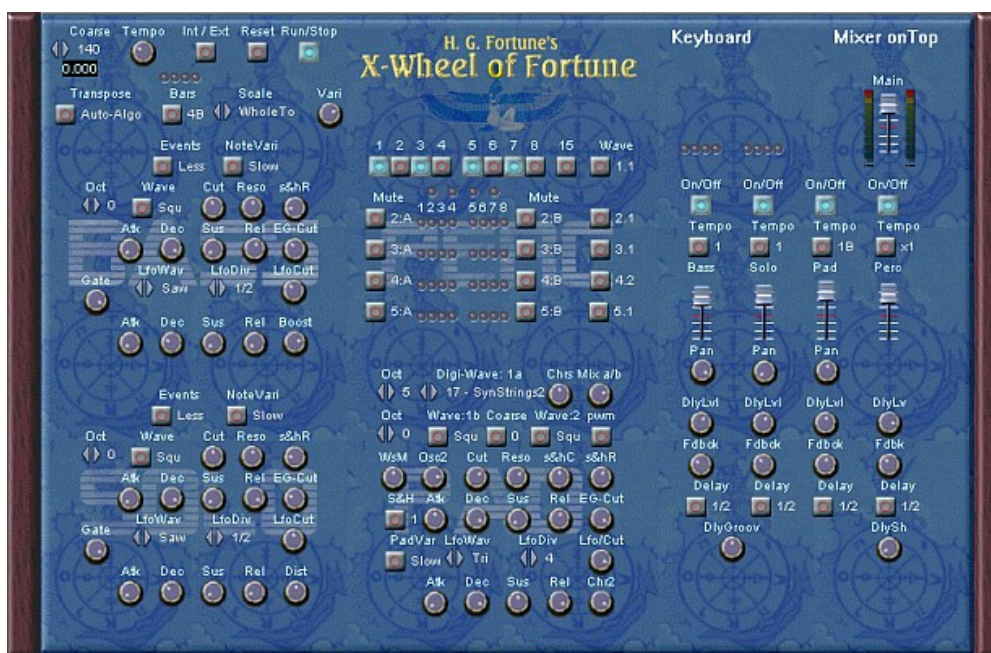


# X-Wheel of Fortune

by H. G. Fortune

**X-Wheel of Fortune** is an algorithmic pattern-based musicsystem as a free vsti-plugin and standalone app. for windows. There are 3 editable synth-parts (bass, solo & pad) and one percussion part (standard wav-file loadable, each with tune, pan & volume).

The X-Wheel of Fortune 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.



To get an impression how versatile X-Wheel of Fortune is just listen to these presets:

(Take a bit time to listen to the presets as some take more then 5 seconds to evolve.)

Technolike hardstuff: **Dark Matter CRN** , Latino-jazz with floating groovy rhythm: **Sven Goonsen CRN**

Newstyle Punk: **Bonkers CRN** , Music from Paris: **FrenchMoon**

"Far Space Style": **Inner Space TC**, **spacer vurt TC**

Ambient: **Aqua CRN**, **Ambient Moon TC**, **Denubola TC**, **Breathkiller-VK**, **Clockwork Stars CRN**, **Utopia Walk TC**, **Avalon - VK**, **Narcotic - VK**,

Atmospherics: **Fripp & Eno TC**, **Orion'sBeltTC**, **Amazonia VK**, **Galaxy-VK**, **Machine Moule CRN**

As You see a large variety of musical styles is covered by this algorithmic music generator.

You can use this program also to create extravagant, very vivid and constantly varying drumloops: see the special PRC-presets by Tim Conrardy, esp. the presets **PRC Tubular TC**, **PRC Tribal TC**.

The presets **Ethnotic SciFi** and **Ethnotic SciFi #2** show how to make use of preset-variations in succession which can be used as parts in a songlike – structure. For remote control simply use MIDI program-change messages from the hostsequencer.

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).

# X-Wheel of Fortune

## 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

**Transpose** set tranpose to only via MIDI / Keyboard or +Automatic or Auto-Algo which set a new root-note every 1, 2, 4 bars or 21 which is changing note for 2, then for two times 1 bar

**Bars** here you set the bar-amount for tranpose, bar-change is indicated by the 4 LEDs above

**Scale** just select the scale you want

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

(Remark: set to AutoAlgo disables option for MIDI/Keyboard transposition.)

## Bass Synthesizer part



**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

**Oct** sets the octave of the oscillator

**Wave** select the wave of the oscillator

**Cut** – Cutoff of LPF

**Reso** - Resonance

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

**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

**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

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

**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

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

**Oct** sets Oscillator 1b octave

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

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

**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

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

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

**Cut** – Cutoff of LPF

**Reso** - Resonance

**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 two modes 1 & 2

**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

**PadVar** play longer or shorter notes

**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

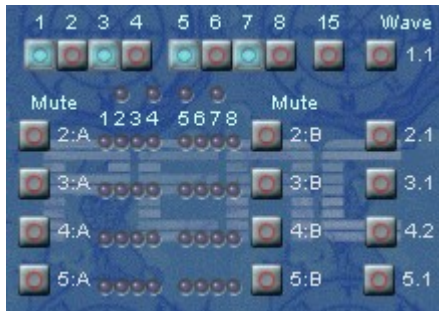
**Sus** – Sustain of Amplifier Envelope

**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 percussioin-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!

