear" Button
This button is used to initialize all pattern-presets (8 banks x 8 programs) with default-values.

The "Transpose" Value
This parameter specifies a transpose value for the patterns. This value is based on the normal pitch that is assigned within the pattern-channel details.

This parameter specifies the tempo of the pattern-preset. You can also synchronize the tempo with the tempo of the host-application, making this parameter obsolete.

The "Sync" Value
This switch is used to synchronize the tempo of the current pattern-preset with the tempo of the host-application. When enabled, the tempo of the host-application is used when playing patterns. This parameter is not available for the VSampler standalone-version.

The Pattern Channel Enabler
This switch specifies, if the pattern preset is active on the appropriate channel. Inactive patterns do not produce audio output.

This element contains the name of the pattern-channel. If an instrument is assigned to a pattern-channel, this field is automatically initialized with the name of the instrument. You can change this value by double-click.

The Pattern Channel Details
This element displays for which pattern channel the detail view (sliders) is activated. Within the detail view you can change several parameters (e.g. volume, panorama, …) for each pattern step.

The Pattern Display
The pattern display specifies which steps are audible for each pattern-channel. You can delete pattern with the context-menu.

This button is used to link instrument settings for all pattern-channels.

The Channel Rootkey
These elements are used to specify the root-leys for the pattern-channel. The semitone setting is used to pitch the pattern when a key different from the root-key is played. If this setting is "Off", the pattern always plays on the root-key specified.

The "Rootkey Link" Button
This button is used to link root-key settings for all pattern-channels.

This parameter specifies how long a step of the pattern-preset is audible. The tempo of the preset remains unchanged.

The "Volume" Value
This parameter specifies the base volume for all pattern steps. This parameter is used together with the pattern-step volumes to calculate the resulting output volume.

The "Panning" Value
This parameter specifies the base panning (stereo position) for all pattern steps. This parameter is used together with the pattern-step panning to calculate the resulting stereo position.

This setting specifies the step-count for the current pattern-preset. It ranges from 1 to 16.

The "Repeats" Value

This setting specifies the repeat-count for the current pattern-preset. It can range from 0 (endless) to 255. When playing a preset, this count is taken into account before the next pattern (it specified) becomes active.

The "Key Mode" Value

This parameter specifies how the pattern-preset reacts on keys on the appropriate MIDI-channel:

Key Lock - The pattern is started when pressing a key and runs as long as the key is pressed again, that means key-off events are ignored.

Key Press - The pattern is started when pressing a key and runs as long as the key is pressed.

This element specifies together with the "Next Program" parameter what pattern preset is played, when the current preset has finished. By specifying this value, pattern presets can be arranged as a preset-chain.

The "Next Program" Value

This element specifies together with the "Next Bank" parameter what pattern preset is played, when the current preset has finished. By specifying this value, pattern presets can be arranged as a preset-chain.

The Activity LED

This element displays the current step within the current pattern-preset.

This switch is used to link the sliders of the pattern channel-details. If this switch is activated, all appropriate sliders are also changed, when you move a certain slider.

The Channel Detail Sliders

These sliders are used to specify pattern channel-details. The buttons beneath the sliders specify what parameters are manipulated.

The Value Control

This element is used to directly specify values of the pattern channel-details.

This button is used to display the volume pattern channel-details.

The "Pitch per Beat" Button

This button is used to display the pitch pattern channel-details.

The "Gate per Beat" Button

This button is used to display the gate-time pattern channel-details.

This button is used to display the velocity pattern channel-details.

The "Panorama per Beat" Button

This button is used to display the panning pattern channel-details.

The Controller per Beat" Button

This button is used to display the controller pattern channel-details.

This list is used to select a controller that is displayed within the pattern channel-details.

Import and Export of sound-data

Importing instruments from VSampler libraries und 3rd party formats is easier than ever in VSampler3. Within the VSampler Import-Rack all instrument can be previewed before import and can be assigned to individual Multi-channels. No matter if the source is in SF2, HALion, GigaSampler or AKAI-CD format, with one click the next instrument is selected and you can test all sounds at once even with the song playing in background.

The Import-Rack stores its contents even if you close the window - until you create a new import. This way you can edit instruments while you have opened a file for importing new instruments in the background. One click switches between editor- and Import-Rack.

VSampler supports loading of sample-formats (WAV, AIF), instruments (VS3, VSB, SF2, LM4, AKP, DLS, HALion, GigaSampler) and AKAI S-1000/S-3000 CDs as well as disc-images of Akai-CDs.

The VSampler SmallView

The VSampler Small-View displays important settings of VSampler within a compact window.

This rack is displayed by using the menu-entry View|Small View".

The Multi List
This list selects the active Multi.

The "Import" Button
This button shows or hides the import-window.

This button shows or hides the instrument-grid.

The "Keyboard" Button
This button shows or hides the screen-keyboard.

The "Bank Manager" Button
This button opens the Bank-Manager Rack.

This element switches the channel display between instruments and output devices.

The "Mute" Button
This button mutes the selected channel.

The "Solo" Button
This button enables solo playback for the selected channel. All other channels are automatically muted.

This button activates the Limiter which limits the output level of the selected channel to 0dB.

VSampler Dialogs

The "Modulation Detail" dialog

This dialog is used to manage extended modulation parameters and to monitor modulation activity.

VSampler supports a multitude of capabilities to dynamically change VSampler parameters via modulation. For this purpose up to 6 instrument-modulation-slots and up to 6 zone-modulation-slots are available. Instrument-modulation apply to all zones of an instrument and are started only once. Zone-modulation applies to the selected zone(s) and are restarted with each new voice.
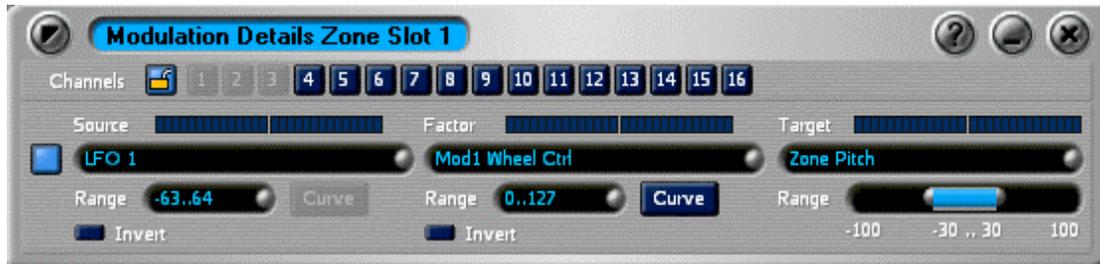
The Channel Selector
This element selects a MIDI-channel that is used to display modulation activity.

This element displays modulation activity for the selected slot.

Activating/Deactivating a Slot
This element is used to activate/deactivate a modulation-slot.

The Source Selector
This element specifies a modulation source for the selected slot. The output signal of the modulation source is multiplied with the modulation factor and results in the value for the modulation target (destination).

The following modulation sources are available:

LFO1..LFO4 - the output of the selected LFO

Free Env1..Free Env 4 (only zone-modulation) - the output of the selected free-envelope

Step Sequencer1..Step Sequencer 4 - the output of the selected step-sequencer

Volume Amount Ctrl - the MIDI-controller for volume (#7)

Panning Amount Ctrl - the MIDI-controller for the stereo position (#8)

Pitch Wheel - the value of the MIDI Pitch-Bend-wheel

Mod1 Wheel Ctrl - the MIDI-controller for modulation wheel #1 (#1)

Mod2 Wheel Ctrl - the MIDI-controller for modulation wheel #2 (#2)

Channel Aftertouch - the value of the MIDI-channel-aftertouch controller

Filter Cutoff Amount Ctrl - the MIDI-controller for the cutoff frequencies of the filters (#74 and #78)

Filter Resonance Amount Ctrl - the MIDI-Controller for the resonance of the filters (#71 and #75)

User Controller 1.. User Controller 6 - the values of the free user controllers from MIDI-preferences

Factor 1 .. Factor 8 - a freely usable factor

This element is used to change the numerical value of the selected modulation factor.

The Source Range
This element is used to specify the target range for the selected modulation source.

The Factor Activity
This element displays modulation activity for the selected modulation-factor/slot.

This element specifies the modulation factor for the selected slot. The output signal of the modulation source is multiplied with the modulation factor and results in the value for the modulation target (destination).

The following modulation factors are available:

LFO1..LFO4 - the output of the selected LFO

Free Env1..Free Env 4 (only zone-modulation) - the output of the selected free-envelope

Step Sequencer1..Step Sequencer 4 - the output of the selected step-sequencer

Volume Amount Ctrl - the MIDI-controller for volume (#7)

Panning Amount Ctrl - the MIDI-controller for the stereo position (#8)

Pitch Wheel - the value of the MIDI Pitch-Bend-wheel

Mod1 Wheel Ctrl - the MIDI-controller for modulation wheel #1 (#1)

Mod2 Wheel Ctrl - the MIDI-controller for modulation wheel #2 (#2)

Channel Aftertouch - the value of the MIDI-channel-aftertouch controller

Filter Cutoff Amount Ctrl - the MIDI-controller for the cutoff frequencies of the filters (#74 and #78)

Filter Resonance Amount Ctrl - the MIDI-Controller for the resonance of the filters (#71 and #75)

User Controller 1.. User Controller 6 - the values of the free user controllers from MIDI-preferences

Factor 1 .. Factor 8 - a freely usable factor

The Factor Value
This element is used to change the numerical value of the selected modulation factor.

The Factor Range
This element is used to specify the target range for the selected modulation factor.

This element displays modulation activity for the selected modulation-target/slot.

The Target Selector
This element specifies the modulation target for the selected slot. The output signal of the modulation source is multiplied with the modulation factor and results in the value for the modulation target (destination).

The following modulation targets are available:

Pitch - this modulation target changes the pitch of the sound

Filter Cutoff - this modulation target changes the cutoff frequencies of the filters

Filter Resonance - this modulation target changes the resonance of the filters

Filter Send - this modulation target changes the effect amount of the filters

Effect Send - this modulation target changes the effect amount of the effects

Factor 1 .. Factor 8 - this modulation target changes one of the modulation factors dynamically

Zone Factor 1 .. Zone Factor 8 (instrument-modulation only) - this modulation target changes one of the zone modulation factors dynamically

LFO 1 .. LFO 4 Frequency - this modulation target changes the frequencies of the LFOs

Step Seq 1 .. Step Seq 4 Frequenz - this modulation target changes the frequencies of the step-sequencers

Sample Play Start (zone-modulation only) - this modulation target changes the sample start position

Sample Play End (zone-modulation only) - this modulation target changes the sample end position

Volume Env (zone-modulation only) - this modulation target changes different values of the volume-envelope

Filter Env (zone-modulation only) - this modulation target changes different values of the filter-envelope

Free Env (zone-modulation only) - this modulation target changes different values of the free-envelope

The Target Range
This element is used to specify the target range for the selected modulation target.

This button is used to optionally specify a modulation curve for modulation-sources/factors that are based on MIDI-events (controllers). The curve is used to assign controller-values to modulation-values.

The "Invert" Option
This option is used to invert values for modulation-sources/factors.

The Filter Selector
This element switches filter controls between filter 1 and filter 2.

These knobs relatively change envelope segment-times (**A**ttack, **D**ecay, **R**elease) or levels (**S**ustain) of the filter-envelope. Changes apply to all zones of the instrument that is selected into the appropriate MIDI-channel.

The "Filter Cutoff" Value
This control relatively changes the filter cutoff frequency. Changes apply to all zones of the instrument that is selected into the appropriate MIDI-channel.

The "Filter Resonance" Value
This control relatively changes the filter resonance. Changes apply to all zones of the instrument that is selected into the appropriate MIDI-channel.

This control relatively changes the filter effect amount. Changes apply to all zones of the instrument that is selected into the appropriate MIDI-channel.

The Effect Selector
This element switches effect send controls between multi-, instrument- or zone-effects.

The "Multi Effects" Button
This button opens a window to edit multi- or instrument-effects (according to the effect switch).

This control relatively changes the effect amount for effect #1. According to the position of the effect switch, changes apply either to the multi-channel effect, the instrument-effect or to all zone-effects of the instrument that is selected in the appropriate MIDI-channel.

The "Effect 2 Send" Value
This control relatively changes the effect amount for effect #2. According to the position of the effect switch, changes apply either to the multi-channel effect, the instrument-effect or to all zone-effects of the instrument that is selected in the appropriate MIDI-channel.

The "Effect 3 Send" Value
This control relatively changes the effect amount for effect #3. According to the position of the effect switch, changes apply either to the multi-channel effect, the instrument-effect or to all zone-effects of the instrument that is selected in the appropriate MIDI-channel.

These knobs relatively change envelope segment-times (**A**ttack, **D**ecay, **R**elease) or levels (**S**ustain) of the volume-envelope. Changes apply to all zones of the instrument that is selected in the appropriate MIDI-channel.

The "Velocity" Value
This control relatively changes the velocity sensitivity. Changes apply to all zones of the instrument that is selected in the appropriate MIDI-channel.

The "Volume" Value
This control relatively changes the maximum output volume. Changes apply to all zones of the instrument that is selected in the appropriate MIDI-channel.

This window shows the selected instrument or output device (according to the position of the selector) for each channel. Settings are changed by double-clicking on an appropriate entry.

The Zones Display
This element shows the assignment of zones to the keys of the keyboard.

The "Master Volume" Value
This control has impact on the volume when playing with the onscreen-keyboard.

The onscreen-keyboard is used to simulate an external keyboard and can be used to quickly test instruments.

The Host Tempo
This element shows the current tempo of the host application (sequencer). In the Standalone version you can enter a tempo (by double click) to simulate the external tempo of the sequencer.

The "Analyze Sample Usage" dialog

The „Analyze Sample Usage" dialog displays informations about the usage-state of the current sample within instruments. A VSampler sample can be used within multiple instruments, sample-data is stored only once per library where possible.
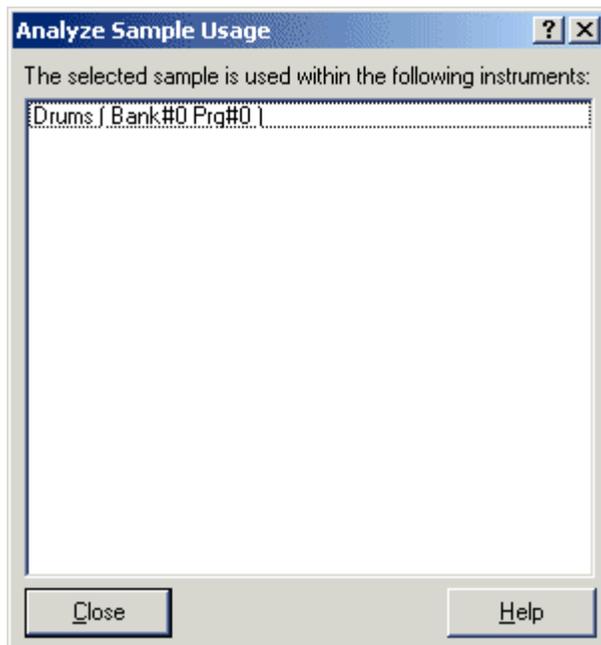
The instrument-list
The instrument-list shows all instruments that use the current sample. Double-clicking on an entry makes the selected instrument the active instrument.

The "Load Sample as Link" dialog

The „Load sample as link" dialog is automatically displayed, whenever a WAV-file is loaded into VSampler. Display of this dialog is controlled by defining a standard-action within the

Import-Preferences of VSampler (tab "WAV").

VSampler stores samples either as embedded copy or as link to the original file on hard-disc. Embedded samples are stored together with the VSampler library, the original file is no longer needed and can be deleted or moved. For linked samples, sample-data is reloaded from the reference to the WAV-file when loading a library. Linked samples reduce bank size, but complicate exchanging libraries with other users or copying/moving bank files with the associated WAV-files.
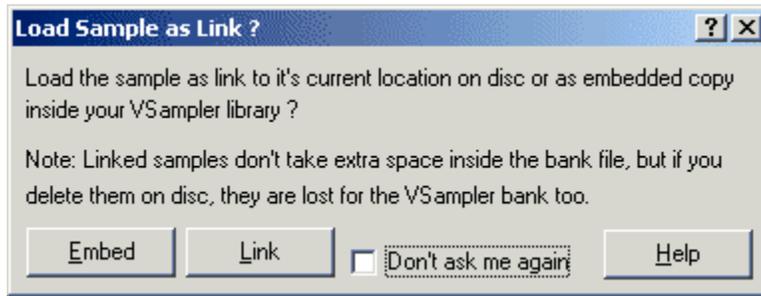
The "Embed" Button

The "Embed" button loads the data of the current WAV-File into the current VSampler library. The original WAV-file is no longer needed by VSampler and can be deleted or moved.

The "Link" button stores a reference to the current WAV-file within the current VSampler library. Sample-data itself is not copied and reloaded from the WAV-file whenever the library is loaded.

The "Audio Preferences" dialog

The „Audio Preferences" dialog is used to manage settings for audio hardware used by VSampler. VSampler supports the following technologies or protocols:

Microsoft DirectSound Version 6+ - This option is only available for the standalone-version of VSampler. If you additionally have ASIO-compatible hardware, you should use the ASIO-drivers of your soundcard for performance boosts. The latency of the VSampler DirectSound driver depends on the selected driver and the buffer settings. You always should use the latest drivers available for your hardware.

Steinberg ASIO -This option is only available for the standalone-version of VSampler. ASIO-drivers usually achieve best performance and latency when using VSampler standalone-version, some drivers allow latencies up to 2ms (practically no audible latency). When using the VSampler ASIO-drivers, you should disable the DirectSound-drivers, otherwise problems may occur on some systems.

Propellerheads ReWire - This option is only available for the ReWire-version of VSampler. To start the ReWire-version, first start your ReWire compatible mixer-application (e.g. Cubase), activate VSampler and then start the standalone-application of VSampler. You will be prompted for the VSampler ReWire mode. The ReWire-driver of VSampler automatically uses sound-card-settings of the ReWire host-application. ReWire provides the same sample-accurate timing of MIDI-data and practically no audible latency (depending on selected driver within the ReWire host-application).

Steinberg VSTi - This option is only available for the VSTi-version of VSampler. To start the VST-version, first start your VSTi compatible host-application (e.g. Cubase) and activate

VSampler. The VSTi-driver of VSampler automatically uses sound-card-settings of the VST host-application. VSTi provides same sample-accurate timing of MIDI-data and practically no audible latency (depending on selected driver within the VST host-application).

Cakewalk DXi - This option is only available for the DXi-version of VSampler. To start the DXi-version, first start your DXi compatible host-application (e.g. SONAR) and activate VSampler. The DXi-driver of VSampler automatically uses sound-card-settings of the DXi host-application. DXi provides the same sample-accurate timing of MIDI-data and practically no audible latency (depending on selected driver within the DXi host-application).

For the ReWire, VSTi and DXi versions, VSampler supports up to 16 stereo-outputs. For the DirectSound and ASIO versions, the available outputs depend on the appropriate driver. For DirectSound and ASIO-drivers additional parameters (like buffer-settings and sample-rate) can be specified, for the ReWire, VSTi and DXi versions these settings are taken from the appropriate host-application.
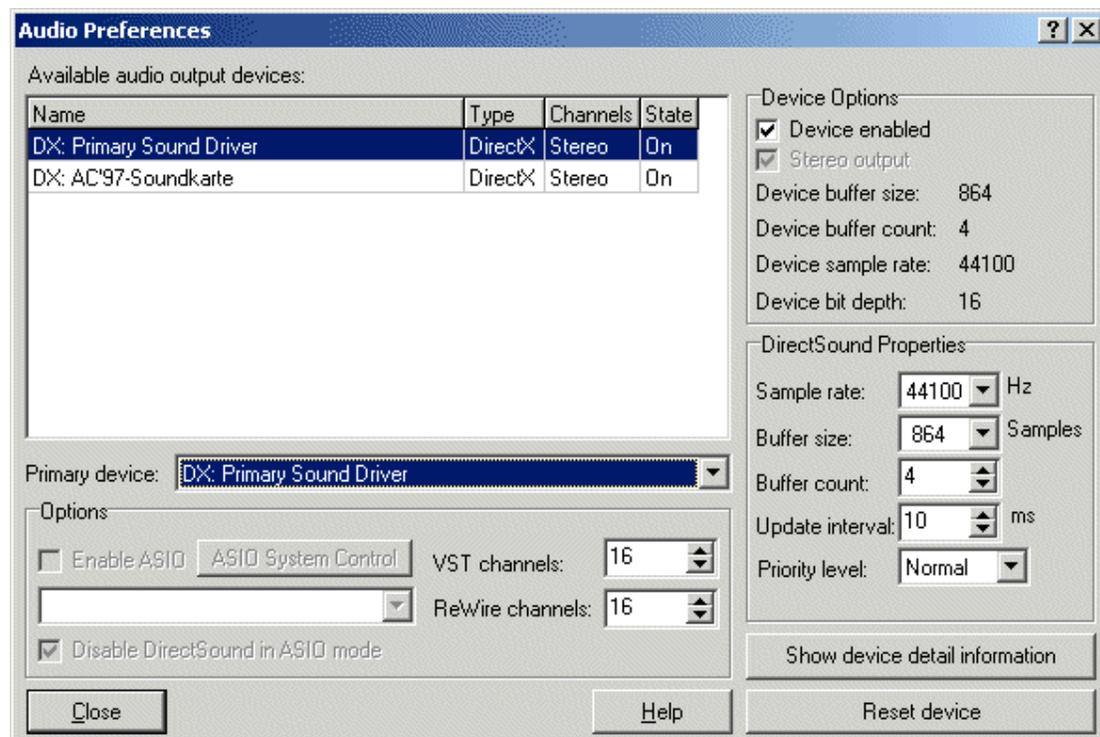
The output device list
This listbox shows all audio devices available to VSampler. Depending on the VSampler version used (Standalone, ReWire, VSTi or DXi), different devices are available.

This element is used to select the VSampler default-audio-device. The default-audio-device is used for all non channel sound outputs within VSampler (e.g. screen keyboard and previewing WAV-files).

Activating/Deactivating ASIO
This switch activates or deactivates the availability of the VSampler ASIO-driver (if available).

The "ASIO Preferences" Button
This button displays a property dialog for the selected ASIO-driver.

This element specifies the appropriate ASIO-driver that should be used by VSampler. You can only activate one ASIO-driver at a time. Some ASIO-drivers provide sub-devices or independent outputs.

Specifying VST channels

This element specifies the VSTi/DXi-channels available to VSampler. VSampler supports up to 16 independent VSTi/DXi outputs.

Specifying Rewire channels

This element specifies the ReWire-channels available to VSampler. VSampler supports up to 16 independent ReWire outputs.

These elements specify options for the selected device. Additionally you can deactivate the device or specify output channels (Mono/Stereo).

Device settings

These elements are used to specify device settings for DirectSound and ASIO-drivers.

The "Detail information" Button

This button shows detail information for the selected device.

This button resets the selected device.

The "Deactivate DSound" Button

This switch is used to automatically deactivate DirectSound drivers, whenever usage of ASIO-drivers is activated. When using ASIO-drivers you should always deactivate DirectSound to prevent resource conflicts.

The "Combine Zones" dialog

The „Combine Zones" dialog is used to specify options when combining 2 mono zones to one stereo zone.
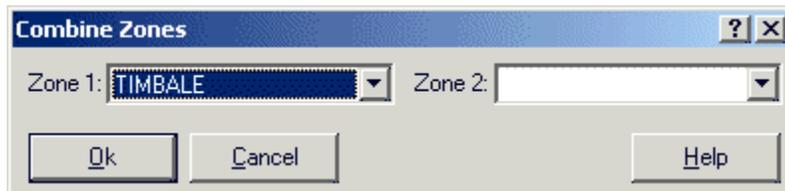
Zone selection

These elements specify the zones to combine.

The "Configure Pages" dialog

The „Configure Pages" dialog is used to assign VSampler-Racks to different rack-pages. One rack-page can contain multiply racks or each rack can be positioned on its own page.
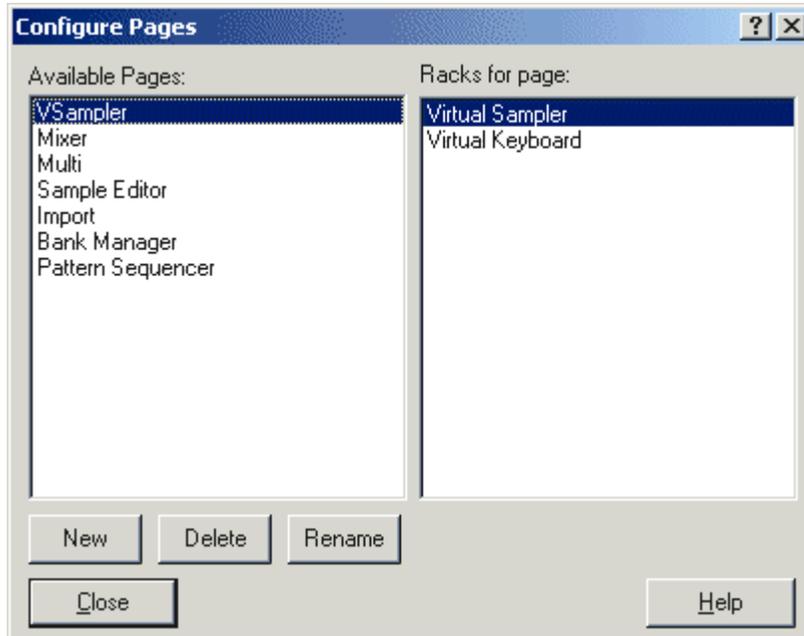
The available pages
This list contains all rack-pages available. New pages are created, deleted or renamed with the buttons underneath this control. By using drag&drop, the rack-page order is changed.

