

# X-Wheel of Fortune Pro

by H. G. Fortune

This is a fantastic, enhanced algorithmic pattern-based music system as vsti-plugin and standalone app. for windows(tm). There are 4 editable synth-parts (bass, solo, pad & athmo), one vocal/wav-sequencer and one percussion part (both with standard wav-files loadable).

The X-Wheel of Fortune Pro musicsystem is capable of generating a wide variety of fascinating music based on very few input-data. Thus you can let it play and let "the flux flow" or control it at realtime via MIDI/Keyboard for instant transposition.



If You are already familiar with the free version of X-Wheel of Fortune you know how versatile and astounding the program is. The Pro-Version now offers even more stunning features and six Parts.

- New: Selectable Audio-Out mode for Stereo-Sum or Multichannel
- New: X/Y-Modulation-Matrix as a joystick-like control of up to four parts and different destinations.
- New: Voc/Wav-Sequencer for adding vocal phrases, naturesounds and the like at var. bar-settings.
- New: Atmosphere-Soundgenerator for adding strange soundscapes and atmopsheres.
- New: Playlist-Feature to play up to 16 patch-presets in succession for different bar-settings each.
- New: Advanced Setup for loading different soundfonts, chorus settings, set-MIDI-Channels.
- New: Individual Stereo-outputs for all 5 Mixer-channels.
- New: Enhanced fast access to each setup-window and the mixer.
- New: Now featuring 16 selectable musical scales incl. some exotic types.
- and a lot of finetuning!

**Just listen to the presets to get an impression how powerful the Pro-Version of X-Wheel of Fortune is.**

The Evaluation Version differs to the registered version by a slight nag as the audio-output is faded down at varying bars for a very short moment: gently but noticeable, not too often but reminding You to get a registered version if You want to use this program quite regularly.

You can easily buy a registered version using this link:

<http://www.shareit.de/product.html?productid=221828>

# X-Wheel of Fortune Pro V 1.2b

## Description of the controls & functions



Set internal tempo: **Coarse** in/decrements bpm in steps of 10, and **Tempo**-knob for fine-tempo +/- 10bpm  
Sync to **External** Tempo by a VST-host (button lit) or use the **Internal** tempo-setting, current tempo is shown below the Coarse-selector

**Reset** the machine's sequencers to 1<sup>st</sup> step

**Run/Stop** the machine also remote controlled by MIDI-CC#4

**Note on tempo-setting:** If You are using **External** tempo control from your host please keep in mind that patches might have been programmed for a completely different tempo-setting than your host currently running. Thus if you notice a remarkable difference between the number indicated at the **Coarse**-selector and the current tempo running shown below then crosscheck the patch set to internal tempo to get a feeling what tempo is most appropriate for that patch. For example: Coarse shows 70 and the current tempo is 120 then it is advisable to run the patch set to Internal tempo-control.



Control for scale-setting and tranpose-options

**Vari** this knob changes the algorithmic root-value, best used for a new start value.

**Transpose** set tranpose to only via MIDI or +Automatic or Auto- Algo which sets a new root-note every 1, 2, 4 bars or 21 which is changing note for 2, then for two times 1 bar – **Note:** check this setting first if transpose via MIDI does not seem to show a result.

**Bars** here you set the bar-amount for transpose

**Scale** just select one of the 16 scales



Auto-Play is a new feature within X-Wheel of Fortune Pro which allows to chain up to 16 different patches to be played in succession. You can set and store the number of bars (8, 16, 32, 64, 128 or 256 Bars) to be played with each patch separately. The Reset-button allows to reset to startingpatch. The Auto-Play function uses program no. 112 to 127. As all information with this feature is stored within the preset-bank You can use different preset banks for sequences to be played with varying patches stored to the program no. 112 to 127.

This feature is working fine but there are a few points to be considered:

Ensure to have saved the patches with Auto-Play "On" otherwise the sequence will play the patch with Auto-Play Off just as normal. Actually you have even 17 patches playable in sequence as You can start this feature from any patch number below 112. It is best to set up a sequence of patches with the VSTi-host set to off or stop.