This list contains the racks associated with the current rack-page. You can assign racks to rack pages per drag&drop, re-assignment takes place immediately.

The "New" Button
This button creates a new rack-page.

The "Delete" Button
This button deletes the current rack-page. You can only delete a page if it does not contain any racks.

This button is used to rename the current rack-page.

The "Configure Toolbar" dialog

The „Configure Toolbar" dialog is used to define the placement of the rack buttons on the vertical toolbar palette. All changes are applied immediately.
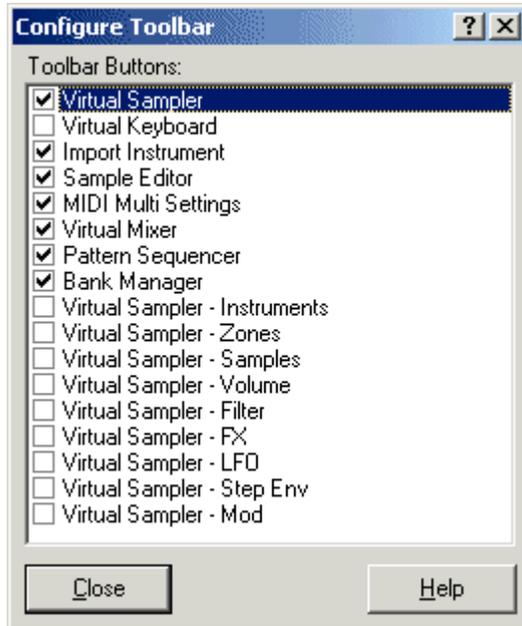
The Toolbar Buttons

This list contains all rack-buttons of the vertical toolbar. These buttons are used to display the appropriate rack when pressed. The ordering of the buttons can be changed per drag&drop. The checkbox controls visibility of the current rack-button.

The "Environment Options" dialog

The „Environment Options" dialog is used to configure general environment options of VSampler.
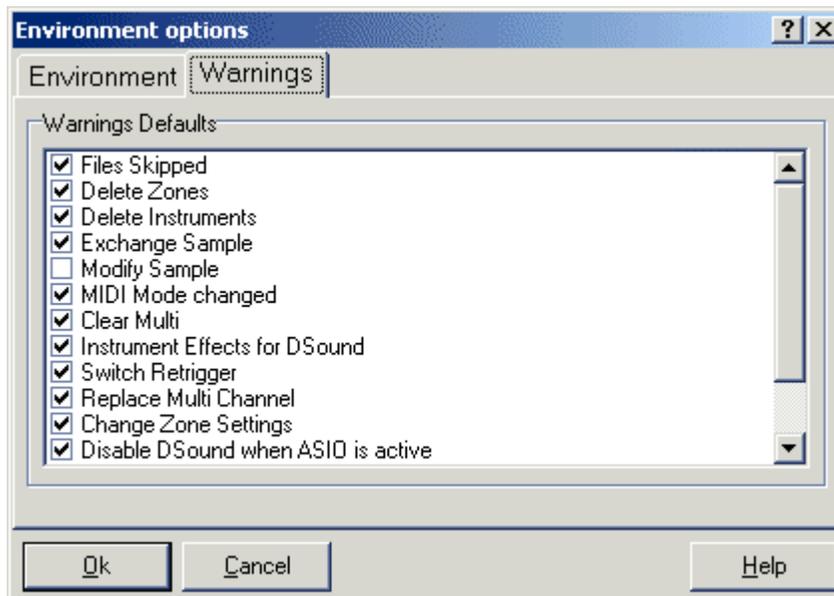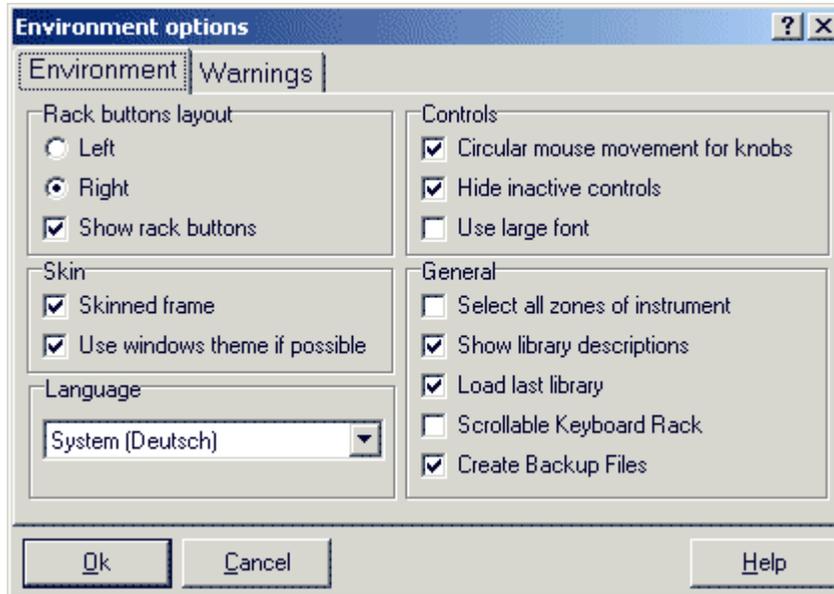
The "Rack buttons layout" option
This option specifies position and visibility of the rack-buttons.

The Skin options
This option specifies whether the window frame of rack-windows is drawn with the current skin or by the operating system.

These options specify which warnings are produced by VSampler for certain operations.

The language options
This option specifies the language for the whole application. Changes are applied when you restart VSampler.

The Windows Themes Option
This option specifies if the windows XP themes should be used for control elements within the VSampler dialogs (only available for windows XP operating systems).

This option specifies if all zones of an instrument are automatically selected when an instrument is activated.

The "Show library description" option
This option specifies if additional information (description, author and copyright) is displayed when loading a VSampler library.

The "Load last library" option
This option specifies if the last used library is automatically loaded when starting up VSampler.

This option specifies if the keyboard rack is docked on a fixed position or like other racks freely moveable.

The "circular knobs" option
This option specifies the behaviour of data knobs within the racks. You can choose between radial or linear behaviour.

The "Hide inactive controls" option
This option specifies if VSampler deactivates control elements that have no influence on the sound output. Deactivated control elements are displayed half-transparent und cannot be changed.

This option enables large fonts for several control elements.

The "Create Backups" option
If this option is activated, VSampler creates a backup copy each time a bank is saved. Backup-files have the file extension .bak.

The "Use standard host toolbar" option
If this option is activated, VSampler shows the standard toolbar of the host application for the VSTi version of VSampler.

The "Find Sample" dialog

The „Find Sample" dialog is displayed, if VSampler cannot find the associated WAV-file for a linked sample. You can search for the sample automatically or manually or you can ignore the sample.
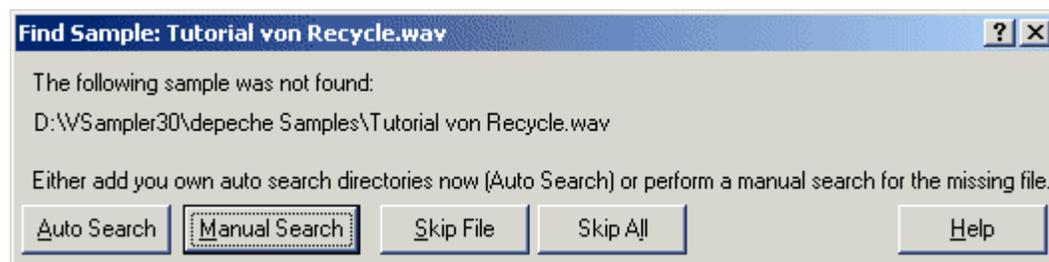
The "Manual Search" Button
This button is used to manually search for a WAV-file. You will be prompted to specify the location of the file.

The "Skip" Button
This button skips the current WAV-file. The appropriate sample is deleted.

This button starts a automatic search for the WAV-file, using the directories and sub-directories specified with the "Search Paths" option.

The "Skip All" Button

This button skips all missing WAV-files. The associated samples are deleted.

The "Import Preferences" dialog

The „Import Preferences" dialog is used to define preferences for importing audio- and bank-formats into VSampler.
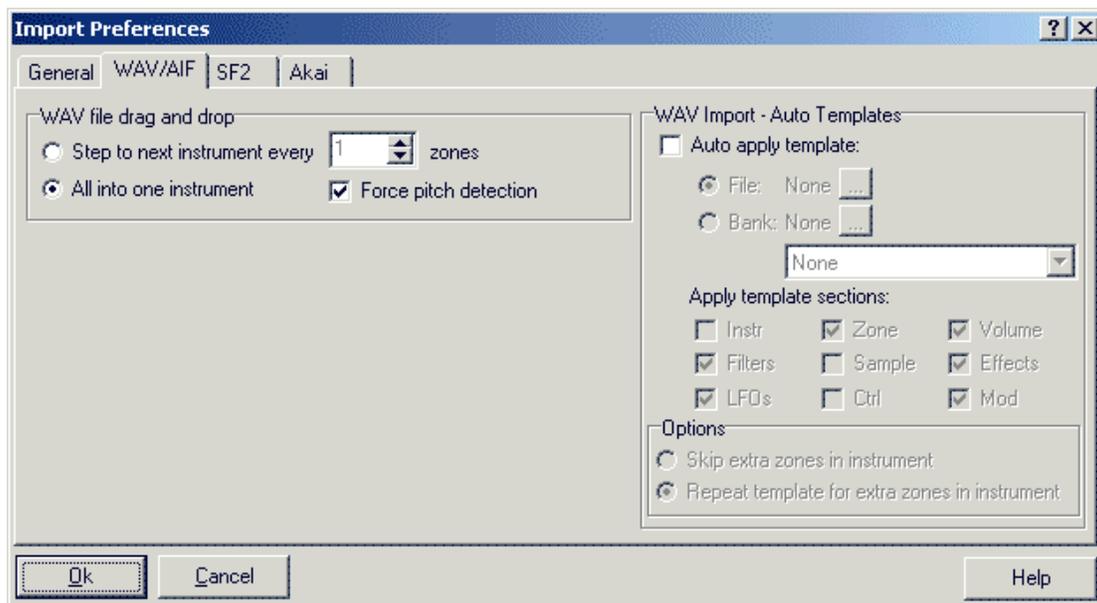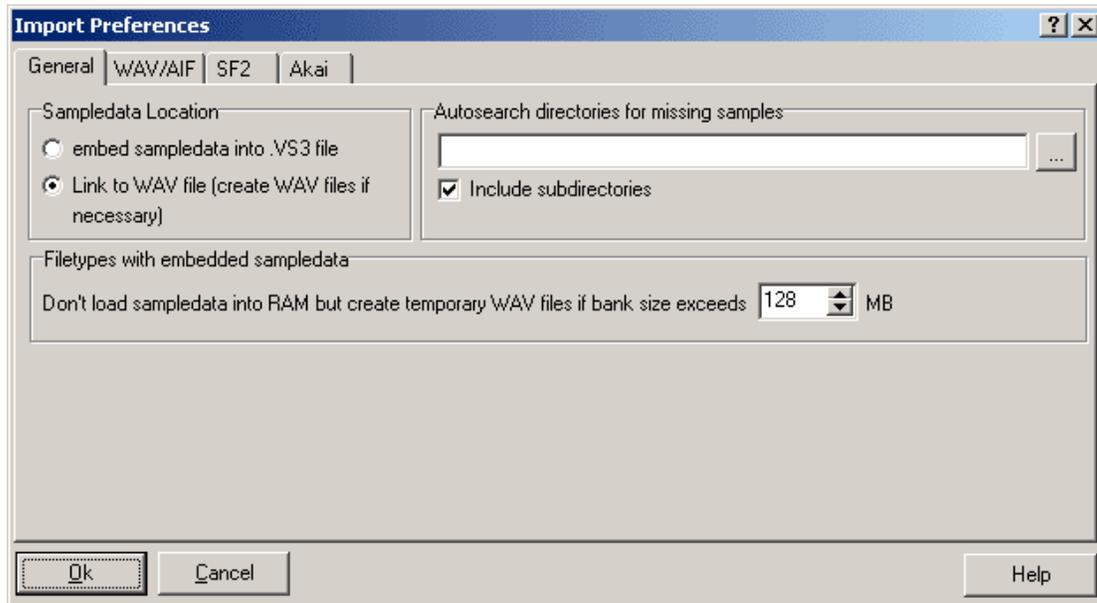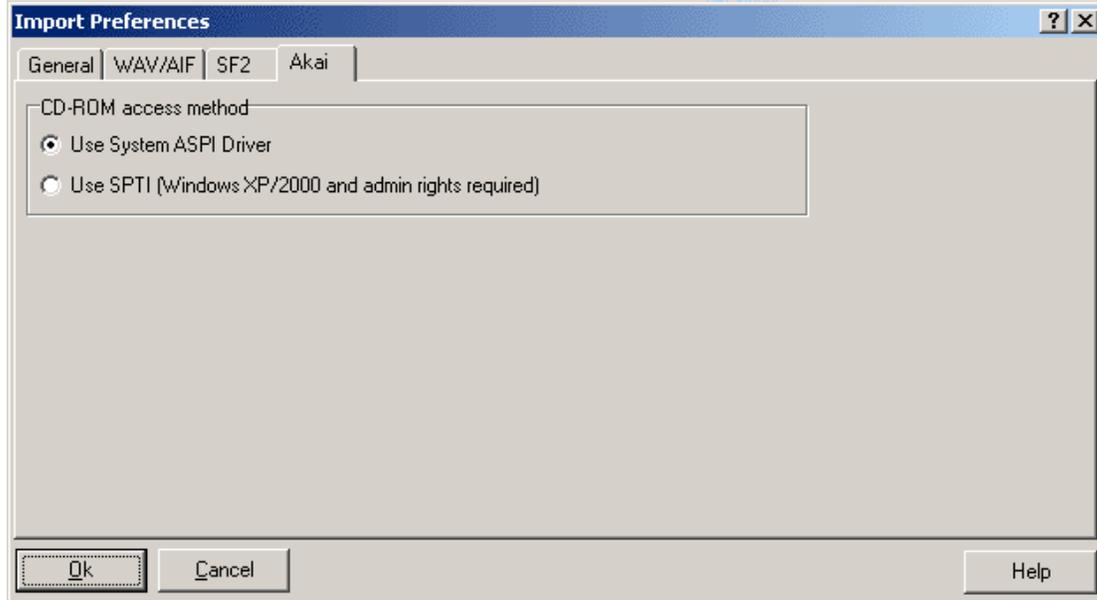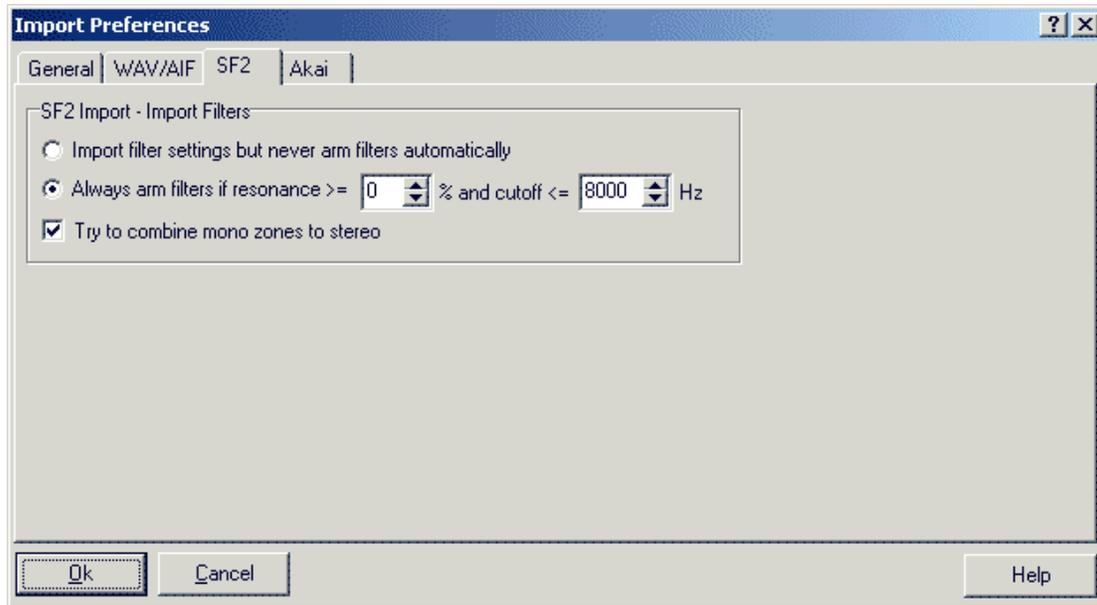
Storage location for sampledata

These options specify, if VSampler automatically creates linked samples when importing WAV-files. The following options are available:

Embed sample-data into library - VSampler embeds sample-data into the current library.

Link to WAV-file - VSampler creates a link to the original WAV-file on hard-disc. Eventually new WAV-files are created when saving the bank.

These options specify settings for importing WAV-files via drag&drop. The following operations are available:

Step to next instrument every xx zones - when importing multiple WAV-files, VSampler automatically creates a new instrument on the next free slot after the specified maximum zone-count is reached.

All into one instrument - when importing multiply WAV-files, VSampler stores all samples into one instrument.

Force pitch detection - VSampler uses the integrated pitch-detection algorithm to determine the root-key of the samples automatically from the WAV-files.

Search directories
This element is used to define search-directories for WAV-files.

These options are used to automatically apply a template to the imported zones, when WAV-files are imported. Additionally you can specify what information from the template file should be applied to the zones.

SF2 Options
These elements specify options for the SF2-import. VSampler can import filter-settings for SF2-files always or under certain conditions, this setting usually has impact on the performance of VSampler when extensively using filters on SF2-files. Additionally you can specify if VSampler automatically combines SF2 mono zones to stereo-zones.

CD-ROM Options
These options specify access type for the CD-ROM drive for the Akai import. Available are:

System ASPI driver - VSampler uses ASPI drivers from the operating system for CD-ROM access.

SPTI driver - VSampler uses the SPTI protocol for CD-ROM access (only available under Windows 2000/XP with admin rights)

These options specify settings for importing bank-files. For files larger than the value specified here, VSampler automatically creates linked WAV-files on hard-disc and does not load all samples into memory. This is especially useful if you have only little main memory available.

The "Keyboard Scaling" dialog

The „Keyboard Scaling" dialog is used to define the dependency of the volume from the keyboard-key pressed. The volume can be change from -100% (silence) up to +100% (doubling). You can define up to 11 points per mouse-click. Changing values is done by dragging a point with the mouse. VSampler supports keyboard scaling at either zone- or instrument-level. Additionally you can display key-crossfading data.
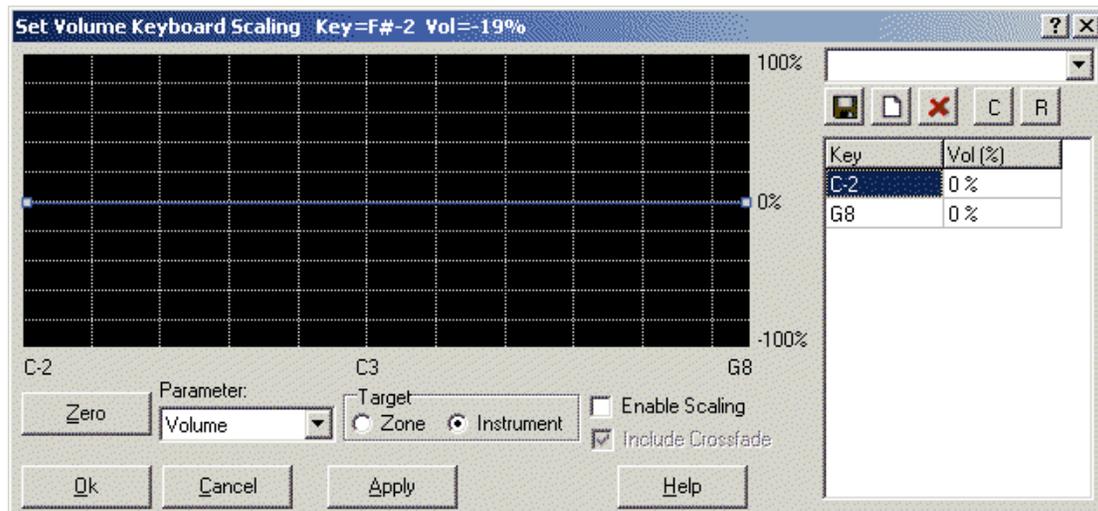
The Scaling Display
The scaling display shows the current scaling-data. You can insert new points into the curve per mouse-click. Changing points is done by dragging a point with the mouse. Alternatively you can enter values with the keyboard by using the note/value grid on the right side of the dialog window.

The "Zero" button resets the current scaling-data, that means all points are set to 0% (no changes).

Activating/Deactivating Scaling

This element is used to activate/deactivate the keyboard scaling.

The Noten/Value Display

The note/value grid displays the current scaling-data. Per double-click on the Vol (Volume) column, the volume for the appropriate point can be entered with the keyboard.

The target selector defines the type of the keyboard scaling. VSampler supports keyboard scaling either at **zone-** (each zone can have its own scaling settings) or at **Instrumentes**-level (all zones of an instrument have the same scaling-settings). You can also combine zone- and instrument-scaling.

The Preset Tools

By using the preset tools, you can save or restore user-defines scaling-settings. You can assign a name to each preset.

Including Crossfading

This switch additionally displays impact of the keyboard-crossfading (if enabled) on the volume. Keyboard-crossfading and keyboard-scaling values are combined to calculate the resulting volume for each key.