NEW to Version 1.2b: selectable Output-Mode (global setting - valid for all patches)  
Multi-Channel - for hosts supporting individual outputs from a VSTi - i.e. Cubase  
Stereo-Sum – for hosts like Chainer supporting only Stereo-Out of a VSTi

**In a Multi-Channel host like Cubase You can/should activate Multi-Channel, as due to demand the default setting is Stereo-Sum.**



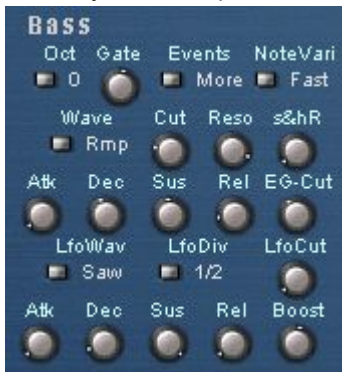
Here You can switch directly between the onscreen display of the **Mixer**, and Setup for

**Percussion** – load different, tune and pan wav-files

**Voc/Wav** – load different and tune wav-files

**Advanced** – load different soundfonts for Pad & Athmo-part, adjust Chorus-settings for these parts and set MIDI-channels. For details see below in each respective section.

## Bass Synthesizer part



**Oct** sets the octave of the oscillator

**Gate** sets the basic gate-time of the note

**Events Less/More** determines playing more or less events in a bar

**NoteVari** determines how often new pitches for notes will be generated: Slow, Medium or Fast

**Wave** selects the waveform of the oscillator

**Cut** – Cutoff of Lowpass-Filter

**Reso** - Resonance

**s&hR** – sets the amount of sample&hold modulation to Resonance

**Lfo-Wav** select the wave of the LFO

**LfoDiv** as all LFO are temposynced you can set the Division to note-length or bars

**Lfo/Cut** set the amount of LFO-Modulation to Filter-Cutoff

**Atk** – Attack of Filter Envelope

**Dcy** - Decay of Filter Envelope

**Sus** – Sustain of Filter Envelope

**Rel** - Release of Filter Envelope

**EG-Cut** – Amount of ADSR-EG on Cutoff

**Atk** – Attack of Amplifier Envelope

**Dcy** - Decay of Amplifier Envelope

**Sus** – Sustain of Amplifier Envelope

**Rel** - Release of Amplifier Envelope

**Boost** – saturator type of boost

**Solo Synthesizer part** - quite the same as bass with one exception:



Instead of the boost-knob there is a knob (**Dist**) for adding a some distortion to enrich the timbre. For the technical interested this is a special not filtered ringmodulator-signal controlled by the envelope of Amp-EG. Thus the higher the sustain-level the more of this distortion will be there.

## Pad Synthesizer part



**Oct** sets Oscillator 1a octave

**Digi-Wave: 1a** selects a wave from a built-in Soundfont

**Chrs** enriches the sound of the wave:1a with a chorustype effect

**PadVar** play longer or shorter notes

**Oct** sets Oscillator 1b octave

**Wave:1b** determines waveform of Osc. 1B

The 3rd oscillator can be detuned by **Coarse**-switch to +7 halftones

**Detune** is for fine detuning of Osc1b/Wave 1b and Wave2

**Wave:2** determines waveform of Osc. 3

**pwm** – activates pulse width modulation, only be heard if at least one oscillator wave (:1b or :2) is set to **Square**-waveform