The "MIDI Preferences" dialog

The „MIDI Preferences" dialog is used to specify settings for the MIDI-interfaces of VSampler. For the standalone-version VSampler supports all MIDI-devices available to the system. For the ReWire, VSTi and DXi versions only one MIDI port (with 16 MIDI channels) is available.
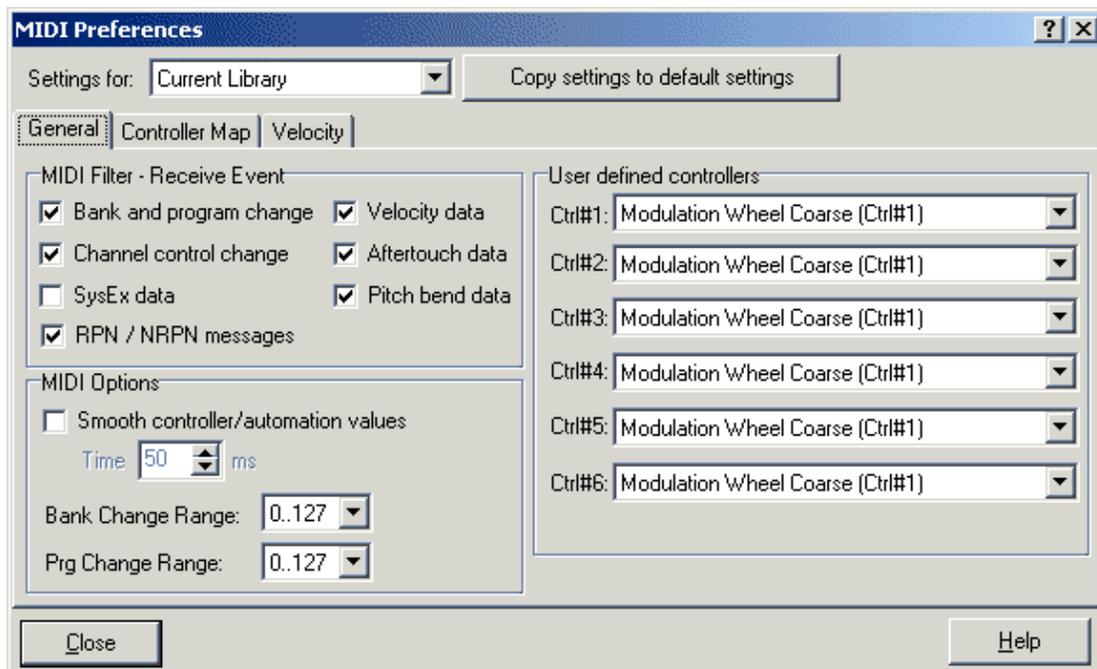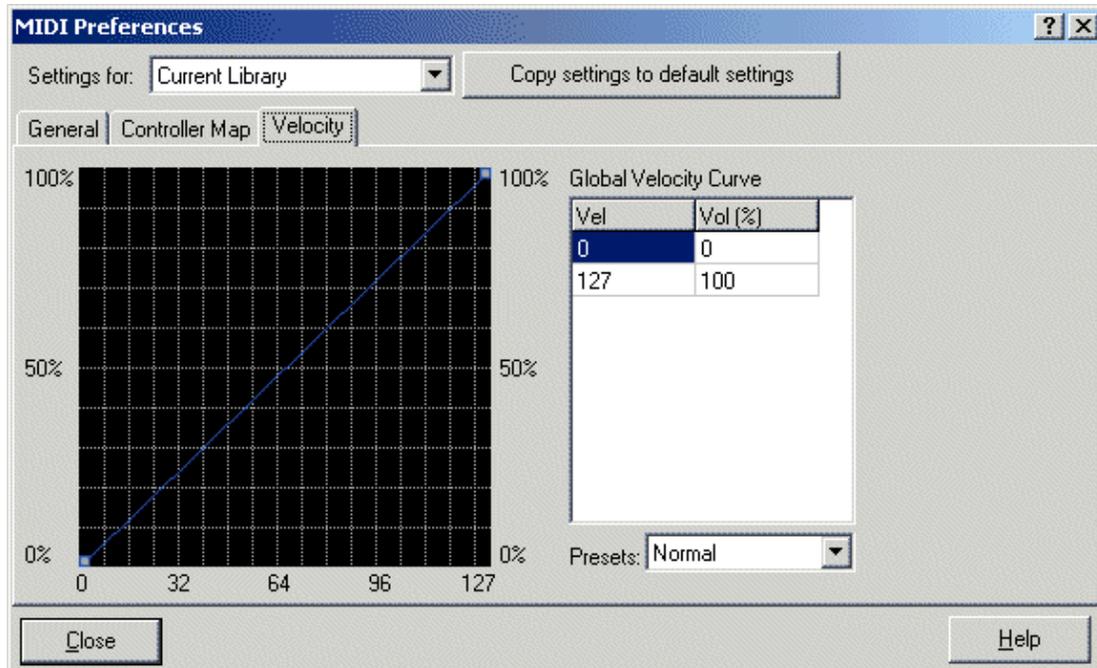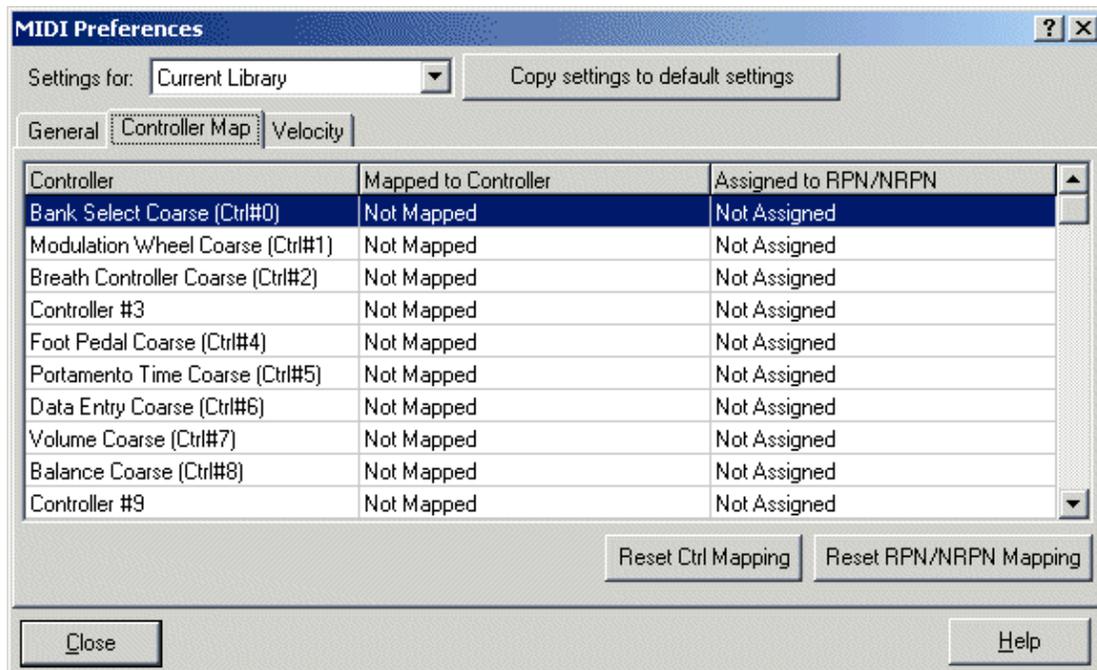
The MIDI Filters

MIDI-filters define, what kind of MIDI events VSampler accepts. Deactivated event types are ignored by VSampler.

The MIDI Options

These controls are used to specify MIDI-options. Available options are:

Smooth controller/automation values - If this option is set, VSampler interpolates subsequent controller-/automation values. This is done by interpolating the last valid value with the next value within buffers. This prevents audible glitches between values. The time setting specifies the minimum time that is used to smooth values, a higher value produces higher latency of input data.

Bank Change Range - this option specifies the range for Bank-Change MIDI-events.

Prg Change Range - this option specifies the range for Program-Change MIDI-events.

This button resets the controller-mapping to default values, that means no controller is redirected to another.

The Global Velocity-Curve
These controls are used to specify the global velocity curve of VSampler.

The Controller/RPN/NRPN Map
The controller/RPN/NRPN map defines a mapping for each MIDI-controller-/RPN-/NRPN value to another value. Each controller in VSampler can be redirected to another controller. For example you can control the volume of a sound (usually controller #7) via controller #1 (Modulation wheel) by redirecting controller #1 to controller #7. All MIDI-events "controller #1" will then automatically be interpreted as "controller #7". Additionally you can assign a RPN-/NRPN-event to each controller. You can change the assignments by double-clicking on the appropriate entry.

This option specifies, if VSampler replaces the settings of a library loaded with the global settings each time a library is loaded.

The "Reset RPN/NRPN-List" Button
This button resets the RPN-/NRPN-mapping to its default values, that means no controller is redirected to a RPN/NRPN event.

The Mode Selection
This element specifies the mode for settings MIDI-options. The following options are available:

Current Library - The settings only apply to the current library and are saved together with the library.

New Library Defaults - The settings are default values for new libraries, that means for each new library created, these settings are automatically used as default.

This button is used to copy the settings of the current page to the global defaults or to the library settings.

The "Performance/Quality Preferences" dialog

The „Performance/Quality Preferences" dialog is used to define settings effecting performance or output quality of VSampler.
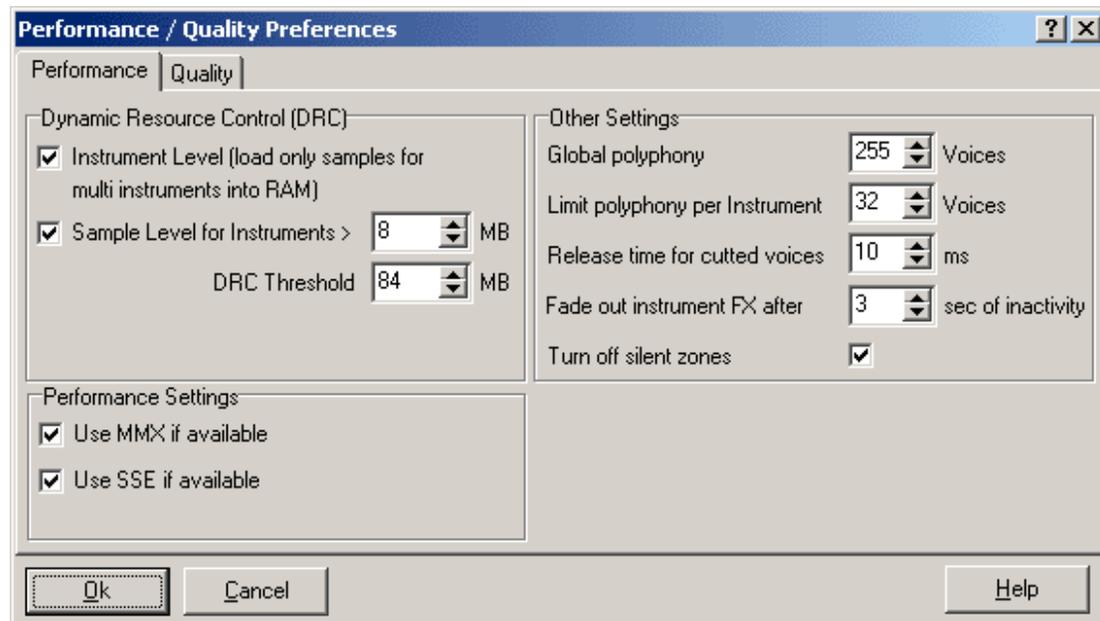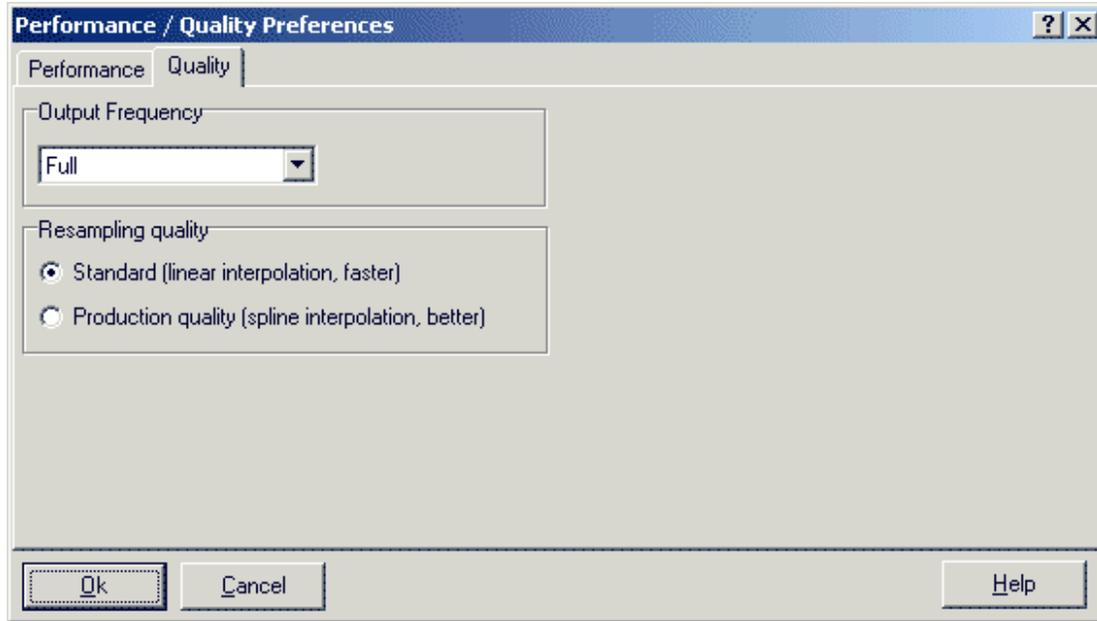
The Performance Options

The performance options affect performance of VSampler. The following options are available:

Use MMX - if this option is set, VSampler uses MMX instructions (if available) to perform DSP-operations wherever possible. This may lead to performance boosts. MMX-instructions are not available for all processor types.

Use SSE - if this option is set, VSampler uses SSE instructions (if available) to perform DSP-operations wherever possible. This may lead to performance boosts. SSE-instructions are not available for all processor types.

This option specifies the output sample rate that is used by VSampler, thus defines CPU power needed to create output sample-data. Base setting for the sample frequency is the specified output sample rate of the output device for the appropriate channel (defined within the audio preferences for the standalone version or within the host application for the ReWire, VSTi and DXi versions). The following options are available:

Full - VSampler calculates sample-data with full sample frequency. This option provides best quality, but needs most CPU power.

Half - VSampler calculates sample-data with the half sample frequency of the output device (e.g. 22kHz when the sample rate of the output device is set to 44kHz), thus saving CPU power. The output quality is slightly worse than for full rate.

Quarter - VSampler calculates sample-data with the quarter sample frequency of the output device (e.g. 11kHz when the sample rate of the output device is set to 44kHz), thus saving CPU power. The output quality is significantly worse than for full rate.

Other Settings

These controls define extended settings that have impact on the performance of VSampler:

Global-Polyphony - this setting specifies the maximum polyphony of the current library. If the polyphony specified is exceeded, the oldest voices playing are automatically terminated by VSampler.

Polyphony per Instrument - this setting specifies the maximum polyphony for a single instrument. If the polyphony specified is exceeded, the oldest voices playing are automatically terminated by VSampler.

Release time for cutted voices - this setting specifies a release time that is used by VSampler to fade out voices that were terminated (e.g. due to polyphony limit).

Fade out instrumente-effects - this setting specifies a time for fading out instrument-effects if no more sample-data is available. For instrument effects with very long effect tails (e.g. Reverb), you must eventually increase this value to prevent cutting off the effect.

Turn off silent zones - when activating this option, silent zones (zones that reached level 0) are automatically

terminated by VSampler, also if Note-off MIDI-events arrive. This saves CPU power by preventing unnecessary calculations.

Resample Quality Settings

These options have impact on the re-sampling quality of VSampler. Each time a <u>sample</u> is played on a key different from the root-key of the sample, VSampler must interpolate the new output frequency (pitch). The following algorithms are available:

Standard - VSampler uses linear interpolation between sample-values. Output quality is good, but interpolation artefacts may occur.

High End - VSampler uses a spline interpolation between sample-values. Output quality is significant higher than for linear interpolation, but calculation consumes more CPU power.

VSampler automatically activates <u>DRC</u> at sample level for instruments that exceed the size specified. Additionally you can specify the total memory usage for VSampler. If this value is exceeded, VSampler does not allocate more memory.

DRC Instrument Level

This <u>DRC</u> option specifies, how VSampler loads sample-data from library files. If this option is activated, only samples that are assigned to a multi-channel are loaded into memory. This option is especially useful for large bank files or for systems with limited memory, delays may occur when re-loading data.

The "Target Instrument not empty" dialog

The „Target instrument not empty" dialog is displayed if you perform an operation on a instrument-slot that is already in use.
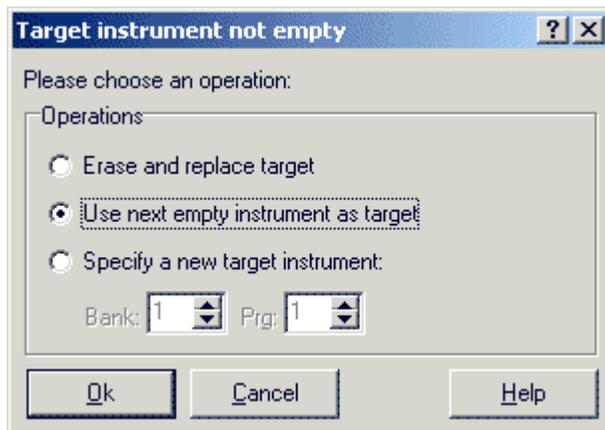
The Operations

The following operations are applicable:

Delete and replace target - The instrument on the current instrument-slot is deleted and replaced by the new instrument.

Use next free slot - VSampler automatically searches the next free (unused) instrument-slot and performs the operation.

Specify target - Using this option you can manually specify a slot for the appropriate operation.

The "Create ShortCut" dialog

The „Create ShortCut" dialog is used to create or edit a shortcut within the VSampler Bank-Manager.
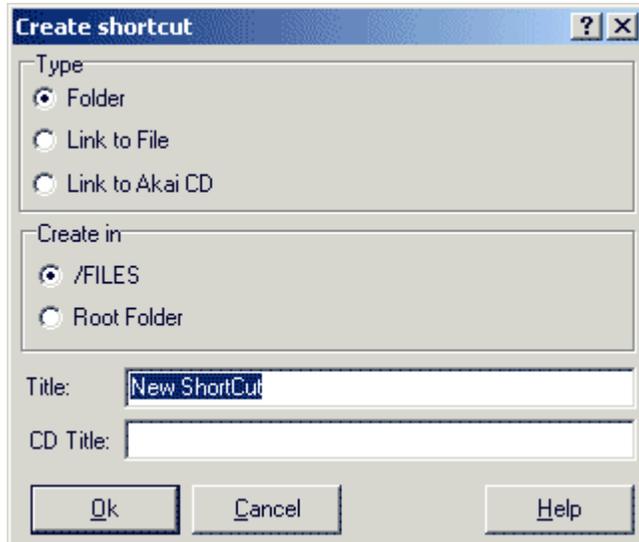
The Item-Type

These options specify the type of the Bank-Manager entry. Available are:

Folder/Item - this entry specifies a sub-element that acts as a container for other elements. This is used to create a tree-structure for other elements.

File-Link - this entry specifies a link to a file on hard-disc. The target file can be in any format supported by VSampler.

Link to Akai-CD - this entry specifies a link to the current Akai-CD.

This option specifies the parent node of the entry. This is used to create a tree-structure for other elements. Available are:

Current Node - the entry is a sub-entry of the current node.

Root-Node - the entry is inserted at the root level of the tree.

The Item-Title

This element specifies the name of the element.

The CD Title

For entries that refer to removable media (e.g. CD-ROM) you can specify a name for the media here. If the entry is recalled later, VSampler prompts you to insert the appropriate media.

The "Select Akai Drive" dialog

The „Select Akai Drive" dialog is displayed if a Akai-CD is to be imported and VSampler cannot automatically identify the CD-drive that should be used for the operation or no Akai-compatible CD is inserted into any of the available drives.

The available devices
This element lists all drives containing Akai-compatible CDs, please select one when prompted.

The "Refresh" Button
The "Refresh" button actualizes the elements within the drive selection list. This is done by scanning all drives for Akai-compatible CDs.

This button saves the drive currently selected as default. When importing another Akai-CD, VSampler tries to use the drive specified first without further notice.

The "Select Output Device" dialog

The „Select Output Device" dialog is displayed to select an audio output device. For the standalone-version all active devices (DirectSound or ASIO) listed under the Audio Preferences dialog are displayed. For the Rewire, VSTi and DXi versions all individual outputs availale from the "Audio Preferences" dialog (up to 16) are displayed. Audio devices can be assigned hard-wired or the standard-device defined within the audio preferences can be used.
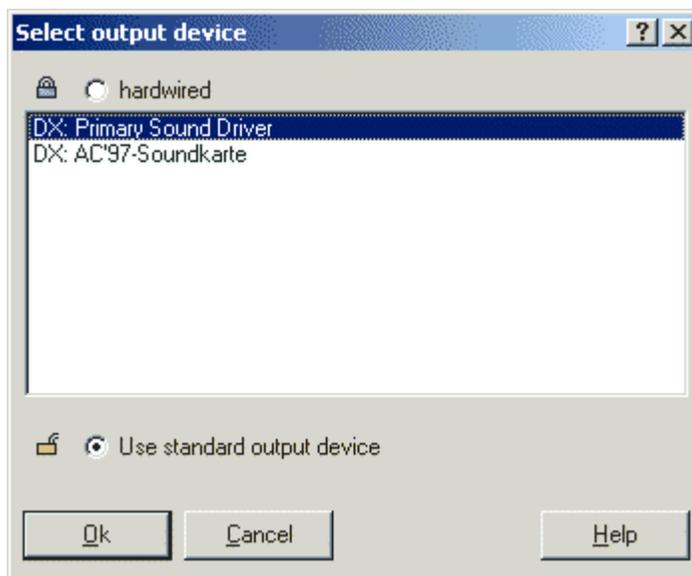
The available devices

This list displays all audio devices available. Audio devices are managed within the Audio Preferences dialog.

This option permanently assigns a output device. Audio devices are managed within the Audio Preferences dialog.

The "Use Standard Device" Option

This option uses the appropriate standard-device as the output device. Changing the standard device within the Audio Preferences dialog automatically changes the device(s) for the appropriate target(s).

The "Manage Selection-/Poly/Cycle Groups" dialog

The „Manage Selection-/Poly-/Cycle-Groups" dialog is used to manage Selection-, Poly- and Cycle-groups of VSampler

Selection-Groups - VSampler can put zones of an instrument into selection-groups. These groups can be selected with the button in the right upper corner of the main window. By using the function zones can be grouped and edited at once.

Poly-Groups - VSampler can put zones of an instrument into poly-groups ranging from 1 to 31. All zones having a poly-group assignment can have their polyphony limited by the poly-group settings, for example to save CPU power.

Cycle-Groups - VSampler can put zones of an instrument into cycle-groups ranging from 1 to 127. All zones having a cycle-group assignment can be played in cycle-mode. Cycle mode only plays one zone of the assigned zones at a time. How this zone is determined depends on the cycle-mode of the group (Round Robin or Random). This is used to create "living" sounds.
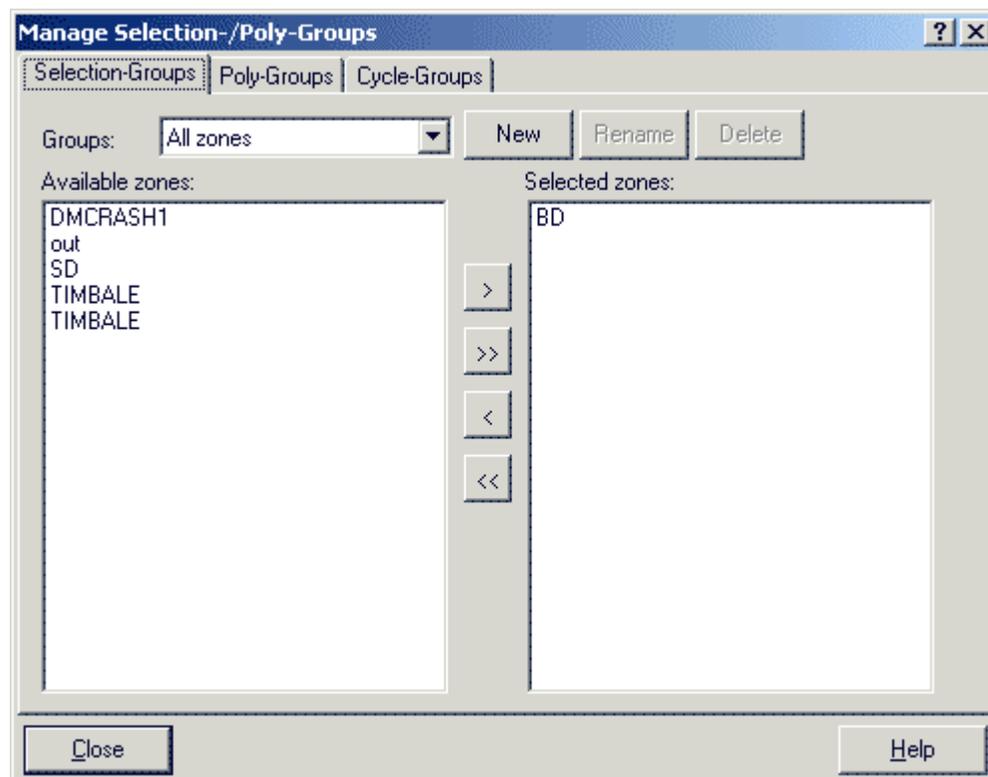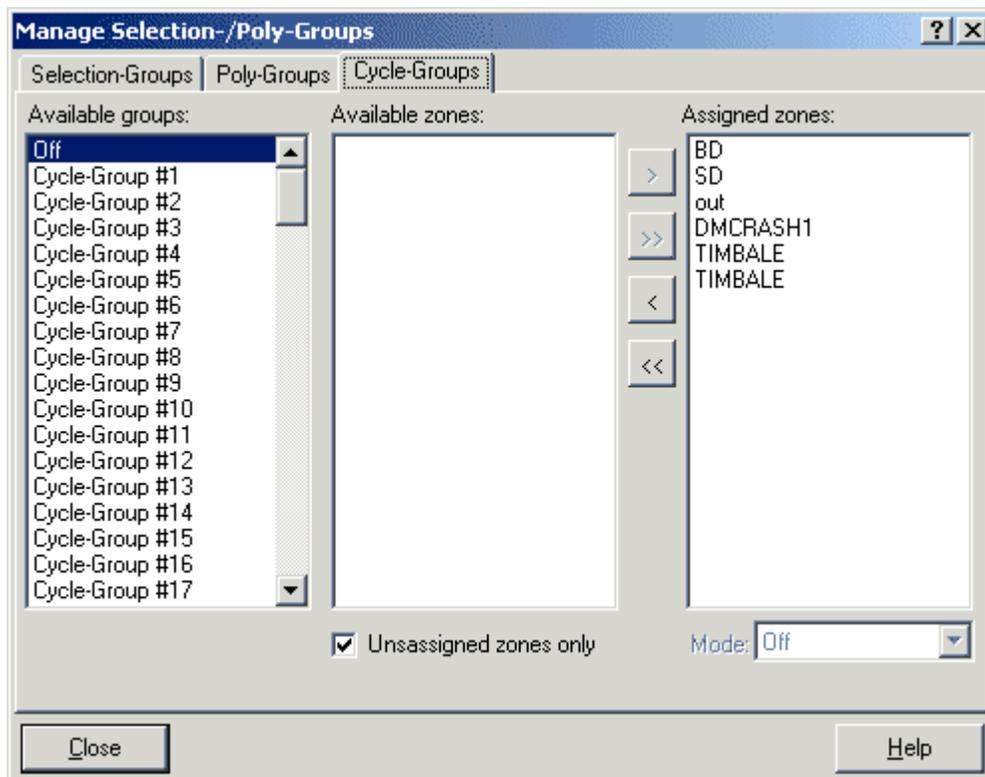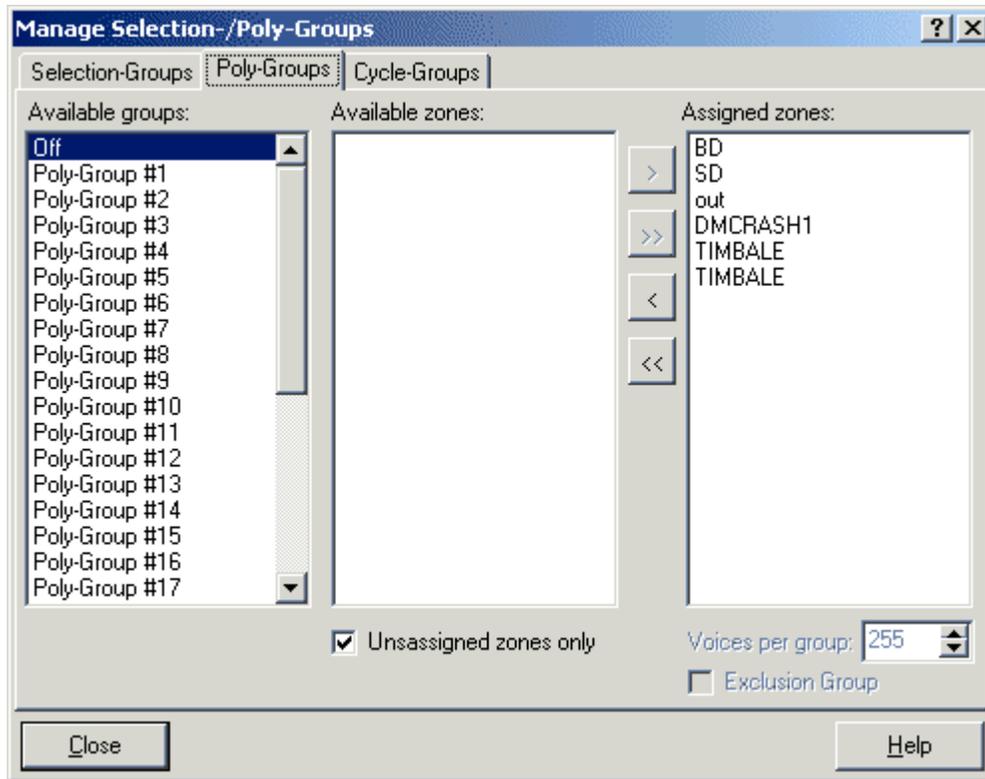
The display of available poly-groups
This list shows all poly-groups available. The value "Off" means that no poly-group will be assigned to the selected

zones.

This list shows all zones available. The option "unassigned zones only" is used to hide zones that already have a poly-group assignment.

The "Unassigned Zones only" Option

This option hides zones that already have a poly-group assignment.

These buttons are used to move the selected zones from the list of selected zones to the list of assigned zones or vice versa.

The display of assigned zones

This list shows all zones currently assigned to the poly-group.

The Voices/Group Option

This option specifies the maximum voice count (polyphony) for the zones of the selected poly-group. When the polyphony specified is exceeded, VSampler automatically terminates the oldest voice(s).

This option specifies, if the selected poly-group is an exclusion group. Zones for exclusion-groups exclude each other, that means if a voice from a poly-group is played that is marked as exclusion-group, all other voices of this poly-group are automatically terminated.

Selecting selection-groups

This control selects the current selection-group.

The Buttons

These buttons apply certain operations to the selected selection-group:

New - This operation creates a new selection-group.

Rename - This operation renames the current selection-group.

Delete - This operation deletes the current selection-group.

This list shows all available zones for the current selection-group.

The assigned zones of the selection-group

This list shows all zones currently assigned to the selection-group.

Moving zones for selection-groups

These buttons are used to move the selected zones from the list of selected zones to the list of assigned zones or vice versa.

This list shows all cycle-groups available. The value "Off" means that no cycle-group will be assigned to the selected zones.

The display of available zones for cycle-groups

This list shows all zones available. The option "unassigned zones only" is used to hide zones that already have a cycle-group assignment.

The "Unassigned zones only" Option for cycle-groups

This option hides zones that already have a cycle-group assignment.

These buttons are used to move the selected zones from the list of selected zones to the list of assigned zones or vice versa.

The display of assigned zones for cycle-groups

This list shows all zones currently assigned to the cycle-group.

The cycle-mode Option

This is used to define a cycle-mode for the selected zones. Available values are:

Off - Cycle-mode is deactivated.

Round Robin - The next zone that is played is the zone that immediately follows the current zone. Calculation starts with the first zone in the list. If the last zone is reached, processing starts with the first zone and so on.

Random - The next zone that is played is determined by a random algorithm.

The "Register" dialog

The "Register" dialog is displayed for registering your VSampler-copy. This dialog is also displayed at start-up, if VSampler is not registered or if the registration information is invalid or if registration has expired. To use all features of VSampler, you have to register the software.

After registration you will obtain a registration key, which enables you to use all features of VSampler. An internet connection will be build up to the registration page of VSampler for registration. The registration-key will be sent to you by email. This key must be inserted into the "Registration key" field. The registration key you'll receive is not bound to your hardware or any other system components.

Serial number

The license number has 32 digits and is part of your VSampler product. If you have purchased the download version of VSampler, the serial number will be sent by E-Mail.

Registration Key

The registration key is used to enable all features of this software.

If you have problems with the registration please contact us.

The "Load Registration key" Button
This button is used to load a registration-key from a file. This file s sent to you as an attachment by email when you register VSampler.

The "Don't show at startup" Option
This option indicates, if VSampler shows this dialog at start-up, if no valid registration information is found.

This button starts the standard web-browser and opens the online registration-page of VSampler.

The Registration Key
This field contains the registration-key that you receive by email once you have finished the registration process.

The Serial number
This field contains the serial number (licence key) of the registered VSampler version.

This field contains the expiration date for your registered VSampler version. Depending on the license type, your software license expires on the date specified or runs unlimited.

The "Product" Value
This field contains the product name of the registered VSampler version.

The "Username" Value
This field contains the user name (E-Mail address) of the registered VSampler version.

The "Velocity Scaling" dialog

The „Velocity Scaling" dialog is used to specify dependencies of the volume (Volume Velocity Scaling), filter-cutoff (Filter Velocity Scaling) or envelope-times/levels (Envelope Velocity Scaling) from the velocity (strength) of the key played. The target value can be change from -100% (silence) up to +100% (doubling values). You can define points per mouse-click. Changing values is done by dragging a point with the mouse. Additionally you can display velocity-crossfading data (Volume Velocity Scaling only).
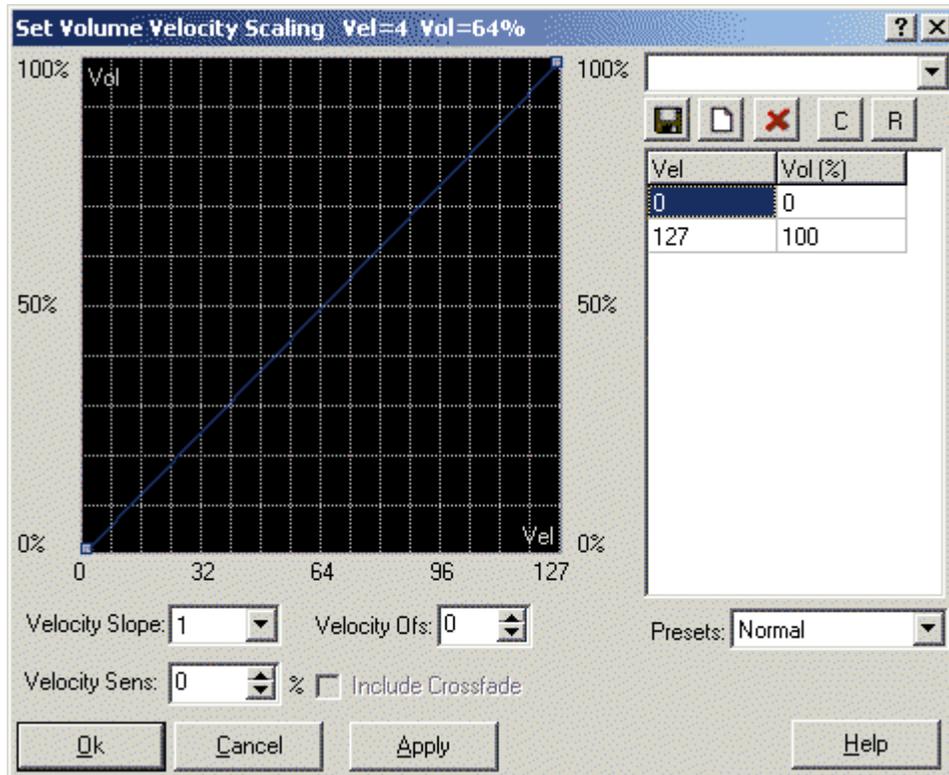
The Volume Scaling Window

This display shows influence of the velocity to the volume of the sound. New points can be inserted per mouse-click. Changing points is done by dragging with the mouse. Additionally you can change values by using the velocity/value grid on the right side of the dialog.

The Velocity Slope

The velocity-slope indicates a value that is multiplied with the velocity of a voice. The "real" velocity is calculated by adding velocity*velocity-slope to the value of the velocity-offset parameter.

This setting specifies the velocity sensitivity of the current zones. Setting this value to 100% results in direct dependency of the volume on the keyboard velocity.

The Velocity Offset

The velocity-offset indicates a value that is added to the velocity of a voice. The "real" velocity is calculated by adding velocity*velocity-slope to the value of the velocity offset parameter.

The Velocity/Value Display

The velocity/value displays current scaling data. By double clicking on the "Vel" (velocity) column, values can be entered with the keyboard.

The presets specify predefined velocity curves.

The Filter Scaling Window
This display shows influence of the velocity to the filter cutoff-frequency of the sound. New points can be inserted per mouse-click. Changing points is done by dragging with the mouse. Additionally you can change values by using the velocity/value grid on the right side of the dialog.

The Velocity to Cutoff Option
This setting specifies the velocity sensitivity of the filter cutoff for the current zones. Setting this value to a value <>0% results in dependency of the filter cutoff on the keyboard velocity.

This setting specifies the velocity sensitivity of the filter resonance for the current zones. Setting this value to a value <>0% results in dependency of the filter cutoff on the keyboard velocity.

The Velocity to Env Option
This setting specifies the velocity sensitivity of the envelope for the current zones. Setting this value to a value <>0% results in dependency of the filter cutoff on the keyboard velocity.

The Preset Tools
The preset tools are used to save or recall predefined scaling presets. You can assign a name to each preset.

This switch additionally displays impact of the velocity-crossfading (if enabled) on the volume. Velocity-crossfading and velocity-scaling values are combined to calculate the resulting volume for each velocity value.

The "Apply Template" dialog

The „Apply Template" dialog is displayed whenever a template is applied to an <u>instrument</u>.

Selecting Parameters
These elements select the template parameters that should be applied to the current selection. These parameters correspond to the sub-pages of the VSampler-Rack.

This option ignores <u>zones</u> within the current template, if the template contains more zones than the current <u>instrument</u> holds.

The "Skip Extra Zones in Instrument" Option
This option ignores <u>zones</u> within the current <u>instrument</u>, if the template contains less zones than the current instrument holds.

The "Manage Instrument-Templates" dialog

The „Manage Instrument-Templates" dialog is used to manage templates of VSampler. A template is a container for user-defined VSampler-settings. By using templates, settings can be applied to instruments.
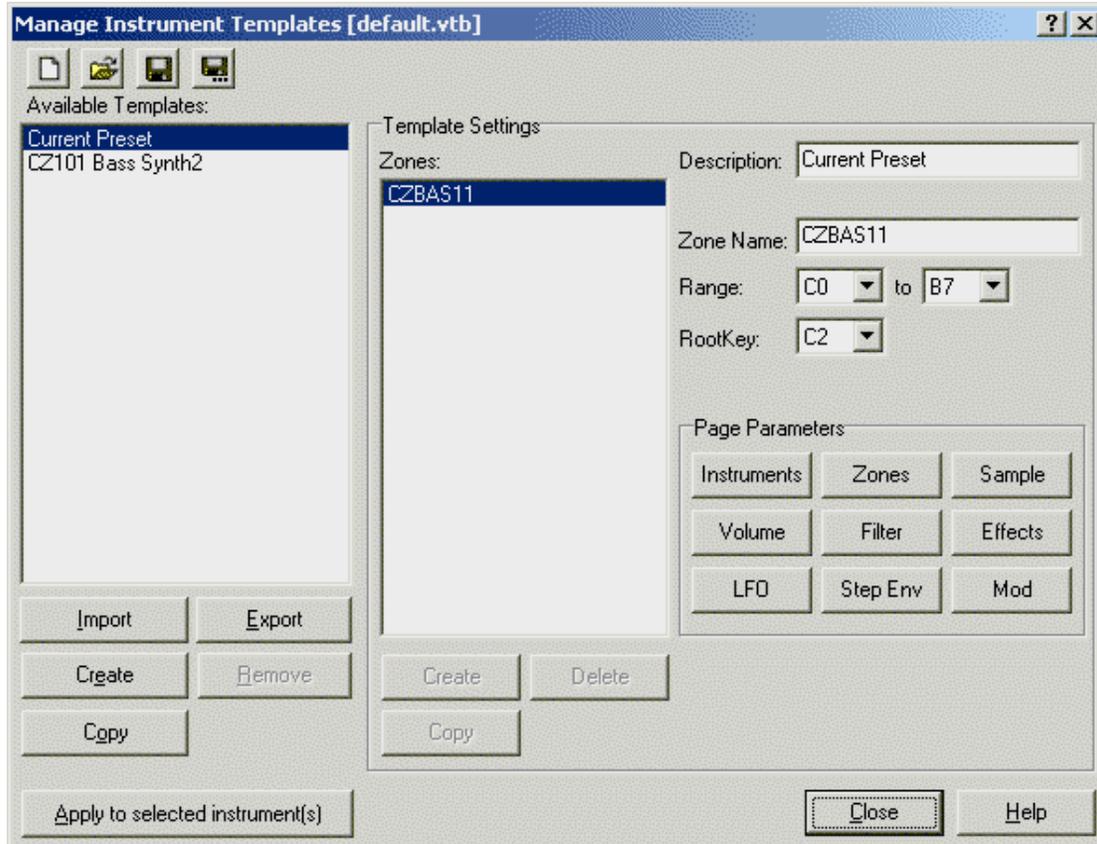
The available Templates
This list shows the templates available.

This button imports a template from an external file.

The "Export" Button
This button exports a template to an external file.

This button creates a new template.

The "Delete" Button
This button deletes the current template.

The "Copy" Button
This button copies the current template.

This button copies the current template.

The Template Zones
This list shows all zones assigned to the selected template.

The "Create" Button
This button creates a new template-zone.

This button deletes the selected template-zone.

The "Copy" Button
This button deletes the selected template-zone.

The Template Description
This control specifies the name for the current template.

This control specifies the name for the current template.

The Template Range
These elements specify the keyboard range for the current template-zone.

The Template RootKey
This element specifies the root-key for the current template-zone.

These elements allow access to the various template parameters. These parameters correspond to the sub-pages of the VSampler-Rack.

The Toolbar Buttons
These buttons provide access to common operations.

The "Select Sample-Format" dialog
The „Select Sample-Format" dialog is used to specify the format for a sample.
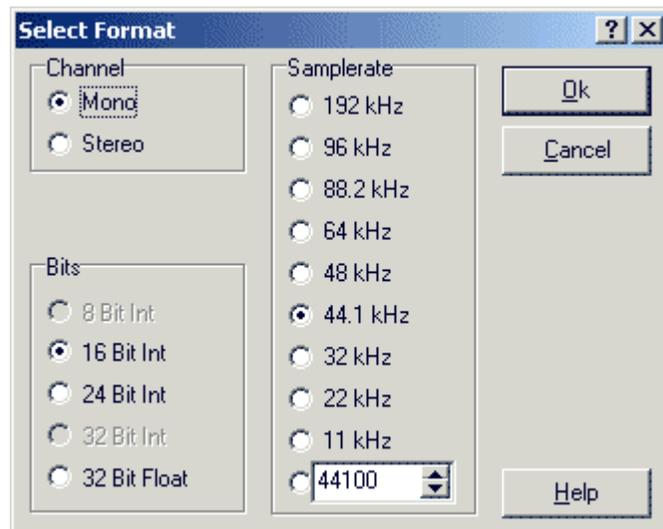
The Channel Options
This option specifies the channel number for the resulting sample. If a mono sample is converted into a stereo sample, the channel is duplicated. If a stereo sample is converted into a mono sample, either the left or right channel is used or both channels are mixed.

This option specifies the accuracy for the resulting sample. A higher accuracy improves audio quality, but requires more memory.

The Sample-Rate Options
This option specifies the sample rate for the resulting sample. A higher sample-rate improves audio quality, but requires more memory.

The "Edit Template Parameters" dialog

The „Edit Template Parameters" dialog is used to manage template parameter settings.

Value Name	Value
ZoneStart	24
ZoneEnd	119
RootKey	48
PolyGroup	0

Edit Template Parameters ? X

Ok
Cancel
Help
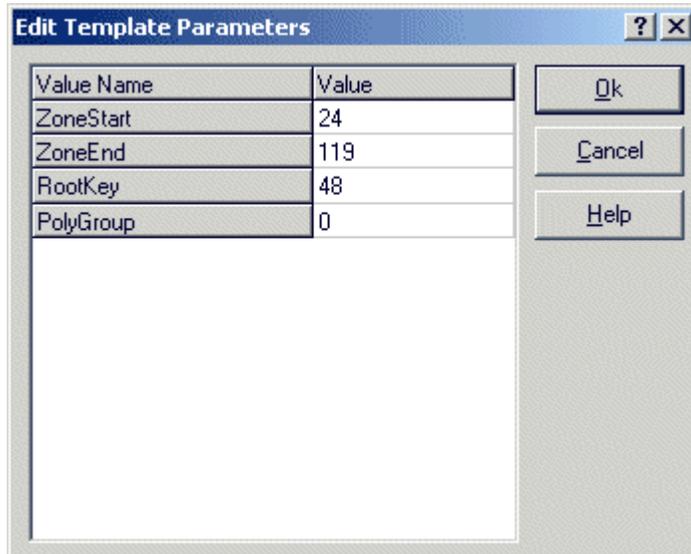
The Parameter-Display
These elements display all parameters with associated values. Changing values is done by double-clicking on an entry.

The "Device Detail Informationen" dialog

The „Device Detail Information" dialog displays detailed information for the selected device within the VSampler Audio Preferences.

Device detail information ? X

Device name: DX: Primary Sound Driver
DirectSound version: 0801
OutputSampleRate: 44100
PlayBackSampleRate: 44100
BufferSize: 864
BufferCount: 4
Bit depth:16
Supports EAX: NO
Supports 3D: NO
Update interval: 10
Module:
Emulated driver: NO
SampleRate range: 8000..48000
Max hardware buffers: 1
Free hardware buffers: 0

Close   Help
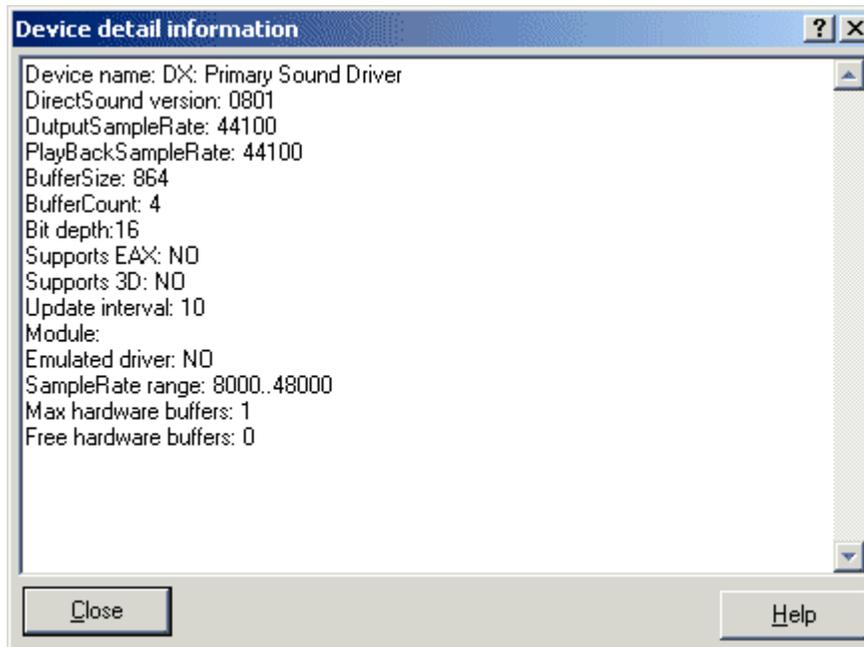
The Device Data Display

This element shows information for the selected device. Depending on the device type (DirectSound, ASIO, ReWire, VSTi, DXi), displayed data differs.

The "Specify Directories" dialog

The „Specify Directories" dialog is used to manage directories within VSampler.
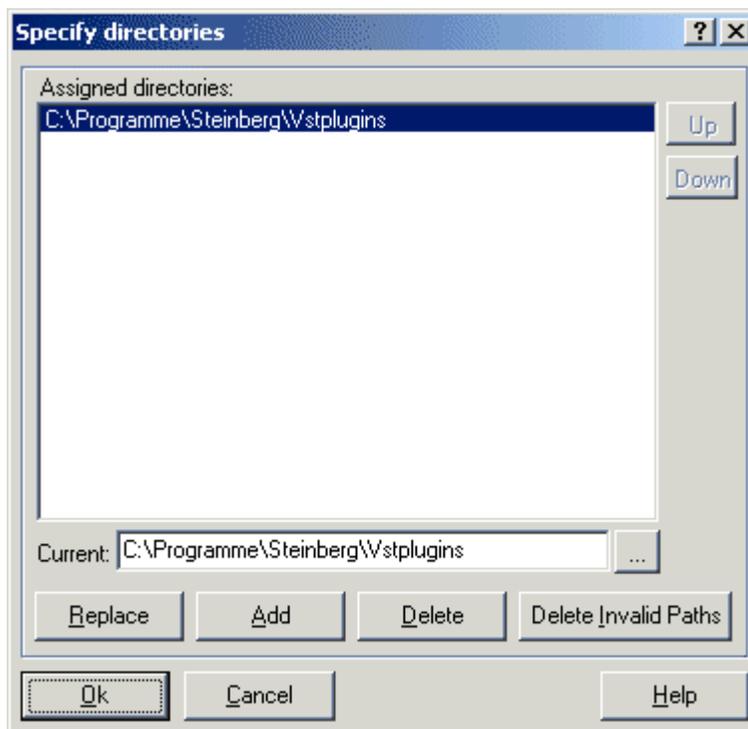
The display of assigned directories

This list shows all currently assigned directories.

This element shows the complete path of the currently selected directory.

Adding Directories

This button is used to create a new directory.

The "Up/Down" Buttons

These buttons move the selected directory up or down in the list. The list is processed sequentially, that means directories at the start of the list are processed first.

This button replaces the currently selected directory with the selection.

The "Add" Button

This button adds the selection to the directory list.

The "Delete" Button

This button deletes the currently selected directory from the list.

This button deletes invalid directories, that means directories that no longer exist or that are not accessible.

The "Edit Extra Chunks" dialog

The „Edit Extra Chunks" dialog is used to change optional WAV-Chunks when exporting WAV-files. Optional WAV-chunks save additional information in WAV-files. These information is only informational and do not have effect on the sample-data within the WAV-file.
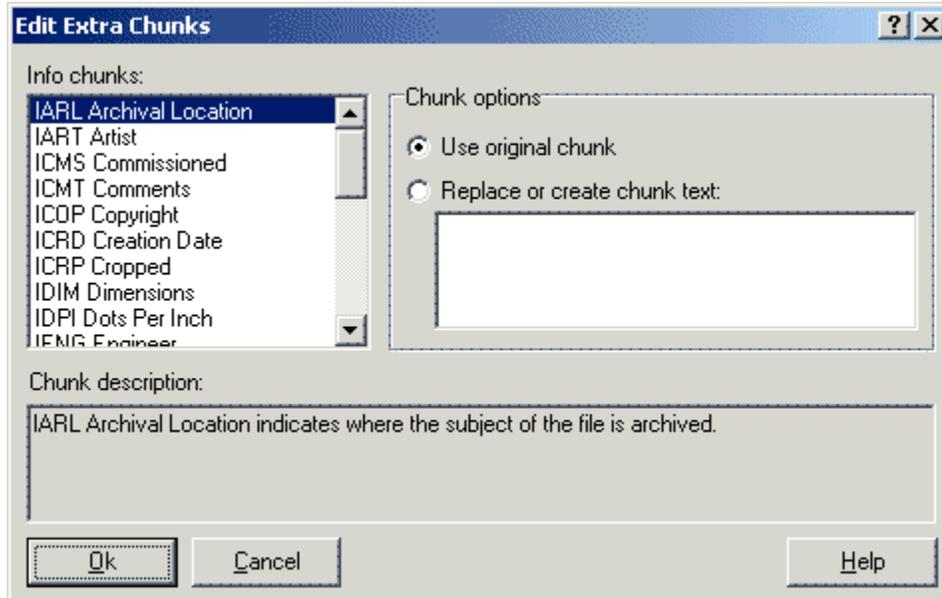
The Chunk Display
This list displays all WAV-chunks available.