**WsM** adjusts the amount of Waveshaping-Modulation, more vivid signal even with Saw-Wave etc.

**Mix a/b** mix the output-level of Wave:1a and Wave:1b

**Osc2** controls the output level of Osc 2

**Cut** – Cutoff of LPF / **Reso** - Resonance

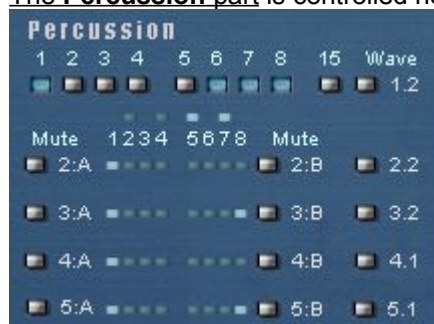


**S&H** – switch selects modes of Sample & Hold  
**Atk** – Attack of Filter Envelope  
**Dcy** - Decay of Filter Envelope  
**Sus** – Sustain of Filter Envelope  
**Rel** - Release of Filter Envelope  
**EG-Cut** – Amount of ADSR-EG on Cutoff

**s&hC** – sets the amount of sample&hold modulation to Cutoff  
**s&hR** – sets the amount of sample&hold modulation to Resonance  
**LfoWav** select the wave of the LFO  
**LfoDiv** as all LFO are temposynced you can set the Division to note-length or bars  
**Lfo/Cut** set the amount of LFO-Modulation to Filter-Cutoff

**Atk** – Attack of Amplifier Envelope  
**Dcy** - Decay of Amplifier Envelope  
**Sus** – Sustain of Amplifier Envelope  
**Rel** - Release of Amplifier Envelope  
**Chr2** enriches the overall output of Pad-part with a 2<sup>nd</sup> chorustype effect

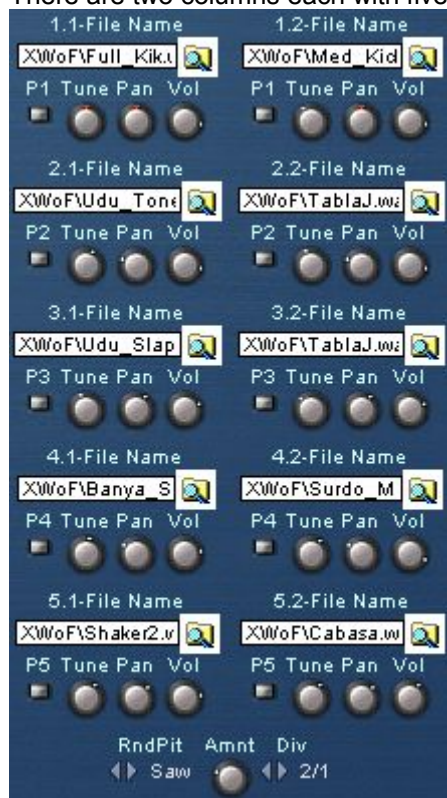
The **Percussion** part is controlled here



The buttons **1** to **8** allow you to set the steps for e.g. kickdrum  
 Button **15** is a bit tricky as you'll have the kick played in bar 2 on step 7 and in bar 4 on steps 7 and 8  
 The bar played is indicated by the row of four LEDs  
 The button **Wave** 1.1 or 1.2 selects between one of the preloaded wave-files in -> Perc-Setup  
 The buttons in the column down do the same for the other four percussion-lines  
 The **Mute**-buttons (2:A/2:B, 3:A/3:B etc.) allow you to mute a half bar in each percussssion-line.

### Percussion Setup

You can easily load your on drum- and percussion sounds here using standard wave-files:  
 There are two columns each with five slots to load a standard .wav-file



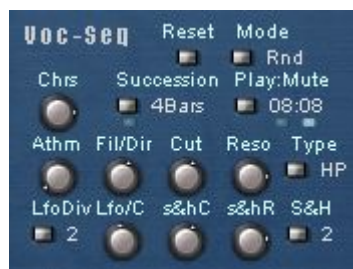
**Attention:** Please keep in mind the place where you loaded the wave-file from will be stored within a preset-patch! Thus if You delete a wav-file later you get error-message when trying to access a preset-patch using that wave!!! So it is best to keep all waves used within this program in a specific subdirectory!

Each wavefile can be **Tuned** at a wide range (7 octaves), placed in **Pan**-pospition and set to a certain **Volume**  
 The **P1** to **P5** buttons are there to check the sound and settings, even when the machine is not running.