These options define, if an optional WAV-chunk is created or not. Alternatively you can keep the chunk of the original file or you can create a new chunk or edit an existing chunk.

The Chunk-Description
This control displays a shorthand description of the selected chunk.

The "Export Sample-List" dialog

The „Export Sample List" dialog is used to export <u>samples</u> from a VSampler <u>library</u>.
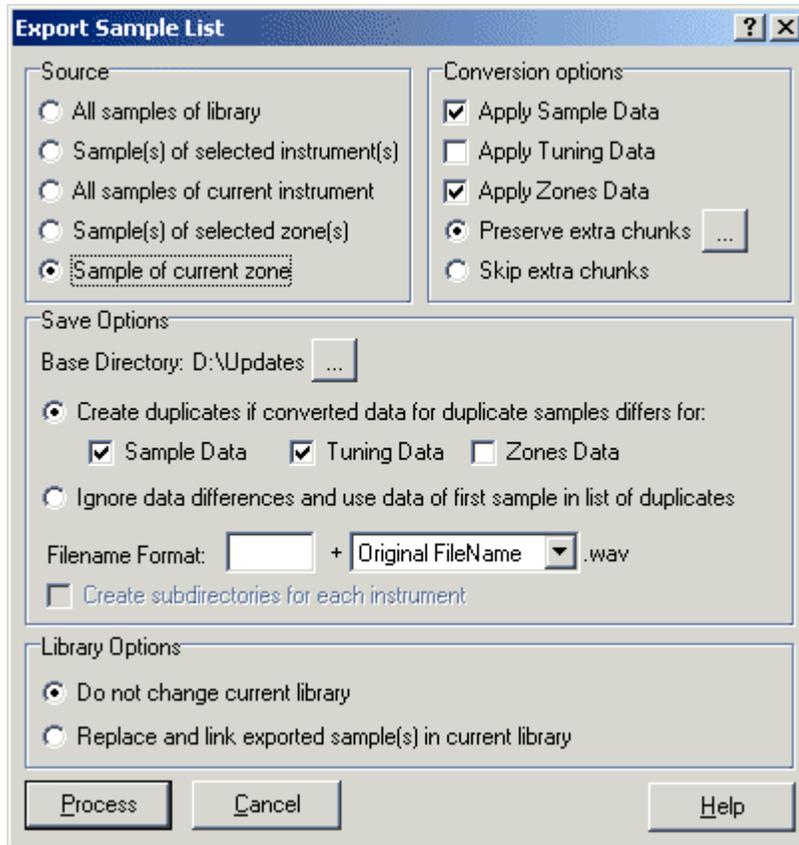
The Source Options

These options specify, which <u>**samples**</u> are to be exported from the current <u>**library**</u> :

All Samples of Library - all samples of the current library are exported.

Samples of selected instruments - all samples of the selected instruments are exported.

All samples of current instrument - only the samples of the current instrument are exported.

Samples of selected zones - only the samples of the selected zone(s) are exported.

Sample of current zone - only the sample of the current zone is exported.

These options affect converting samples to external WAV-files:

Apply Sample data - all sample settings are exported.

Apply Tuning data - all tuning settings are exported.

Apply Zones data - all zone settings are exported.

Preserve Extra Chunks - optional WAV-chunks are stored. Additionally you may edit existing chunks or add new chunks.

Skip Extra Chunks - Existing optional WAV-chunks will be ignored.

The Save Options
These options specify, how VSampler creates WAV-files:

Create Duplicates - This option creates different files, if the data underneath this switch differs for two samples

Ignore data differences - This option ignores different data and creates one WAV-file per sample.

Filename format - this option changes the filename format.

Create subdirectories for each instrument - When exporting multiple instruments, VSampler can create a separate subdirectory for WAV-files for each instrument.

These options specify if the current library is updated to reflect changes after sample-export:

Do not change current library - this option only exports the selected samples and leaves the current library alone.

Replace and link exported samples in library - this option changes the state of all exported samples to "linked" and adds a link to the exported WAV-file.

The "PlugIn Preferences" dialog

The „PlugIn Preferences" dialog is used to manage settings for VSampler Plug-Ins.

PlugIn Preferences

PlugIn Settings | PlugIn List | PlugIn Categories

Available PlugIns

- ☑ AutoPan
- ☑ Chainer VST
- ☑ Choirus2
- ☑ CleanComp
- ☑ Fuzzbox
- ☑ Leveler
- ☑ mda Bandisto
- ☑ mda BeatBox
- ☑ mda Combo
- ☑ mda Degrade
- ☑ mda Dynamics
- ☑ mda Limiter
- ☑ mda RePsycho!
- ☑ mda Stereo
- ☑ mda SubSynth
- ☑ Noise Gate
- ☑ Peak Master
- ☑ StereoEcho
- ☑ StereoExpander

Path:
C:\Programme\Steinberg\Vstplugins\Aut

Kind:
Effect PlugIn

Ok   Cancel   Help

PlugIn Preferences

PlugIn Settings | PlugIn List | PlugIn Categories

Categories:
- All
- Unassigned
- VSampler

PlugIns:
- VST: AutoPan
- VST: Chainer VST
- VST: Choirus2
- VST: CleanComp
- VST: Fuzzbox
- VST: Leveler
- VST: mda Bandisto
- VST: mda BeatBox
- VST: mda Combo
- VST: mda Degrade
- VST: mda Dynamics
- VST: mda Limiter
- VST: mda RePsycho!
- VST: mda Stereo
- VST: mda SubSynth
- VST: Noise Gate
- VST: Peak Master

Add   Delete   Rename

Ok   Cancel   Help

The VST PlugIn search directories
This setting specifies which directories are used by VSampler when searching for VST-compatible plug-ins.

This setting specifies which directories are used by VSampler when searching for SpeedSoft-compatible plug-ins.

The "Force Rescan" Option
This option forces a complete plug-in rescan next time VSampler is started.

The PlugIn-Category Display

This list shows all available plug-in-categories.

This list shows all plug-ins that are assigned to the selected plug-in-category.

The "New" Button

This button creates a new plug-in-category.

The "Delete" Button

This button deletes the selected plug-in-category.

This button changes the name of the selected plug-in-category.

The PlugIn List

This list shows all plug-ins recognized by VSampler. Additionally you can activate or deactivate plug-ins. Deactivated plug-ins are not available for use within VSampler.

The "Instrument Options" dialog

The „Instrument Options" dialog is used to manage settings for VSampler instruments.

Instrument Options

Settings for: Selected Instrument(s) ▾   Copy Settings to default settings

MIDI Controllers | Settings | Description

Polyphony

Instrument Polyphony: 128 ⬍ Voices

Release Cutoff Level: -90 ⬍ dB

Release Cutoff Rate: 0 ⬍ ms

Modulation

Max Pitch Range: 200 ⬍ cents

Max Env Time: 10000 ⬍ ms

Close   Help

".\Graphics\English\Dialogs\d2420004.SHG'
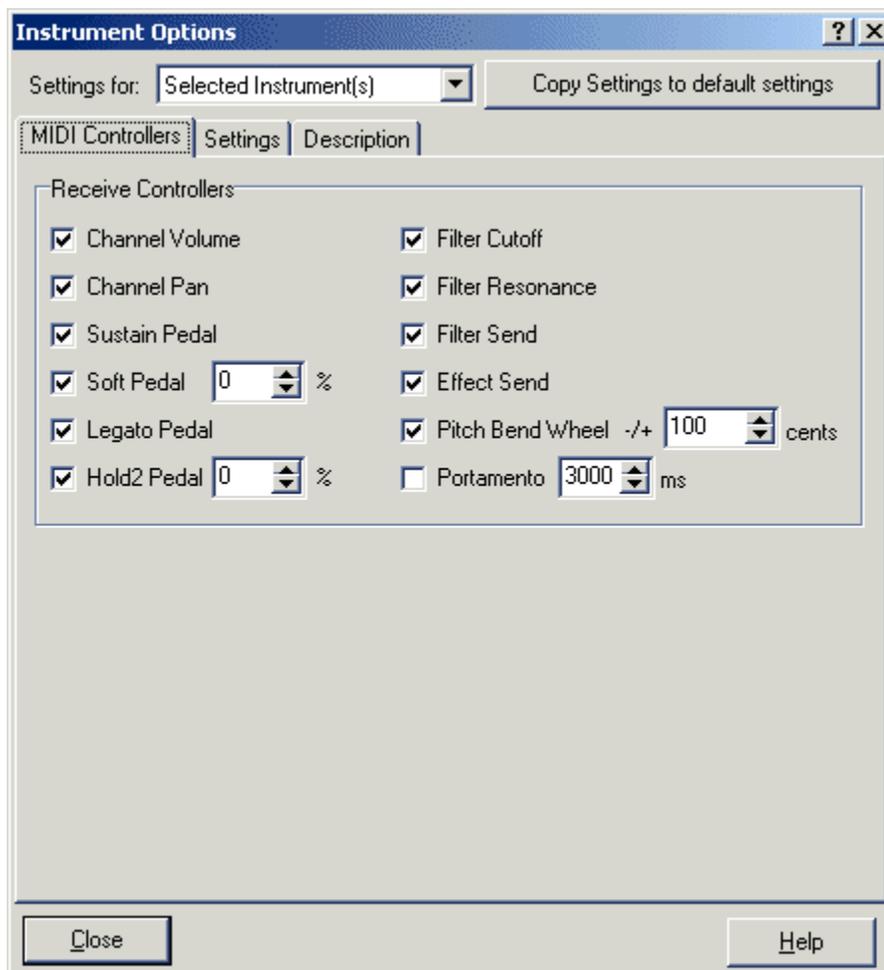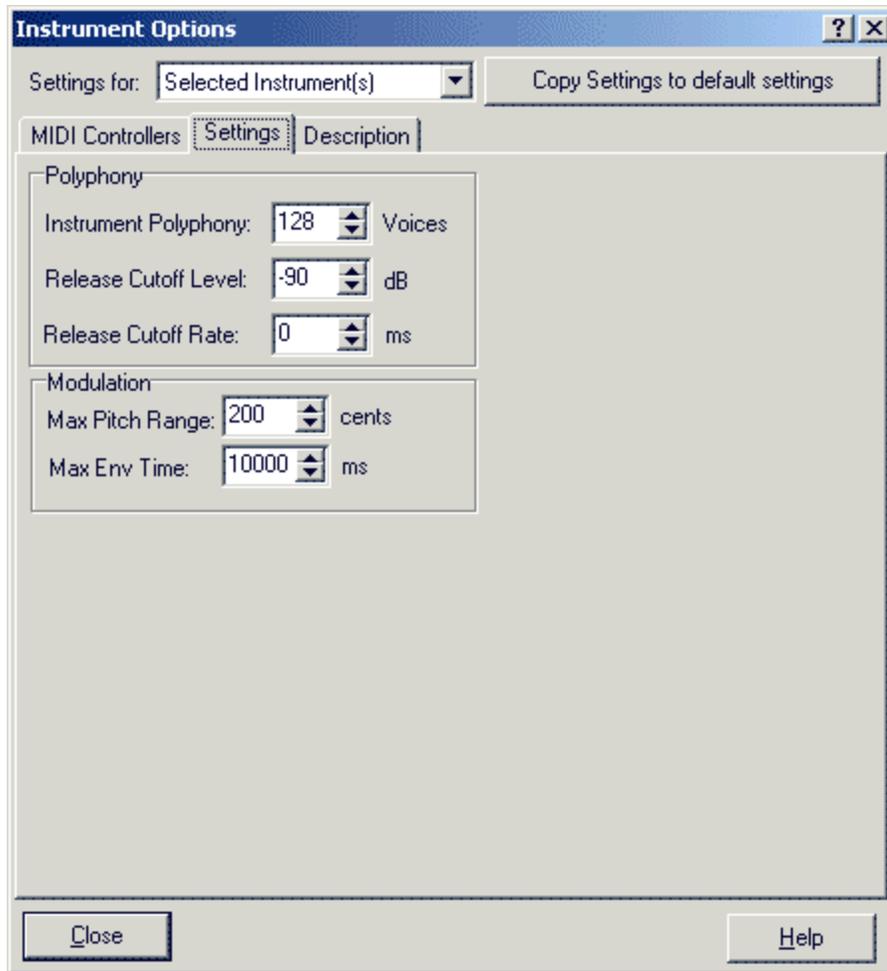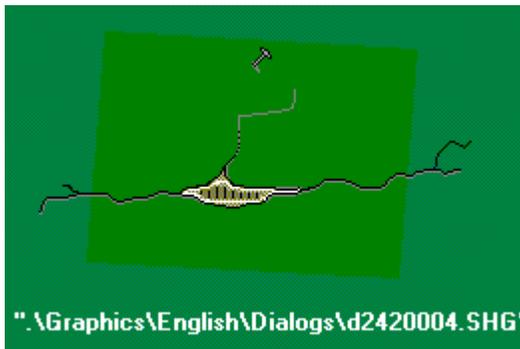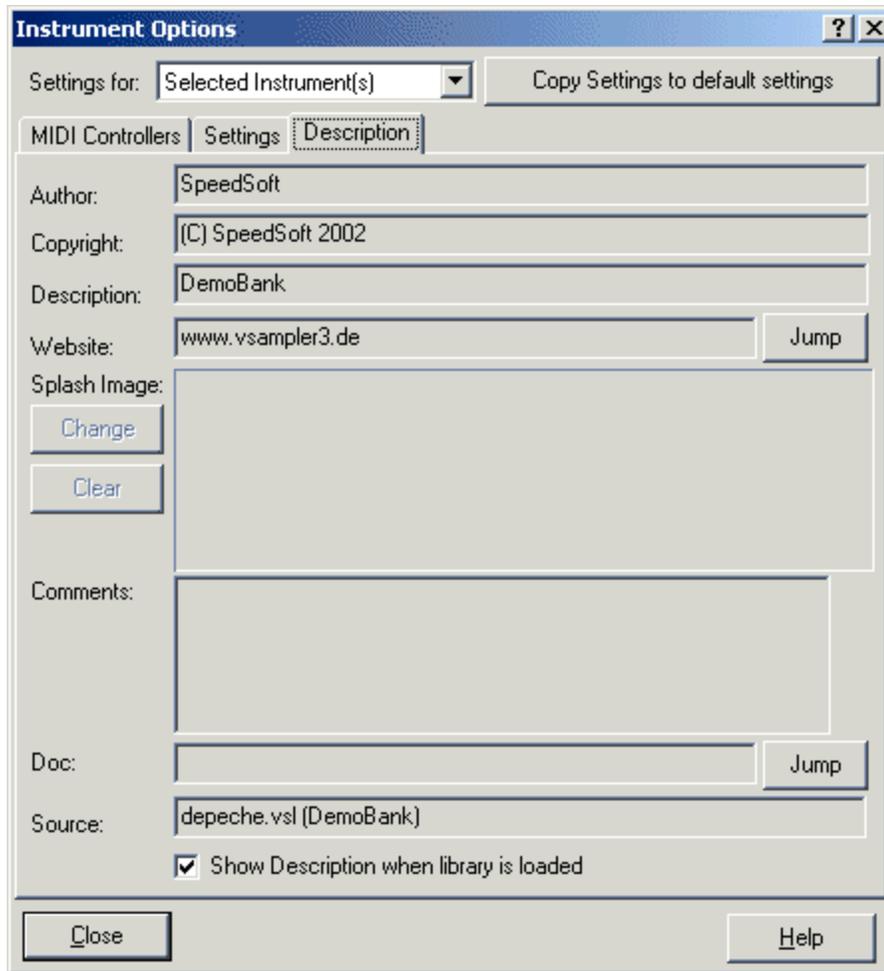
Selecting Settings

This switch specifies, if changes apply only to the currently selected instruments or are used as default values of the library. Library defaults are automatically applied whenever a new instrument is created.

This button is used to copy the current settings from the selected instruments into the library defaults or vice versa.

The MIDI Controller Options

These options specify which types of MIDI-events (controllers) VSampler accepts.

These options specify the polyphony on instrument level. If the selected polyphony is exceeded, VSampler automatically terminates the oldest voices with the specified release time. Additionally VSampler can automatically terminate voices that reach a certain minimum volume level.

The Override Ctrl Settings Option
This option automatically overwrites MIDI-settings of libraries loaded with the global default settings.

The Override Polyphony Settings Option
This option overwrites polyphony-settings of libraries loaded with the global default settings.

These elements are used to add additional information to the VSampler library (e.g. copyright and source). Optionally you can display this information whenever the library is loaded.

The Instrument Velocity Curve
These controls are used to specify the instrument velocity curve of VSampler.

The user defined controllers
These controls are used to define up to 6 user-define controllers. These controllers are used within the VSampler mod-matrix to dynamically change VSampler parameters.

These options affect the modulation matrix of VSampler.

The "Apply Auto Loop" dialog

The „Apply Auto Loop" dialog is displayed if a certain loop is to be assigned to the current sample after processing the "Auto-Looper" dialog. You must specify if a sustain-loop or a release-loop should be created and how the specified smooth-value is interpreted.
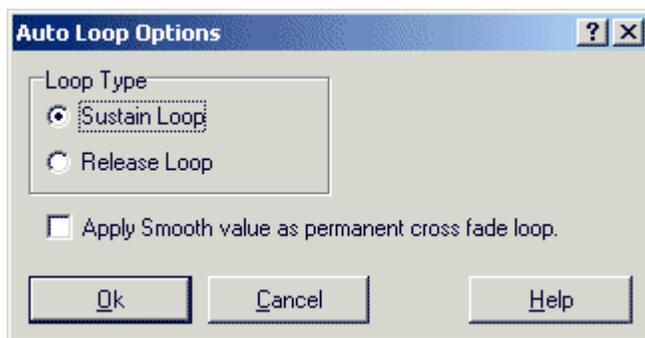
The Loop Type
This option specifies, whether the selected loop is applied as sustain-loop or as release-loop.

This option specifies if the smooth-value specified within the "Auto-Looper" dialog is applied permanently to the sample. This operation modifies the sample-data of the appropriate sample. Otherwise the loop-crossfading is calculated at runtime dynamically.

The "Edit Marker" dialog

The „Edit Marker" dialog is used to manage the markers of a sample.
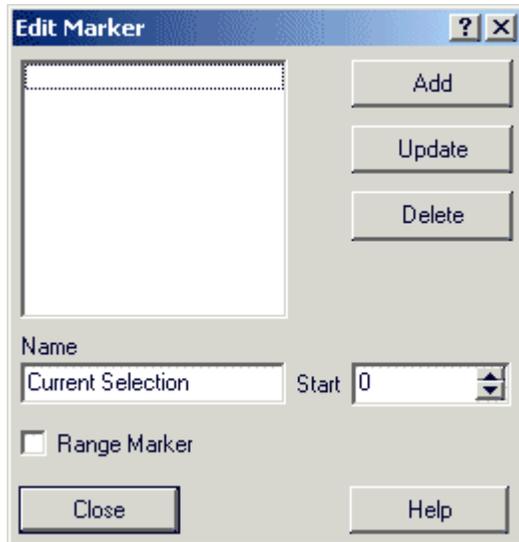
The Marker Display
This list contains all markers available for the current sample. By selecting an entry detail information for the marker can be changed.

This control specifies the description of the marker.

Range-Marker-Option
This option specifies whether the marker is a position marker or a range marker. Range markers consist of a starting- and a ending-position.

The Marker-Area
This control specifies the position of the marker (position marker) or the starting- and ending-position of the marker (range marker).

This button is used to create a new marker within the current sample. The current settings are used for name, position and type.

The "Update" Button
These buttons are used to change data for the current marker. The current settings are used for name, position and type.

The "Delete" Button
This button deletes the current marker and removes it from the list.

The "Save Compressed Library" dialog

The „Save Compressed Library" dialog is displayed when a compressed library is about to be saved. Compressed libraries require less hard-disc space than normal libraries, but must be unpacked whenever loaded. VSampler can create compressed libraries without any loss (2:1 compression ratio max) or with a certain loss in quality (compression ratio can be specified). When using the latter compression, original data cannot be restored bitwise, so compression artefacts or audible changes within the sound may occur.
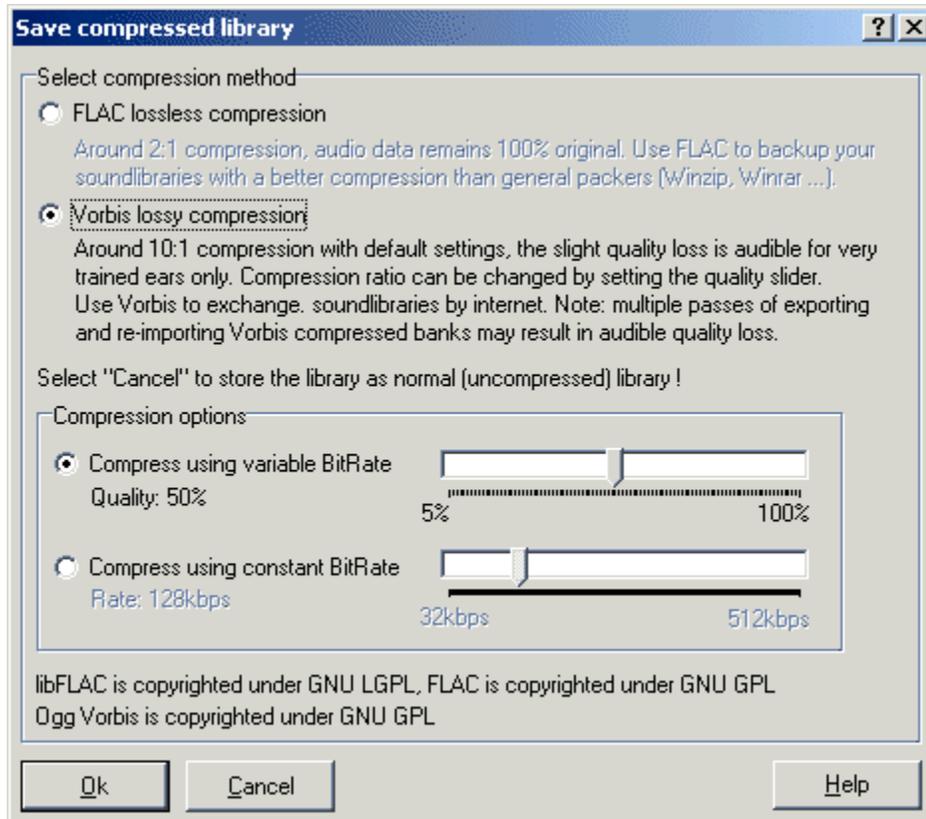
Selection Compression Algorithm
These controls define the compression method used by VSampler. When using lossy compression, original data cannot be restored bitwise, so compression artefacts or audible changes within the sound may occur.

Compression Options
These controls specify options for the selected compression method.

The "Sample-Editor Options" dialog

The „Sample-Editor Options" dialog is used to configure general settings for the internal sample-editor.
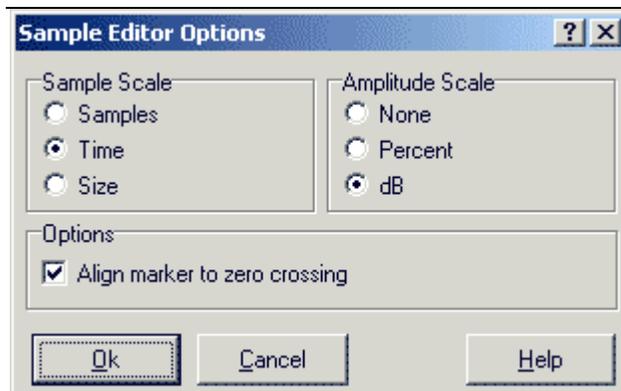
The Sample Scale Options

This option specifies measurement of the horizontal axis (time) within the sample-editor.

The Amplitude Scale Options
This option specifies measurement of the vertical axis (level) within the sample-editor.

This option is used to align markers on zero-crossings when moving the markers with the mouse. If the Ctrl-key is held when releasing the mouse-button, this option is ignored.

The "Select Directory" dialog

The „Select Directory" dialog is used to select a directory.
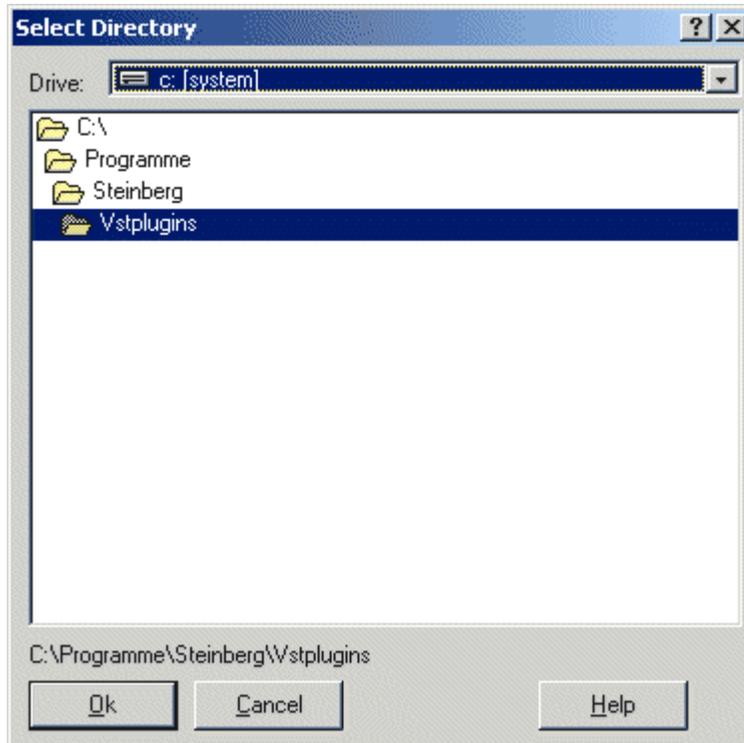
The Drive Display
This control specifies the current drive.