**Hint:** Usually one will load some kind of kick-drum into slots 1.1 and 1.2 as in this line each beat can be switched on/off individually. Anyway it is best to have the other slots loaded with percussion-instruments rather than snaredrums or hihats. You'll get more groove into the rhythm.

**RndPitch** adds a random pitchmodulation to wave 2.1 – 5.2 as well controlled by an LFO set to bars

The **Vocal-Sequencer** is also a great new feature within X-Wheel of Fortune Pro. Basically it was intended to add short vocal-phrases to the music, but it can serve to add different „one-shot-type“ samples like animal-sounds, thunder, churchbells etc.



There is a separate **Reset** button as sometimes it might be helpful to reset the running seq as switching between patches does not stop the inbuilt sequencer-modules. It does not reset the current Play:Mute state. **Mode** determines whether the vocal-phrases are played at random or in sequence as loaded in the File-slots from 1 to 10. For setup see below.

The **Play:Mute** button determines the number of bars the vocals will be or not played, eg. 16:16 vocal will be there in 16 bars and then not played for 16 bars. If set to Play then no muting of bars will occur. **Succession** allows You to set a numbers of bars between two vocals to be played, eg. 4Bars is every fourth bar a vocal-phrase / wav-sample is to be played.

**Chrs** allows You to set the amount of chorus

**Athm** – adjusts the level of the Athmo-generator into the filter of the Voc-Sequencer

**Fil/Dir** – adjusts the level of the Voc/wavs more to filter-Input or direct to output

**Cut** – Cutoff of the Multimode-filter

**Reso** – Resonance of the Multimode-filter

**Type** - Filter-Type: LP=LowPass, HP=HighPass, BP=BandPass, BR=BandReject

**LfoDiv** as all LFO are temposynced you can set the Division to note-length or bars

**Lfo/C(ut)** set the amount of LFO-Modulation to Filter-Cutoff

**s&hC** – sets the amount of sample&hold modulation to Cutoff

**s&hR** – sets the amount of sample&hold modulation to Resonance

**S&H** – switch selects modes of Sample & Hold

### Setup for the Vocal/Wav-Sequencer

As with the percussion-setup there are ten slots for wav-files. The **V1** to **V10** buttons serve for testing each slot. **Tune** allows to detune each wave +/-1 octave, while **Vol** sets the output-volume separately for each slot.



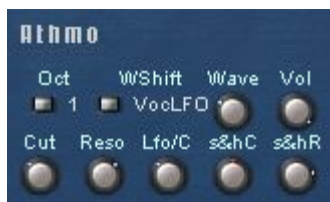
**Attention:** Please keep in mind the place where you loaded the wave-file from will be stored within a preset-patch! Thus if You delete a wav-file later you get error-message when trying to access a preset-patch using that wave!!! So it is best to keep all waves used within this program in a specific subdirectory!

Note: If You use a wav-file with certain loop-information this file will be played in a loop as long as the LED is lit at the corresponding slot.

You can specify the 1<sup>st</sup> and last step to be played so it is possible eg. file from slot 3 to 7 or 2 to 9 only, as well you can specify the direction the slots are played forward, backward or bouncing in two modes.

Note: The phrases and nature-sounds supplied with and used in the presets are meant to demonstrate the potential of the Voc-Sequencer.

The new **Athmo-Generator** seems to be quite simple but there is a very special feature with it, which may be called **Wave-Shifting** or Wave-Stepping as it is possible to modulate the waveform-selection of the soundfont-oscillator by LFO, Sample&Hold and Play:Mute-setting of the Voc-Seq. Setting this switch to Off allows You to select one waveform only (or shift manually) with the **Wave**-knob. The signal is also routed to the filter of the Voc-Sequencer thus two filters can be used on this engine. The LFO- and S&H-rate is taken from the Voc-Sequencer.



**Vol** – sets the output-level of this part  
**Cut** – Cutoff of the Lowpassfilter  
**Reso** – Resonance of the Lowpassfilter  
**Lfo/C(ut)** - set the amount of LFO-Modulation to Filter-Cutoff  
**s&hC** – sets the amount of sample&hold modulation to Cutoff  
**s&hR** – sets the amount of sample&hold modulation to Resonance

NOTE: Even if set Waveshifting to Off You can't access the first few and the last (few) presets in the soundfont by the Wave-knob. This is to ensure the soundfont's audio-out won't crash by exceeding the range of existing presets when modulation-sources might provide values too high. Anyway if needed you can select a specific preset in that range manually via Adv-Setup at the Athmo-Soundfont-box.

Actually the Wave-knob serves as well to set a certain area where the changes occur when set to P:M. If there are around 20 presets within a soundfont and the wave-knob is set to middle-position then the presets will change from about no. 8 to 12, so turning the knob clockwise will shift this area. This area is depending on the number of presets in a soundfont. If there are more than 20 this area will be wider.

**Note:** a soundfont to be loaded should comprise of 15 presets at minimum.

Most impressive is the **X/Y-Modulation-Matrix** controlling up to four selectable destinations in a joystick-like manner.



X and Y axis have only one output each with – 0 + range so the normal output of X-axis (- to +) is destined to Bass the same output with an inverter (+ to -) to Solo. The same for Y-Axis on Pad and Voc/Atm. Anyway moving the ball touches all destinations, but there is an option to set each destinations to off as well.

Be aware that the results might sound quite extreme when moving the ball to the borders depending on the respective settings within a preset.

## The Mixer section



switch each part on or off

here you can set each part to an individual tempo-division (and Athmo-Part On/Off) - Remark: Tempo for pad-part set to 1B is a note length of 1 bar, so 2B is two bars, unless in pad part Pad-Vari is set to Med(ium) where notelength is a quarter-note. Be sure to disable AthOn not to have sound from the Athmo-Part.

set the volume of each part

set pan position for Bass, Solo, Pad and VocAthmo (no pan for perc as each perc-instrument can be set to a separate pan position, there is a stereo-width knob to enhance the width of stereoposition of perc.)

set the Delay-Level of each part

set the feedback-amount of each delay

set the delay-divider to tempo for bass, solo, pad and perc, or, DelayFine to perc if delay is set to Sh(ort)  
 Delay-Groove shifts the tempo-synced delays for bass, solo and percussion out of tight timing.



## Advanced Setup



change the soundfont for the pad-part  
and set the chorus

change the soundfont for the athmo-part  
and set the chorus ( adjust Amount of chorus here for Athmo-SF)

Chorus-setting for all wav-files of the Voc-Sequencer

Set different MIDI-channels

MIDI-Out for Bass, Solo, Pad

MIDI-Out for Athmo, MIDI-In for transposition via MIDI/Keyboard

Hint: MIDI Out does only work within certain hosts like Cubase, as the VSTi cannot be connected directly to a MIDI-Port.

A word about transposing the machine via MIDI.

Only the lower two octaves of a MIDI-Keyboard are active to transpose the system at realtime. This prevents from playing notes exceeding a reasonable range for transposition. Playing beyond this range will provide no change. You need not hold the key, next change via key-transpose will occur with next key pressed. As well the onscreen-kb may be hidden when using an external MIDI-kb. Please keep as well in mind: If You control this machine via MIDI or onscreen-keyboard, it reacts monophonic to last-note-priority. This is because you can „only“ supply a new „root-note“ to the machine but not play it like synthexpander or so.

Some info about a few special features:

Pan and Delay for Bass and Solo - when using delay setting pan e.g. to right forces the delay signal to the left or viceversa respectively. So using no delay pan is like normal pan.

Pan and Delay for Pad and VocAthmo – the delay-signal is slowly LFO-Panned in from left to right and back.

Delay for percussion can be set to Sh which is a very short delay for ambient, even shattering, like spring reverb sounds.

All delays are synced to tempo anyway, but in case of bass, solo and percussion can be made out of sync to get a certain groove effect. Use knob: DlyGroov.