This element displays the directories of the selected drive. Changing a directory is done by double-click.

The "Edit Control Point" dialog

The „Edit Control Point" dialog is used to change parameters for a point of an envelope.
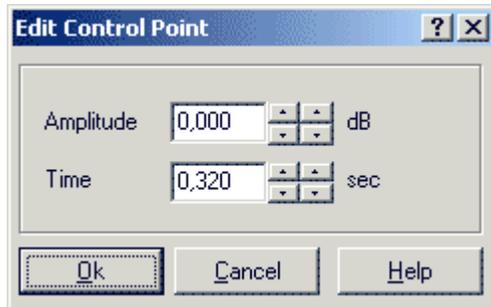
The "Amplitude" Value
This value specifies the absolute amplitude of the control-point.

This value specifies the time-interval from the preceding control-point.

The "Search Directories" dialog

The „Search Directories" dialog is used to define search directories for the "Find Sample" dialog.
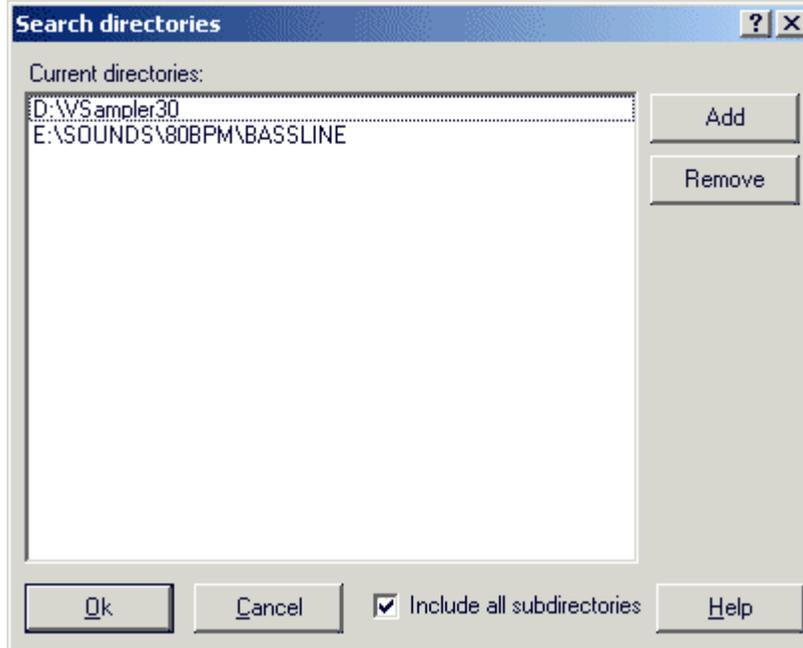
The display of assigned directories
This list shows all search-directories available.

This button adds a new search directory.

The "Remove" Button

This button deletes the selected directory from the list.

The "Subdirectories" Option
This option is used to automatically include sub-directories when searching within the specified directories.

The "Assign Instrument to MIDI Channel" dialog

The „Assign Instrument to MIDI-channel" dialog is used to assign an instrument to a MIDI-channel.
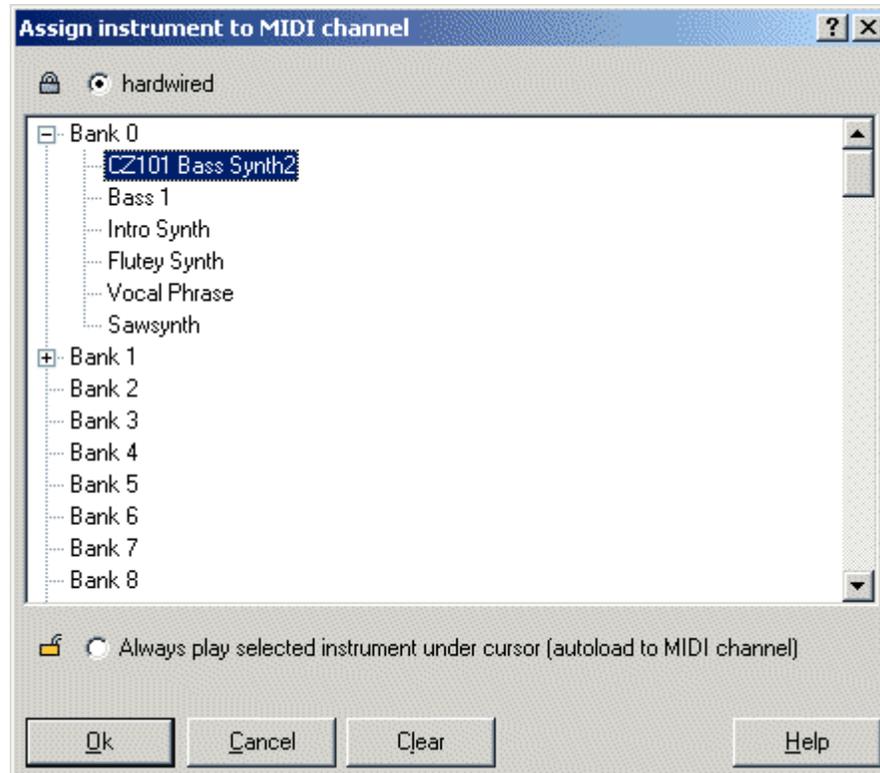
The available instruments display
This element shows all instruments available in form of a treeview.

The "Clear" Button
This button deletes the current instrument assignment.

This option always uses the current instrument for the selected channel. Changing the current instrument automatically reassigns the instrument to all channels marked this way.

The "Hardwired" Option
This option hard-wires the selected instrument to the channel.

The "PitchShift" dialog

The „PitchShift" dialog changes the pitch of the current sample.
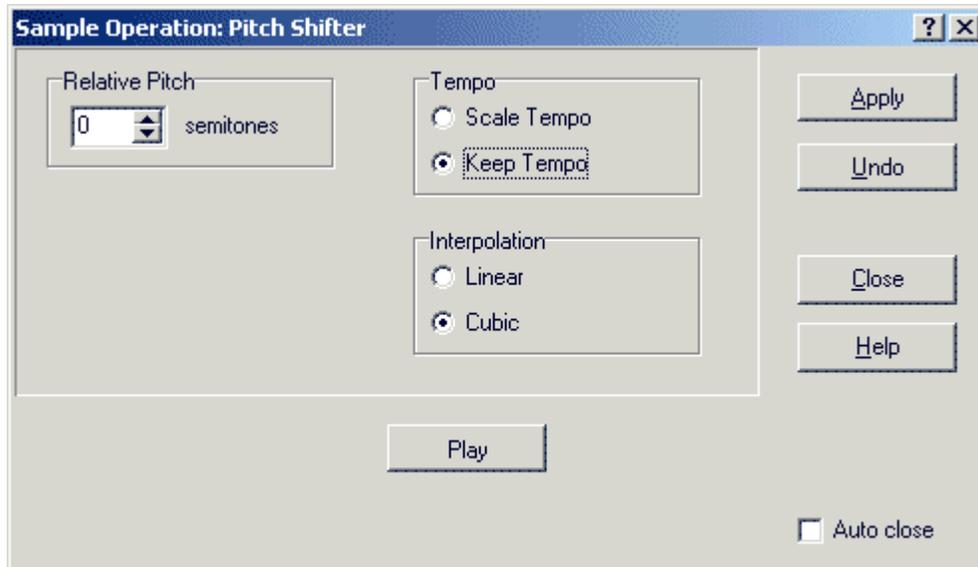
The "Relative Pitch" Value
This value specifies the amount of semitones that are used to re-pitch the current sample.

This option specifies, if the tempo of the sample should be kept or not (scaled).

The "Interpolation" Option
This option specifies an interpolation method for the operation. Cubic interpolation requires more CPU-power but provides best quality in most cases.

This button is used to apply the operation to the current sample.

The "Undo" Button
This button is used to undo the last editor operation.

The "Info" Button
This button displays additional information about the appropriate operation.

This button displays the graphical editor for operation parameters.

The "Play" Button
This button starts playback of the sample. You must apply the operation to the sample first, in order for the effect to be audible.

Selecting the Range
This option specifies, if the operation only applies to the selected portion of the sample or to the whole sample.

This option specifies, if the dialog is automatically closed when the operation is complete.

The "Tempo SampleFX" dialog

The „Tempo" dialog changes the tempo of the selected sample. The pitch of the sample remains unchanged.
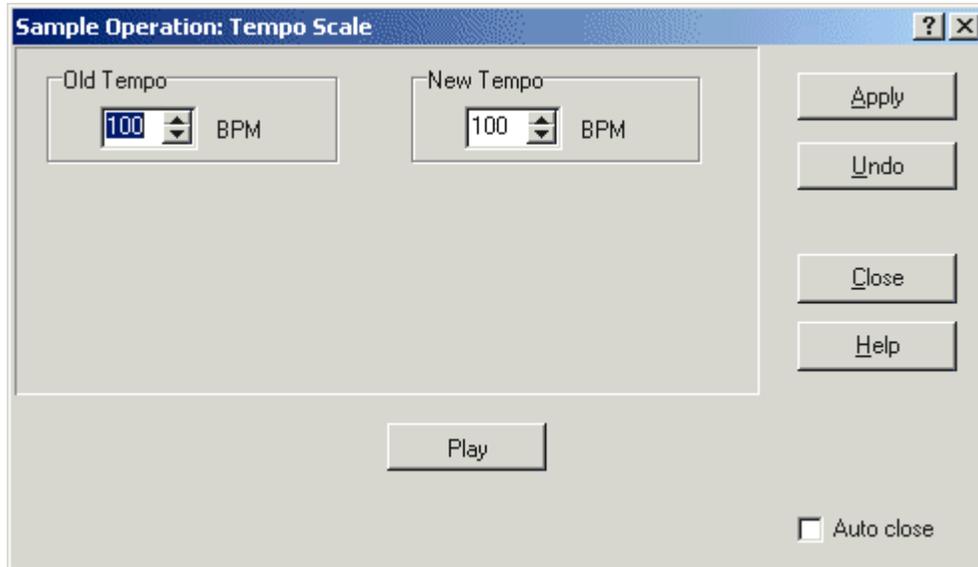
The "Old Tempo" Value
This value specifies the current tempo of the sample measured in BPM (beats per minute).

This value specifies the desired tempo of the sample measured in BPM (beats per minute).

The "Trim Silence" dialog

The „Trim Silence" dialog removes silent portions at the start and end of the sample.
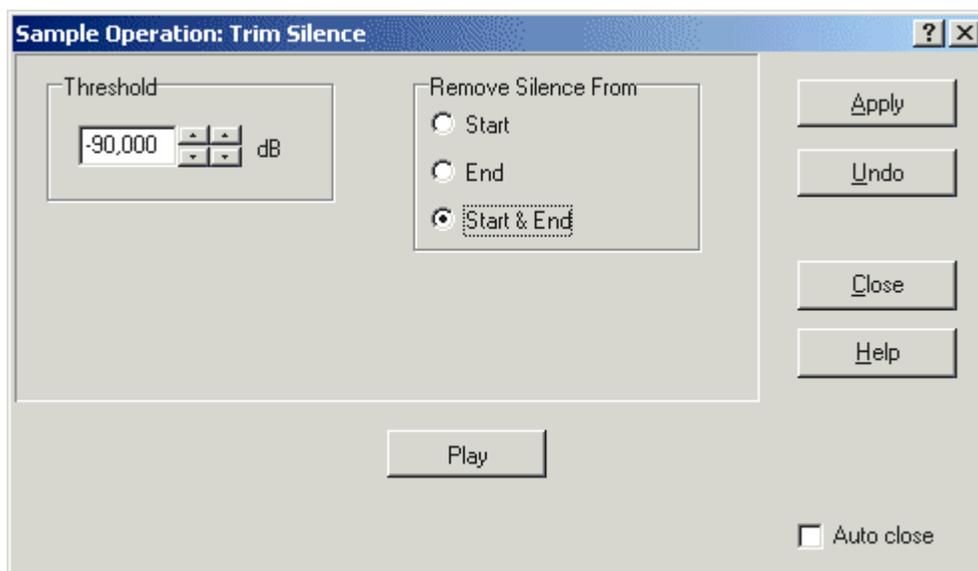
The "Threshold" Value

This value specifies the threshold that is used to determine "silence". Signal levels below this value are assumed as silence.

This option specifies where silent portions are to be removed.

The "Normalize" dialog

The „Normalize" dialog normalizes the level of the sample to a certain value.
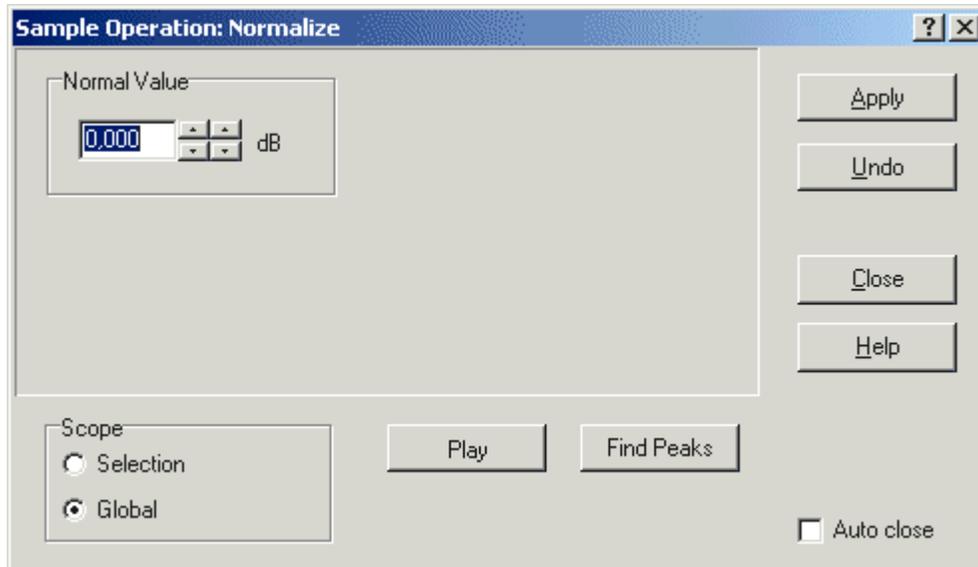
The "Normal Value"

This value specifies the new maximum level of the sample (usually 0dB).

The "Gain" dialog

The „Gain" dialog changes the maximum level of a sample.
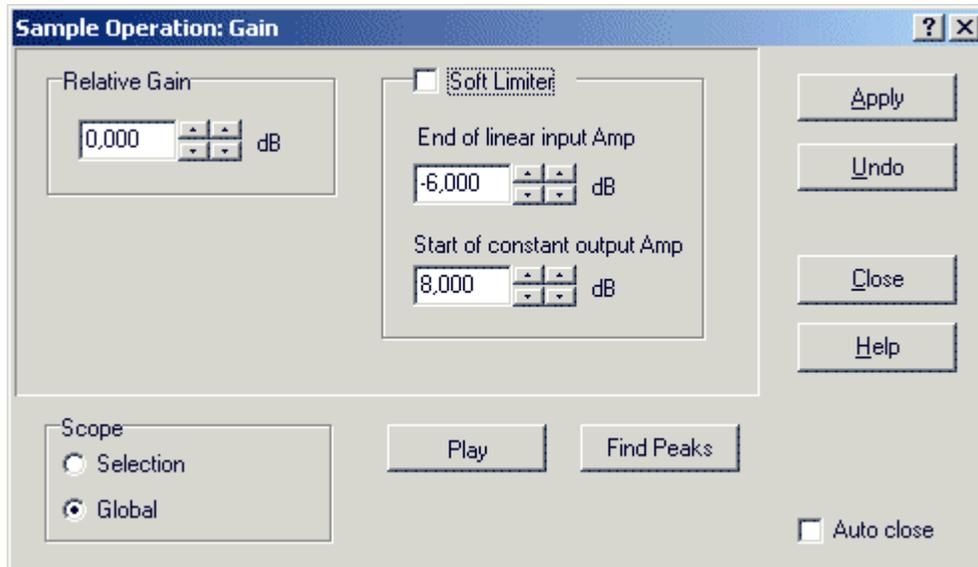
The "Relative Gain" Value
This value specifies the relative change of the sample-level in dB.

The "Soft Limiter" Option
This option is used to automatically apply a soft-limiter after the gain processing to prevent dropouts and digital distortion.

This value of the soft-limiter specifies the signal threshold for the limiter. Levels up to this value are not processed, that means output-level is equal to input-level.

The "Start constant Output" Value
This value of the soft-limiter specifies the signal threshold for the limiter. Levels that exceed this level are assumed to be 0dB.

The "CrossFade Looper" dialog

The „CrossFade Looper" dialog is used to smooth jumps from loop-end to loop-start. This is done by fading-in the are before the loop-start (source) into the area before the loop-end (target).
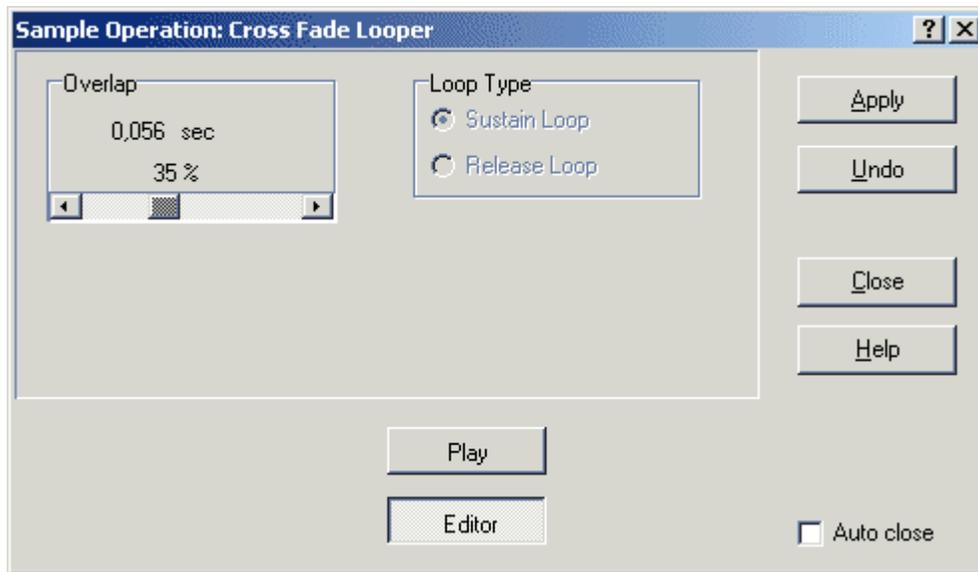
The "Overlap" Value

This value specifies the size of the source and target ranges.

This option specifies if the operation applies to the sustain-loop or to the release-loop of the sample.

The "Play" Button

This button starts playback of the selected loop. Current settings can be previewed at once.

The "PostFade Looper" dialog

The „PostFade Looper" dialog is used to smooth the loop-end. This is done by fading-out the area after the loop start into the area after the loop-end (target).
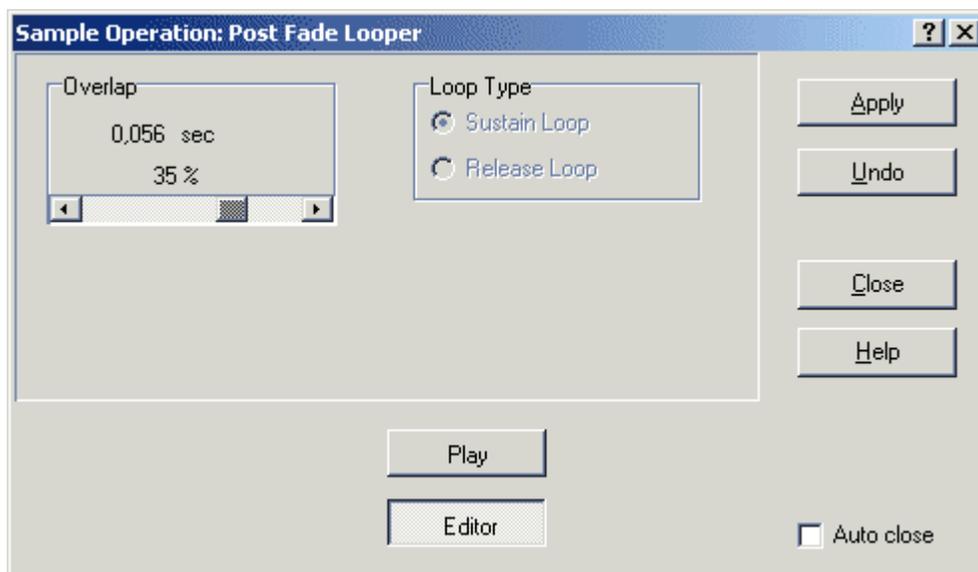
The "Auto Looper" SampleFX dialog

The „Auto Looper" dialog is used to automatically search for loop-start and loop-end positions within the current sample.
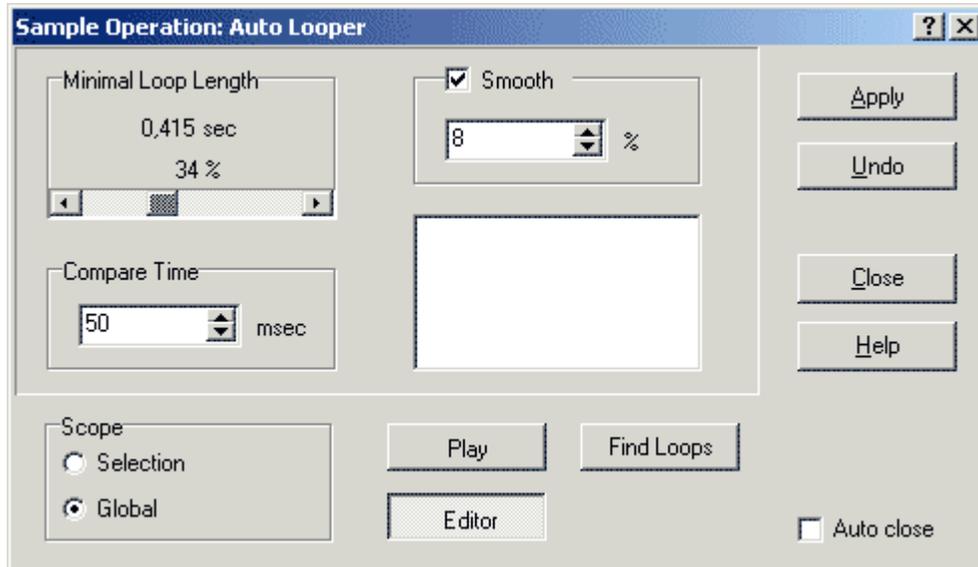
The "Minimal loop length" Option
This value specifies the minimum length of the loop.

This value specifies the range that is used for comparing loop-start and loop-end.

The "Smooth" Option
This value specifies the range before the loop start that is used to fade in at the loop-end.

Display of search results
This list contains all loops that were found by the loop-finder ordered by quality.

This button is used to assign the selected loop to the sample.

The "Find Loops" Button
This button starts searching loops.

The "Play" Button
This button starts playback of the selected loop. Current settings are audible at once.

The "Apply Instrument Template" dialog

The „Apply Instrument Template" dialog is called whenever a template is applied to an instrument. The sections that should be applied can be selected from a list.
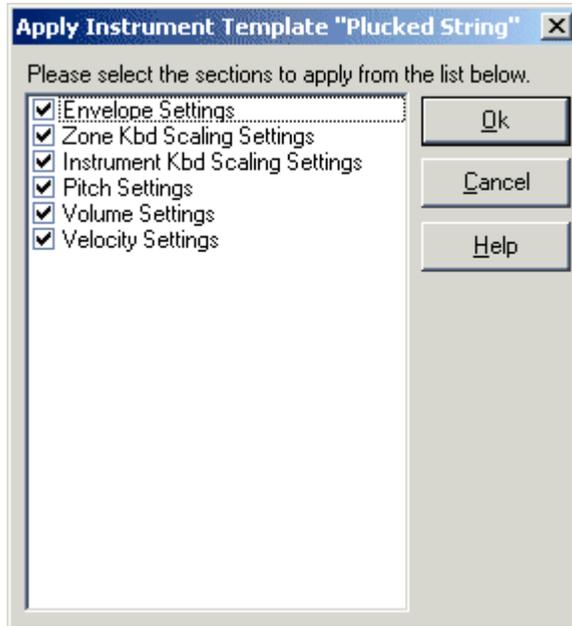
Selection Sections
This control specifies the sections that should be applied to the target-instrument.