**„It's music in the spirit of Fortune“**



Yours  
H.G. Fortune

## **Credits:**

**X-Wheel of Fortune Pro** is an algorithmic VSTi created by H. G. Fortune (Günter Hager)

Contact - email: fortune<at>flomo-art.de

Website – [www.flomo-art.de/se](http://www.flomo-art.de/se)

Explicit thanks go to:

**Vera Kinter** from Czech Republic who worked out the MIDI-implementation and did some very fine patches,

**Timothy Conrardy** for pushing .. erhh ... encouraging me to do it and his very impressive patches,

**Carlos Needham** from UK, Spain & Netherlands for bugreporting and great patches,

The phrases have been spoken by **Elena Mogilevskaja-Hermes** and **Estella van Ooijen**.

**Dr Ambient** aka **Guido Goebertus** ([www.algomusic.nl](http://www.algomusic.nl)) for hosting.

**Hermann Seib** for providing SAVIHost to have X-Wheel of Fortune Pro run as a standalone application.

the Yahoo SynthEdit Users List, esp. Dan Worrall, Ugo (Chris Sciurba), David Haupt, Richard Brookes and esp. Jeff McClintock for creating SynthEdit.

This VSTi uses one sep-module by David Haupt and one by Dan Worrall.

Abbreviations of the patch-authors

TC - patches by Tim Conrardy

CRN - patches by Carlos Needham

VK - patches by Vera Kinter

none or /F by the author of X-WoF Pro

## **More stunning VSTi by H.G. Fortune:**

STS 11 Space Transition Synthesizer - 7 Voice (29,- € / 34,- US\$)

ASET-2121 Mythospheric Synthesizer - 8 Voice (20,- € / 25,- US\$)

STS 11 and ASET-2121 will be also out as Freeware, but limited to 2 voices

## **Terms of License Agreement:**

The Evaluation Version of the program (X-Wheel of Fortune Pro) is there to let you check whether it fits Your needs. This fully functional version equals the registered version with two exceptions: there are no individual outputs for each part as with the registered version and there is one slight "nag" as the Audio-Output is faded down at varying bars for a very short moment: gently but noticeable, not too often but reminding You to get a registered version if You want to use this program quite regularly.

Evaluation version:

You are NOT ALLOWED to sell the program or charge for the access to it.

You are NOT ALLOWED to distribute the program in any way (online, magazine CD, hardware or software packages, etc.) without a prior agreement from the author.

Registered version:

You may use the registered version of the program in personal and/or commercial music (credits are welcome).

If You want to use the program for providing music (with optional announcements) to eg. a supermarket, museum or place/institution alike You need a special license. Please ask for details.

You are allowed to run the registered version of the program on different computers as long as You are the only person having access to and using the program.

Both versions:

You are not allowed to modify, decompile or reverse-engineer the program.

This program is not copy-protected but protected by national & international (copyright-) laws.

Changes & enhancements may be made without prior notice and a grant that further editions will read patches from former version cannot be given.

Use this program on Your own risk and Your own responsibility.



## Appendices:

- MIDI-Implementation
- Additional notes

MIDI - Implemented MIDI-controllers (date: 2004-09-16)

CC4 - button Run/Stop (value 0-63=Off, value 64-127=On)
CC7 - fader Main - Mixer - (value 0-127)
CC17 - button Events - Bass section - (value 0-63=Less, value 64-127=More) CC18 - button NoteVari - Bass section - (value 0-42=Slow, value 43-85=Med, value 86-127=Fast) CC19 - button Events - Solo section - (value 0-63=Less, value 64-127=More) CC20 - button NoteVari - Solo section - (value 0-42=Slow, value 43-85=Med, value 86-127=Fast) CC21 - button PadVar - Pad section - (value 0-63=Slow, value 64-127=Med)
CC22 - button Wave 1 - Perc section - (value 0-63=select 1.1, value 64-127=select 1.2) CC23 - button Wave 2 - Perc section - (value 0-63=select 2.1, value 64-127=select 2.2) CC24 - button Wave 3 - Perc section - (value 0-63=select 3.1, value 64-127=select 3.2) CC25 - button Wave 4 - Perc section - (value 0-63=select 4.1, value 64-127=select 4.2) CC26 - button Wave 5 - Perc section - (value 0-63=select 5.1, value 64-127=select 5.2)
CC27 - button Tempo - Mixer/Bass - (value 0-63=1, value 64-127=1/2) CC28 - button Tempo - Mixer/Solo - (value 0-63=1, value 64-127=1/2) CC29 - button Tempo - Mixer/Pad - (value 0-42=1B, value 43-85=2B, value 86-127=4B) CC30 - button Tempo - Mixer/Perc - (value 0-63=x1, value 64-127=x2)
CC64 - button On/Off - Mixer/Perc - (value 0-63=On, value 64-127=Off) CC66 - button On/Off - Mixer/Bass - (value 0-63=On, value 64-127=Off) CC65 - button On/Off - Mixer/Athmo - (value 0-63=On, value 64-127=Off) CC67 - button On/Off - Mixer/Solo - (value 0-63=On, value 64-127=Off) CC68 - button On/Off - Mixer/Voc - (value 0-63=On, value 64-127=Off) CC69 - button On/Off - Mixer/Pad - (value 0-63=On, value 64-127=Off)
CC70 - knob Pan - Mixer/Bass - (position -64 / 0 / +63) CC71 - knob Pan - Mixer/Solo - (position -64 / 0 / +63) CC72 - knob Pan - Mixer/Pad - (position -64 / 0 / +63) CC73 - knob Pan - Mixer/Voc - (position -64 / 0 / +63) CC74 - knob Pan - Mixer/Width - (position -64 / 0 / +63)
CC75 - fader Volume - Mixer/Bass - (value 0-127) CC76 - fader Volume - Mixer/Solo - (value 0-127) CC77 - fader Volume - Mixer/Pad - (value 0-127) CC78 - fader Volume - Mixer/Voc/Athmo - (value 0-127) CC79 - fader Volume - Mixer/Perc - (value 0-127)
It is also possible to use VST-Automation on this PlugIn

The Evaluation version has a special indicator to show when audio-output is faded down.



## Additional notes:

A few considerations about using Soundfonts (SF2-files) within SE and SE-built VSTi

When I did my X-Wheel of Fortune I was asked to add a soundfont-oscillator to utilize digital waves as well. Basically that's no problem, but when I was going to build an appropriate Soundfont from the files I had on my HD I noticed something rather strange. The soundfont-oscillator did not play the presets as these were layered within the SF2-file. Instead only one layer was played.

If You don't know much about the structure within a soundfont I'll give you a short explanation:

The hierarchy consists of samples, instruments and presets

samples are the waveforms (eg. imported wav-files) supplying the raw-material

next is the instrument where you have at least one sample covering a certain octave-range or you can build a multisample covering smaller octave-ranges or even a multi-layer from different samples. From one or more instruments you can create a preset consisting as well splits or layers.

A soundfont-oscillator in SE or an SE-built VSTi is only playing one layer from a preset or even an instrument. So one can't even cheat building a layer on the instrument level. Although a multisample is played correctly you can't have additional samples within the already existing octave-/key-ranges. In the view from Vienna (the known SF2-Editor) only the bottom-instrument or part of the preset is played by the soundfont-oscillator of SE.

Please keep in mind from the soundfonts only the samples will be played as organized within the instruments and presets. The settings for the specific Soundblaster (TM) card's synthesis functions are not supported.

This is to be considered if You want to load different soundfonts into X-Wheel of Fortune Pro.

Hint: If needed you can get a special driver to enhance the audio-performance of your PC: ASIO4ALL by M. Tippach (Freeware) [www.tippach.net/asio4all](http://www.tippach.net/asio4all) which optimizes WDM-based Audio-devices in many cases by reducing latency (W98SE and up).