The "Manage Categories" dialog

The „Manage Categories" dialog is used to manage the categories of the bank-manager. Categories can be assigned to instruments to ease searching the database.
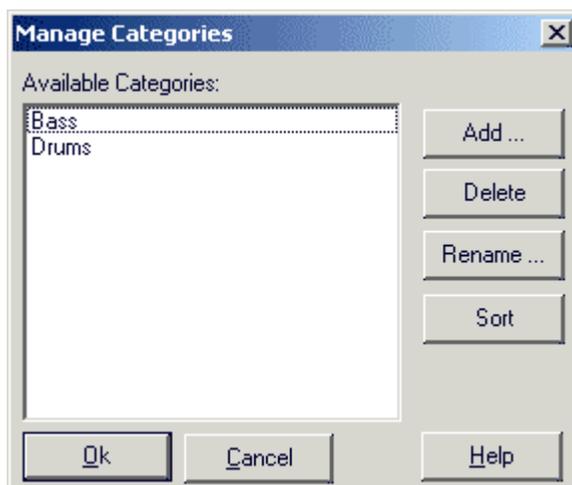
The available Categories
This list contains all categories available.

This button is used to create a new category.

The "Delete" Button
This button is used to delete the selected category.

This button is used to rename the selected category.

The "Sort" Button
This button is used to alphabetically sort the category-list.

The "Extended Zone Settings" dialog

The „Extended Zone Settings" dialog is used to change additional parameters for VSampler zones.
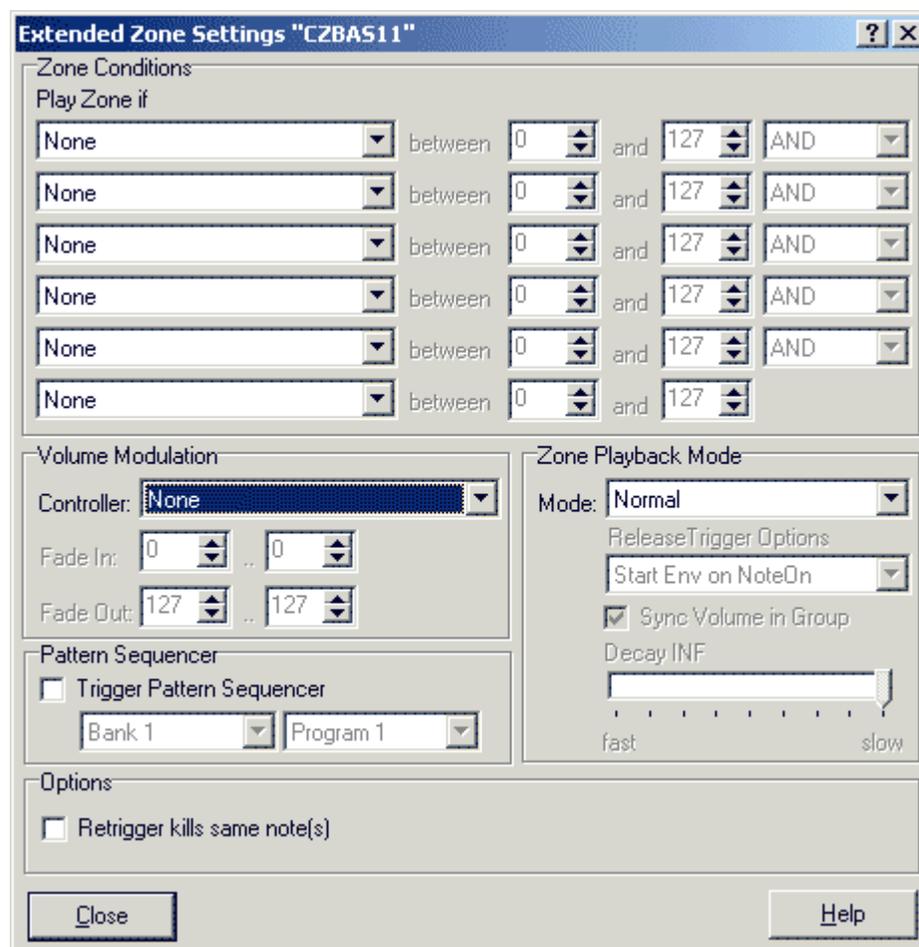
The Zone Conditions
These elements are used to specify conditions that are evaluated when a zone is about to be played. Zone playback only starts, if all conditions are met. Conditions can be combined with certain operators:

AND - the zone is played only if two conditions are met.

OR - the zone is played if either condition is met.

AND NOT - the zone is played when a condition evaluates to "false".

Conditions are processed in sequential order. Example conditions are that a controller has a certain value or is within a range of values. Special conditions are:

Switch Key - If a key is activated for an instrument that has no zone assigned to the key, this key (note) is marked as "SwitchKey" for the appropriate channel. This option can be used to switch between zones per "HotKey".

Keyboard Range - this condition evaluates to "true" if a key is pressed within the range specified at the time the condition is evaluated.

These elements are used to specify a volume fade-in or fade-out depending on a controller-value.

The PlayBack-Mode Options

The playback mode determines the mode that is used to play the sample of the zone. Possible values are:

Normal - the sample is played normally.

Tap On/Off - The sample starts playback on a note-on event (key pressed). The sample plays until the sample keys is pressed again, that means the note-off event is ignored. This mode is especially useful for drum- or bass-loops.

Tap On/Off Easy - This mode works exactly as "Tap On/Off" but plays the sample-loop (for looped samples) until its end before the voice is terminated.

OneShot - The sample is played until end regardless of note-off events. This mode is only available if the corresponding sample has no loop set.

Release-Triggered - This mode works exactly as the "OneShot" mode except that the sample starts playback on a note-off event (key released).

The release-trigger options are only available, if the mode is set to "Release-Triggered" and are used to specify whether VSampler starts the envelope of the zone with the note-on event or when the zone actually starts to be audible (note-off event). The "Sync Volume in Group" synchronizes the levels of release-triggered samples within the same poly-group. For release-triggered samples you can also specify a decay-time that is used to lower zone volume depending on the duration of the note (fade-out).

These elements are used to specify additional zone options:

Retrigger kills same note(s) - if this option is activated, VSampler automatically terminates all voices on a certain key, if a new key is hit.

The "PlugIn Load Error" dialog

The „PlugIn Load Error" dialog is displayed if VSampler cannot find or load certain plug-ins.
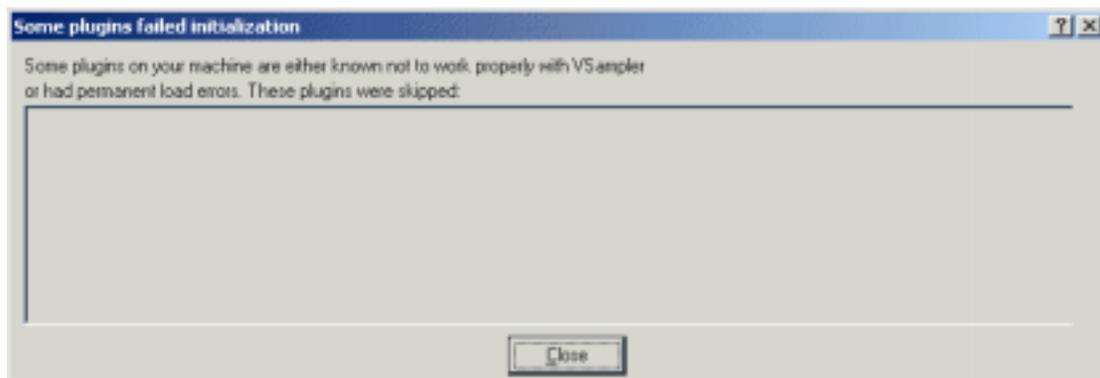
The PlugIn Display

This list contains all plug-ins that failed loading.

The "Learn Controller" dialog

The „Learn Controller" dialog is displayed if a MIDI-controller should be learned for a VSampler-parameter.

```
Learn Controller for "Zone Glide" ...                      ? X

Move your fader or knob now for target 'Zone Glide'!
┌─Controller Options──────────────────────────────────┐
│ Detected controller: None                           │
│ (•) Use in editor mode only                         │
│ ( ) Use in multi mode only                          │
└─────────────────────────────────────────────────────┘
┌─Learn Options───────────────────────────────────────┐
│ Learn this controller for:                          │
│ (•) Global Defaults                                 │
│ ( ) Library Defaults                                │
│ ( ) Current Instrument only                         │
└─────────────────────────────────────────────────────┘

   Ok        Cancel      Wait for MIDI event      Help
```
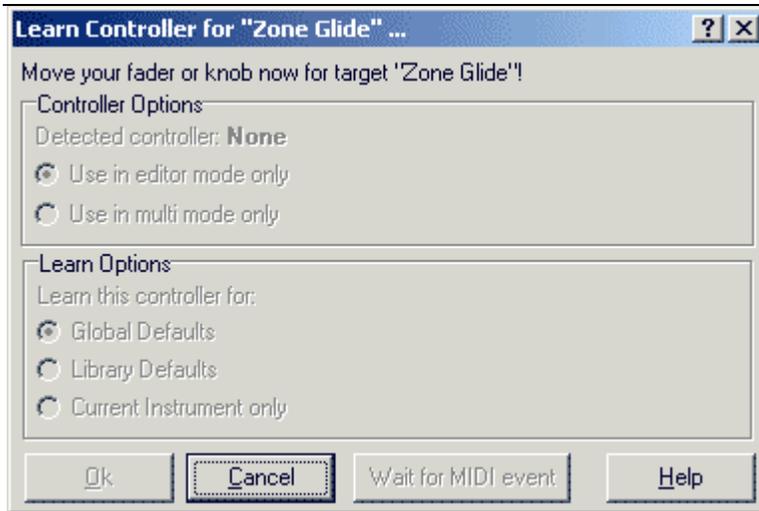
The Controller Options

These options specify, if the learned controller is only available in editor-mode or in multi-mode too. In editor-mode only the parameter of the current instrument is affected by the controller, in multi-mode the instrument that is changed depends on the MIDI-channel of the controller-event.

The Learn Options

These options specify the target of the controller:

Global Defaults - the controller is used globally, that means it is available for all libraries.

Library Defaults - the controller is only available for the current library.

Current Instrument only - the controller is only available for the current instrument.

Note, that global or library defaults overwrite the appropriate library or instrument-definitions.

This button is used to re-schedule waiting for a controller-event.

The "Edit MIDI-Learn Entry" dialog

The „Edit MIDI Learn Entry" dialog is used to edit a Midi-Learn-entry.
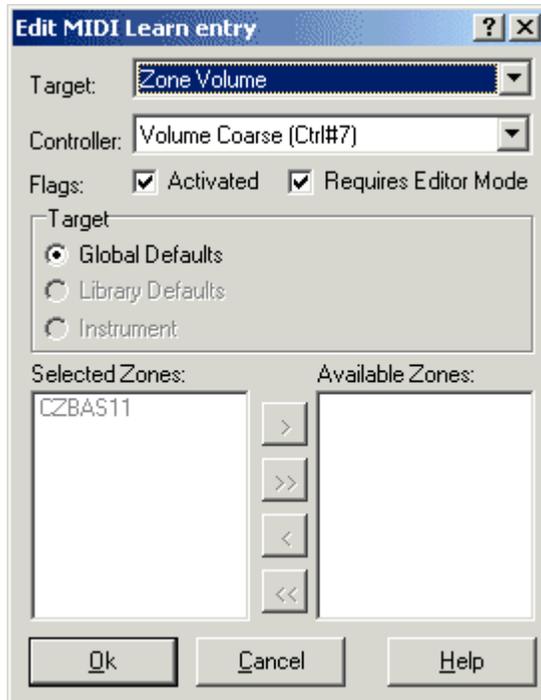
Parameter Selection

This controls specifies the VSampler-parameter that is affected by the controller.

This control specifies a controller value.

Flags and Options

These options specify if the appropriate entry is activated. Additionally you can specify if the learned controller is only available in editor-mode or in multi-mode too. In editor-mode only the parameter of the current instrument is affected by the controller, in multi-mode the instrument that is changed depends on the MIDI-channel of the controller-event.

Selecting the Target

These options specify the target for the learned controller:

Global Defaults - the controller is used globally, that means it is available for all libraries.

Library Defaults - the controller is only available for the current library.

Current Instrument only - the controller is only available for the current instrument.

Note, that global or library defaults overwrite the appropriate library or instrument-definitions.

This list contains the zones that should be affected by the controller.

The "MIDI Remote Preferences" dialog

The „MIDI Remote Preferences" dialog displays all available MIDI-Learn entries. You can change an entry by double-click.
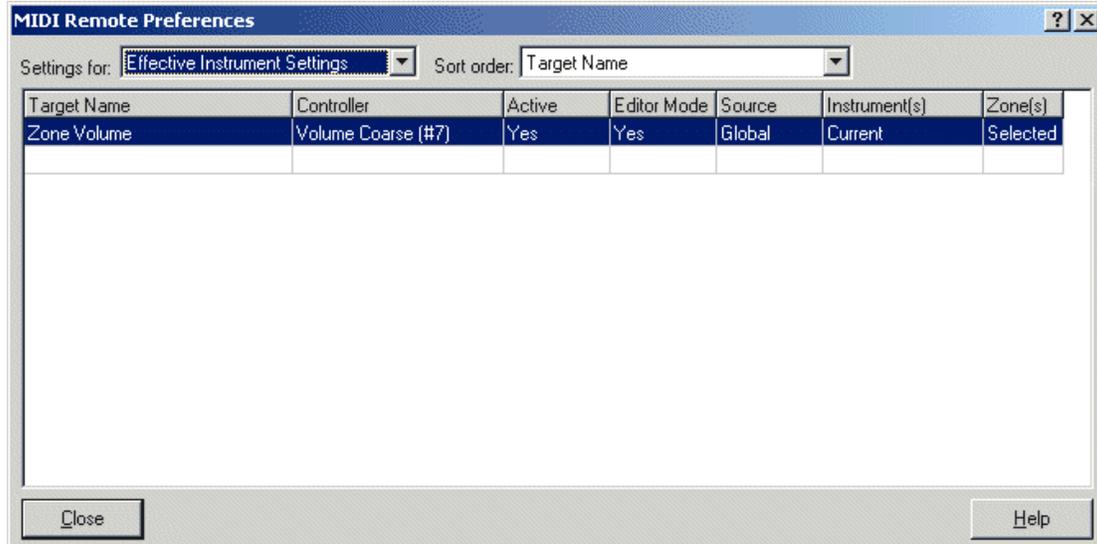
Target Selection

These options specify what kind of controller lists are displayed:

Global Defaults - the controller is used globally, that means it is available for all libraries.

Library Defaults - the controller is only available for the current library.

Current Instrument - the controller is only available for the current instrument.

Note, that global or library defaults overwrite the appropriate library or instrument-definitions.

The "**Effective Instrument Settings**" displays the effective assignment for the current instrument. The highest level of settings are the global settings. The library settings overwrite the global settings and the instrument settings overwrite the library settings. You cannot change data within this mode.

This control is used to sort display by certain search-criteria.

Data Display

This list displays the available MIDI-Learn entries for the selected mode. You can change an entry by double-click.

The "Edit Controller Mapping" dialog

The „Edit Controller Mapping" dialog is used to edit redirection of controller-event to other controllers.
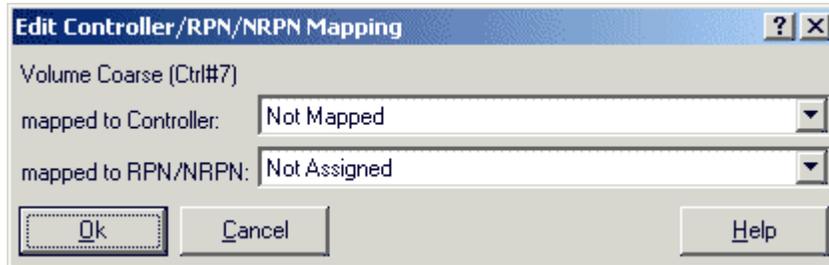
The "Assigned to Controller" Option

This option specifies, if the current controller is redirected to another controller.

This option specifies, if the current controller is redirected to a RPN/NRPN event.

The "New PlugIns found" dialog

The „New PlugIns found" dialog is displayed when VSampler detects new plug-ins at startup. You can either accept the plug-ins or skip them.
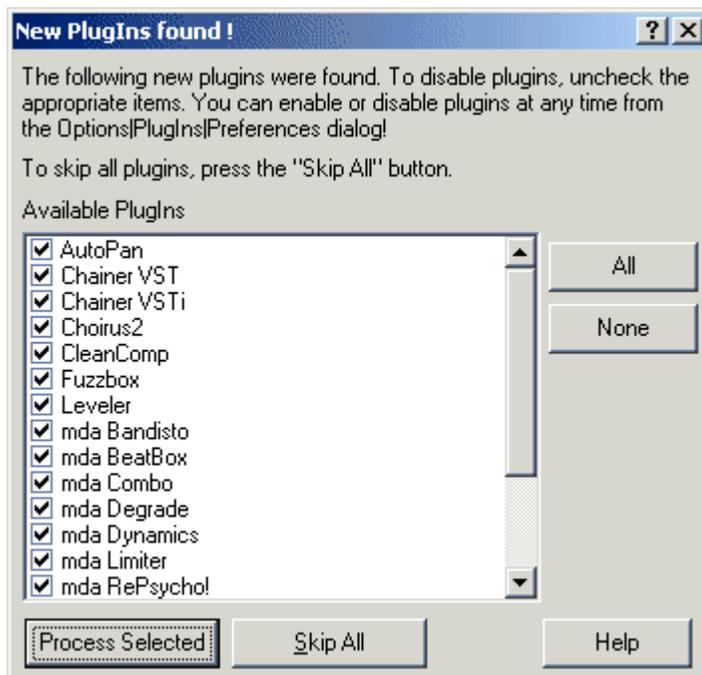
The list of available and deactivated PlugIns

This list shows all plug-ins that were detected. Optionally you may deactivate certain plug-ins, deactivated plug-ins are not available within VSampler. The "All" button selects all plug-ins, the "None" button deactivates all elements.

This button tries to load and initialize the selected plug-ins.

The "Skip All" Button
This button skips all newly found plug-ins and does not attempt to load them.

The "Beat Detector" dialog

The „Beat Detector" dialog is used to automatically search for beat markers within a drum- or bass-loop sample. The search parameters are set with the sliders. The beat markers found can also be edited manually within the Sample Editor.

The beat markers are stored per sample. Beat markers mark start- and end-position of a beat-slice.

The beat-slices are used to change the tempo of a sample during playback without altering its pitch or to change the pitch of a sample without altering its tempo.
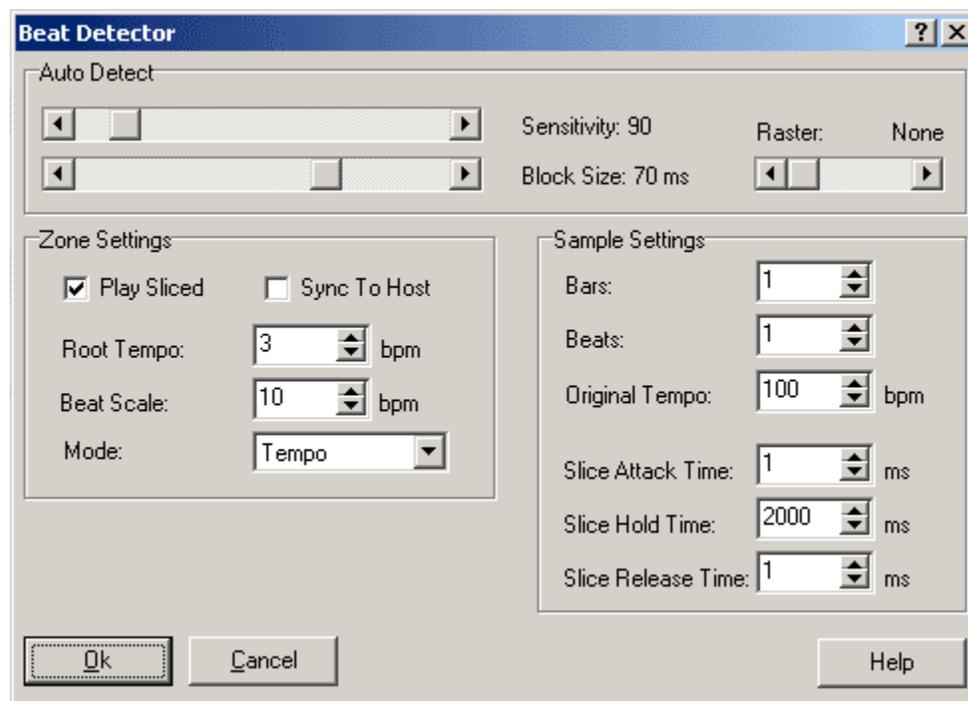
The "Sensitivity" Slider
This slider specifies the sensitivity of the beat-detector algorithm. When changing this value, the current sample is automatically re-processed.

The "Block Size" Slider
The block size slider specifies the minimum block size that is used by the beat-detector algorithm. When changing this value, the current sample is automatically re-processed.

This slider is used to specifiy a raster for beat detection. The sample is divided into sections depending on the beats value and the setting of this slider. If the raster contains for example 1 / 8 (8th note) and the beats contains 4, the sample is divided into 32 equal sections.

Beats found during beat detection are aligned to the raster boundaries if applicable. This is used to compensate inaccuracies during beat detection.

The "Play sliced" Option
These option specifies, if the beat-slider becomes active.

The "Synchronize" Option

This option specifies, if the tempo of the root-key should be synchronizes with the tempo within the sequencer of the host-application.

The root-tempo specifies the tempo of the sample at the root-key of the zone. By using the root-tempo, VSampler can change the tempo of a certain key by the beat-scaling algorithm. The resulting tempo is calculated from the original tempo and the tempo of the key played.

The "Beat Scaling" Value

The beat-scaling specifies the difference in tempo of two successive semitones. By using the root-tempo, VSampler can calculate the tempo of each key with this settings.

The "Beat Mode" Option

The mode of the beat-slicer specifies which parameter of the sample (tempo or pitch) is changed during playback, while the other parameter is not affected.

The original tempo is used as base for changing the tempo by the beat-slicer algorithm. The resulting tempo is calculated from the original tempo and the tempo of the key played.

The "Slice Attack" Value

The attack value of the volume envelope specifies the fade-in-time for each slice.

The "Slice Gate" Value

The gate value of the volume envelope specifies the time that each slice plays at full volume.

The release value of the volume envelope specifies the fade-out-time for each slice.

The "Bars" Value

This value specifies the bars within the sample. This value is used together with the beats-value to calculate the original tempo of the sample.

The "Beats" Value

This value specifies the beats per bar. This value is used together with the beats-value to calculate the original tempo of the sample.

This value is also used as a raster for beat detection. If the raster contains for example 1 / 8 (8th note) and the beats contains 4, the sample is divided into 32 equal sections.

The "Library Description" dialog

The „Library Description" dialog is displayed if a <u>library</u> is loaded and this feature is activated.
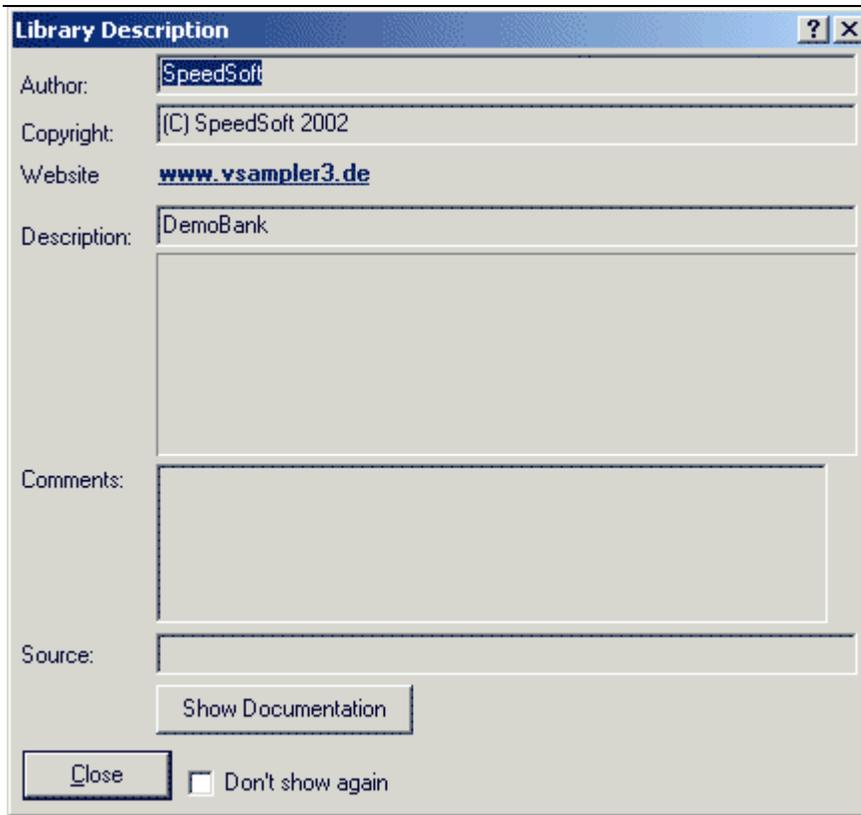
The Library Description Displays

These elements display various information about the current <u>library</u> .

The "Don't Show Again" Option

This options skips displaying this window the next time the <u>library</u> is loaded. You must save the library at least one time to store this setting.

The "Beat Slicer Options" dialog

The „Beat-Slicer Options" dialog specifies sample-specific settings of the VSampler beat-slicer.
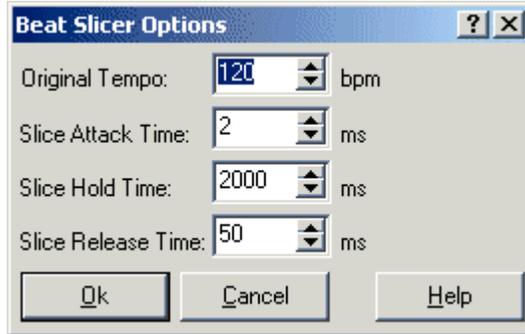
The "Original Tempo" Option

The original tempo is used as base for changing the tempo by the beat-slicer algorithm. The resulting tempo is calculated from the original tempo and the tempo of the key played.

The "Slice Attack" Value

The attack value of the volume envelope specifies the fade-in-time for each slice.

The gate value of the volume envelope specifies the time that each slice plays at full volume.

The "Slice Release" Value

The release value of the volume envelope specifies the fade-out-time for each slice.

The "Product Support" dialog

The „Product Support" dialog is used to send bug-reports to the VSampler bug-report-forum. Within the forum, users and developers can discuss about problems and solutions regarding VSampler.

This dialog is also used for search for product updates on the VSampler homepage.
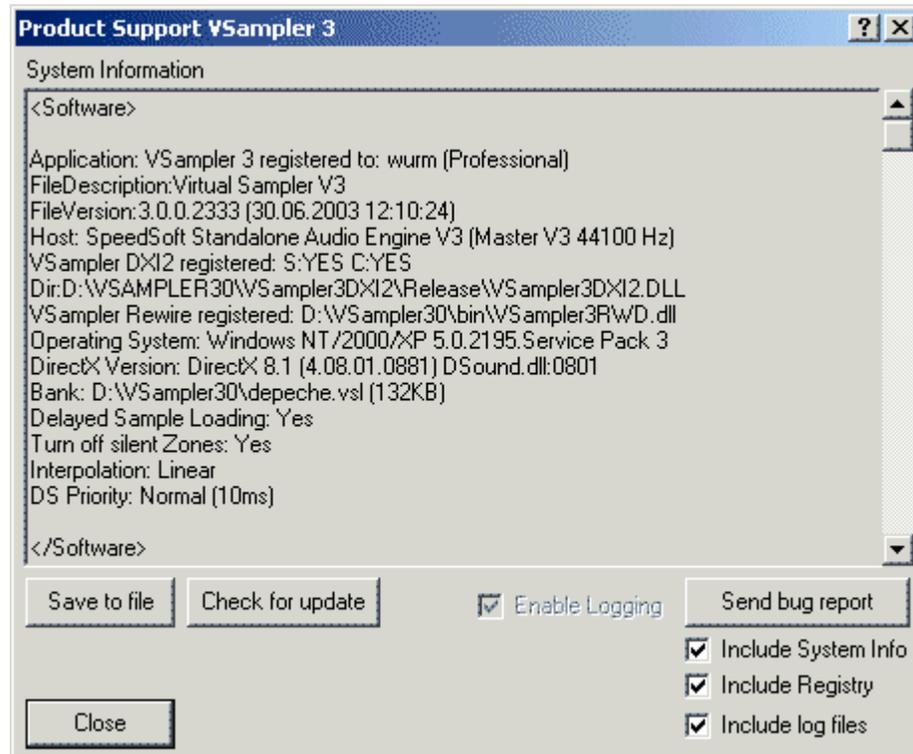
The System Information Display
This window contains information about hardware, software and system settings that affect VSampler.

These buttons are used to store the system information into an external file. This file can be used as an attachment to a bug-report.

The "Check for Update" Button
This button opens the VSampler homepage via the standard web-browser.

This button copies the selected information (system information and registry-settings) to the windows clipboard and opens the VSampler bug-report-forum via the standard web-browser. There you can create a new topic and describe your problems. Insert the information from the clipboard where applicable.

The Options
These elements are used to select the information (system information and registry-settings), that are copied to the windows clipboard for the bug-report.

The "External Wave-Editor" dialog

The „External Wave Editor" dialog is used to define an external WAV-editors (e.g. WaveLab) that is used instead of the VSampler-internal editor.
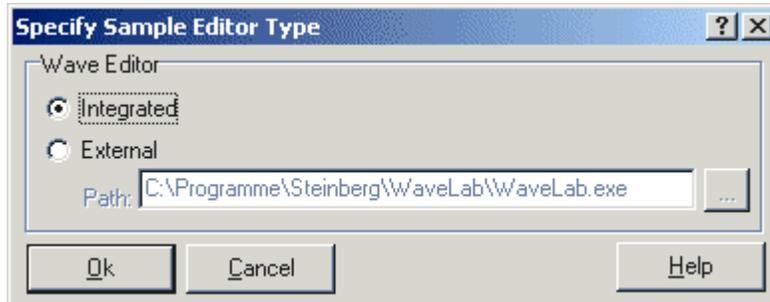
The Wave Editor Options

These options specify if the internal sample-editor is used or if an external editor is called. For external editors you must specify the complete path to the appropriate application executable.

The "Crossfade Options" dialog

The „Crossfade Options" dialog is used to define options for the velocity- and key-crossfade features of VSampler.
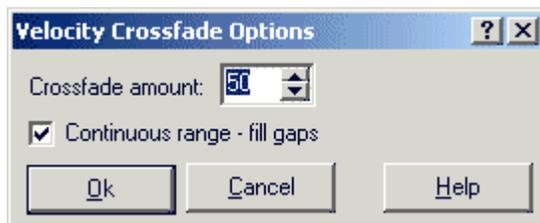
The Crossfade-Depth

This value specifies how much the appropriate zones overlap.

This option automatically removes velocity- or key-gaps from the appropriate zones, thus builds linked zone-areas.

The "AutoSort Zones" dialog

The „Zonen Autosort"-dialog is used to sort zones.

The Key-Sort Options

These options specify what kind of criteria are used to sort zones by key-range.

These options specify what kind of criteria are used to sort zones by velocity-range.

The "Skin not found" dialog

The „Skin not found" dialog is displayed if VSampler cannot find an appropriate skin-file. The skin-file contains bitmaps and other layout-information that affect appearance of the user interface of VSampler.
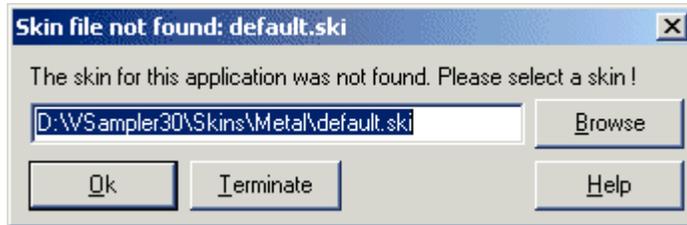
The filename
Please specify the complete path to the skin-file here.

This button shows a file selection dialog that eases searching for skin-files.

The "Terminate" Button
This button terminates the application.

The "Select Categories" dialog

The „Select Categories" dialog is used to select a subset of categories.

This dialog is used within the following contexts:

Change Categories - After calling the dialog, all categories that are assigned to the current instrumentes are selected. By using the "Ok" button the marked categories are assigned to the selected instruments. Categories not selected are removed from the instruments.

Complex Filter - After calling the dialog, all categories that are assigned to the current category-filter are selected. You can build complex filters by marking multiple categories.

Depending on the link-operator, all categories must be present for an instrument (AND), or at least one category must be assigned (OR) to show the appropriate instrument(s) after filtering.

The Operators
The link-operator specifies how marked categories are processed when filtering instruments. Depending on the link-operator, all categories must be present for an instrument (AND), or at least one category must be assigned (OR) to show the appropriate instrument(s) after filtering.

This list contains all categories available. Each category checked is used to filter instruments or to assign categories to instruments.

The "Edit Skin Manager Properties" dialog

The „Edit Skin Manager Properties" dialog is used to change VSampler skin-manager-settings. The skin-file contains bitmaps and other layout-information that affect appearance of the user interface of VSampler.
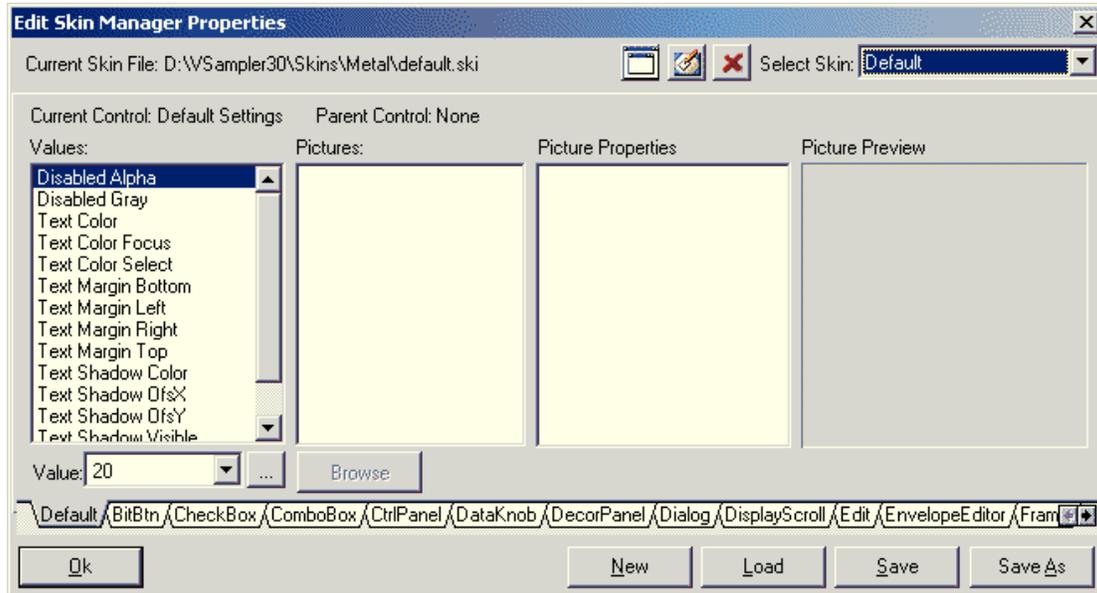
The "About" dialog

The „About" Dialog displays product information and state of the registration.
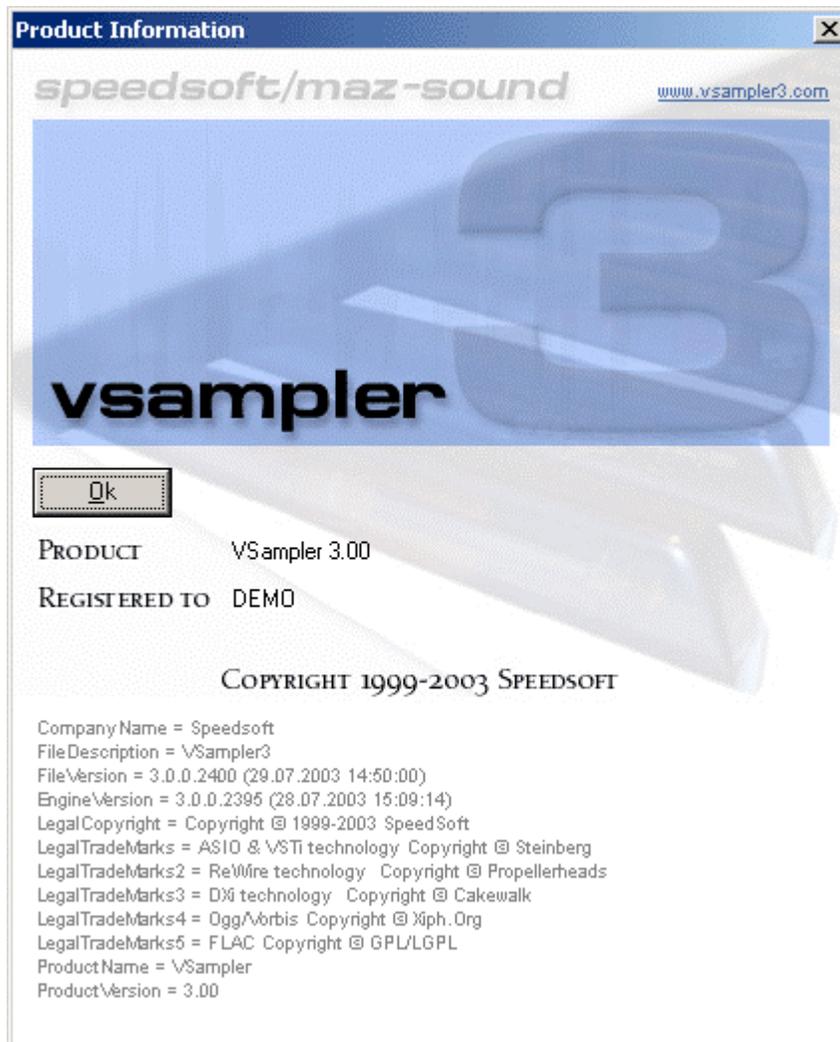
The "WAV Import Wizard" dialog

The „WAV Import Wizard" dialog is used to import WAV-files from hard-disc or CD-ROM.
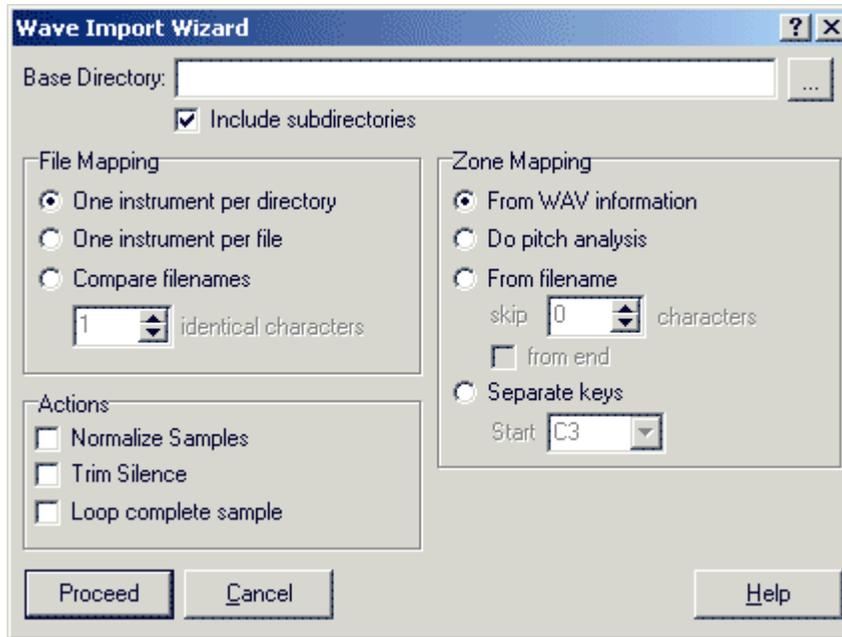
The Base Directory

This control specifies the base-directory which is used to search for WAV-files. The option "Include subdirectories" automatically includes all sub-directories of the base-directory into the search.

The file-mapping determines, how found WAV-files are mapped to **instruments** and **zones**:

One instrument per directory - one instrument is created per directory. WAV-files within the directory are mapped to VSampler-zones depending on the zone-mapping specified.

One instrument per file - exactly one instrument is created per WAV-file.

Compare filenames - Depending on a filename comparison, VSampler maps the found WAV-files to certain instruments. You can specify how many characters of the filename are used when comparing files to determine "equal" instruments.

The Zone Mapping

The zone-mapping determines, how found WAV-files are mapped to **zones** within an **instrument** :

>From WAV-information - to determine the root-keys, the WAV-chunk information is evaluated.

Do pitch analysis - to the determine root-keys the integrated pitch-detection algorithm of VSampler is used.

>From filename - to determine root-keys, the filename of the WAV-file is used. You must specify a character count that is skipped from start or end of the filename.

Separate keys - each WAV-file occupies one key on the keyboard.

The Actions

These actions specify what actions VSampler performs on the **samples** after importing:

Normalize samples - this option normalizes all samples to 0dB.

Trim silence - this option removes silence from the start and the end of the sample.

Loop complete sample - this option loops all samples completely.

The "MIDI Devices" dialog

The „MIDI Devices" dialog is used to manage MIDI-input- and MIDI-output-devices.

MIDI Inputs - VSampler can process MIDI-signals from multiple inputs in parallel. Please activate the desired inputs from the list. The sound-device triggered by the MIDI-signals is specified per channel within the MIDI-Rack.

MIDI Outputs - VSampler can automatically forward MIDI-signals that are received by one of the MIDI-inputs to a MIDI-output (MIDI-Thru). Please activate the desired inputs from the list. Enabling MIDI-Thru feature is done per channel within the MIDI-Rack.
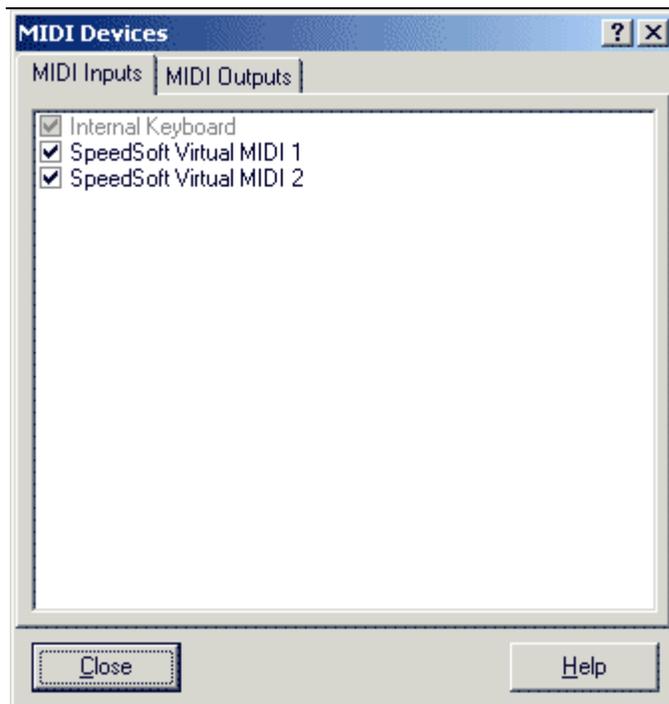
The Device List
Please activate the MIDI-devices that should be available to VSampler.

The "Manage Page Templates" dialog

The „Manage Page-Templates" dialog is used to manage page-templates within VSampler. A page-template is a container for user-defined VSampler-settings for a page of the VSampler Rack. By using templates, settings can be applied to other instruments.
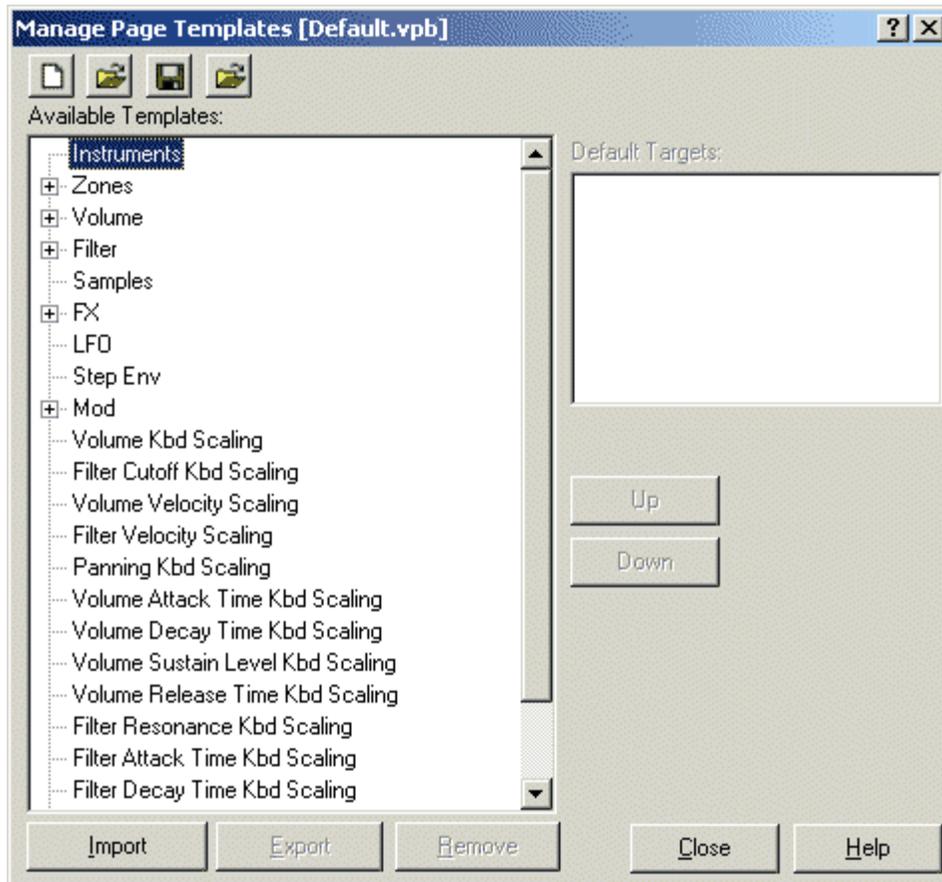
The "Import" Button
This button imports templates from a external file.

This button exports a template into a external file.

The "Delete" Button
This button deletes the current template.

This list shows all templates available.

The Toolbar-Buttons
These buttons provide access to common operations.

The "Up" Button
This button moves the selected template upwards.

This button moves the selected template downwards.

The Default-Targets
These controls are used to define template-targets that are activated by default when applying the template.

The "MIDI-Monitor" dialog

The „MIDI-Monitor" dialog shows incoming MIDI- and VSampler-events. This is especially useful to monitor internal or external events.

No	Port	Ch#	Status	Data1	Data2	Pos (smpls)	Diff (smpls)	Msg/Info
#1	Kbd	Kbd	Note On	C3	107	578880	-	
#2	Kbd	Kbd	Note Off	C3	0	582336	3456	

MIDI Monitor — Options — Max Events: 500 — Clear
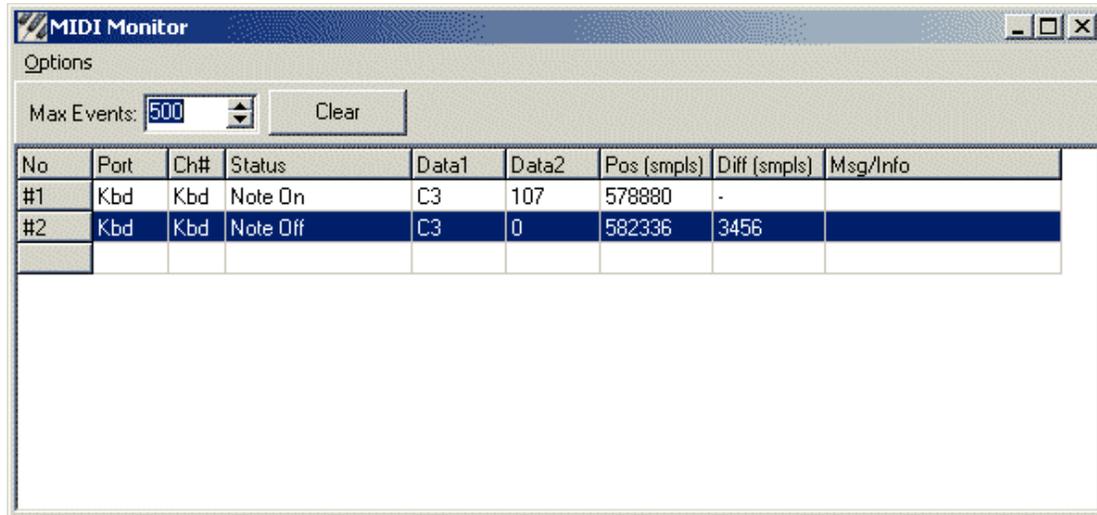
Data Display
This list shows all incoming events

This option specifies the maximum event count. If the count specifies is exceeded, the window is automatically cleared.

The "Clear" Button
This button deletes all events.

Miscellaneous Descriptions (links lost)

The "Close" Button
Der Schließen Button schließt das aktuelle Dialogfenster. Vorgenommene Änderungen werden automatisch The "Close"button closes the current dialog window. Changes are automatically applied.

The "Help" Button
The "Help" button displays help information for the current dialog window.

The "Ok" button closes the current dialog window. Changes are automatically applied.

The "Cancel" Button
The "Cancel" button closes the current dialog window. Changes are discarded.

The "Don't ask again" Option
The "Don't ask again" option is used to prevent the appropriate window from showing up again for subsequent actions. Instead the action that is used to close the dialog window or the option that can be specified inside the dialog window is used without further notice.

The "Apply" button applies the selected operation to the target object.

The Rack-Systemmenu
This button is used to display a context menu that contains commands to minimize or dock the rack.

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