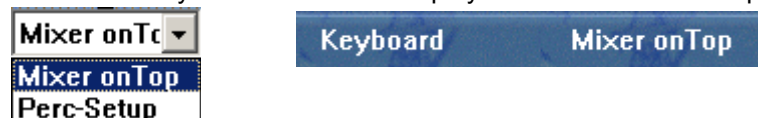
Each wavefile can be **Tuned** at a wide range (7 octaves), placed in **Pan**-pospotion and set to a certain **Volume**

The **P1** to **P5** buttons are there to check the sound and settings, even when the machine is not running.

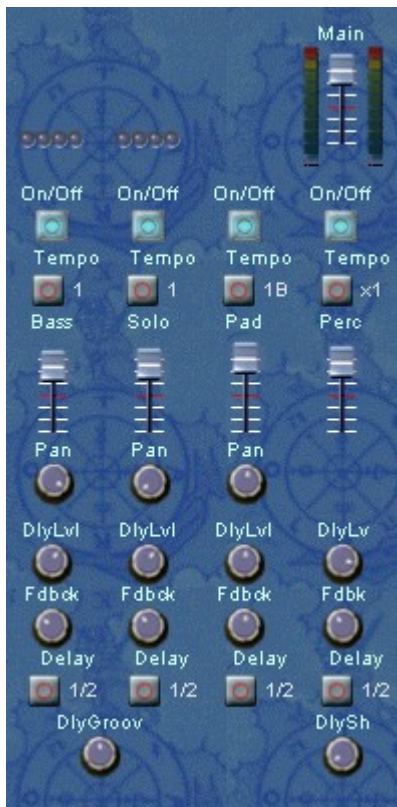
**Hint:** Usually one will load some kind of kick-drum into slots 1.1 and 1.2 as in this line each beat can be switched on/off individually. Anyway it is best to have the other slots loaded with percussion-instruments rather than snaredrums or hihats. You'll get more groove into the rhythm.

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

Here is where you can select the display for Mixer or Perc-Setup and have the onscreen keyboard visible



## The Mixer section



set the Main-Volume

switch each part on or off

here you can set each part to an individual tempo-division

set the volume of each part

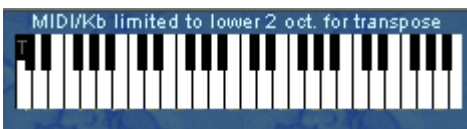
set pan position for Bass, Solo and Pad (no pan for perc as each perc-instrument can be set to a separate pan position)

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.

A word about transposing the machine via MIDI- or onscreen-keyboard



Only the lower two octaves are active to transpose the system at realtime (same for a MIDI-Keyboard). 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 hints 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 – 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, springreverblike 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.

<b>CC4 - button Run/Stop (value 0-63=Off, value 64-127=On)</b>
<b>CC7 - fader Main - Mixer - (value 0-127)</b>
<b>CC17 - button Events - Bass section - (value 0-63=Less, value 64-127=More)</b> <b>CC18 - button NoteVari - Bass section - (value 0-42=Slow, value 43-85=Med, value 86-127=Fast)</b> <b>CC19 - button Events - Solo section - (value 0-63=Less, value 64-127=More)</b> <b>CC20 - button NoteVari - Solo section - (value 0-42=Slow, value 43-85=Med, value 86-127=Fast)</b> <b>CC21 - button PadVar - Pad section - (value 0-63=Slow, value 64-127=Med)</b>
<b>CC22 - button Wave 1 - Perc section - (value 0-63=select 1.1, value 64-127=select 1.2)</b> <b>CC23 - button Wave 2 - Perc section - (value 0-63=select 2.1, value 64-127=select 2.2)</b> <b>CC24 - button Wave 3 - Perc section - (value 0-63=select 3.1, value 64-127=select 3.2)</b> <b>CC25 - button Wave 4 - Perc section - (value 0-63=select 4.1, value 64-127=select 4.2)</b> <b>CC26 - button Wave 5 - Perc section - (value 0-63=select 5.1, value 64-127=select 5.2)</b>
<b>CC27 - button Tempo - Mixer/Bass - (value 0-63=1, value 64-127=1/2)</b> <b>CC28 - button Tempo - Mixer/Solo - (value 0-63=1, value 64-127=1/2)</b> <b>CC29 - button Tempo - Mixer/Pad - (value 0-42=1B, value 43-85=2B, value 86-127=4B)</b> <b>CC30 - button Tempo - Mixer/Perc - (value 0-63=x1, value 64-127=x2)</b>
<b>CC64 - button On/Off - Mixer/Perc - (value 0-63=On, value 64-127=Off)</b> <b>CC66 - button On/Off - Mixer/Bass - (value 0-63=On, value 64-127=Off)</b> <b>CC67 - button On/Off - Mixer/Solo - (value 0-63=On, value 64-127=Off)</b> <b>CC69 - button On/Off - Mixer/Pad - (value 0-63=On, value 64-127=Off)</b>
<b>CC70 - knob Pan - Mixer/Bass - (position -64 / 0 / +63)</b> <b>CC71 - knob Pan - Mixer/Solo - (position -64 / 0 / +63)</b> <b>CC72 - knob Pan - Mixer/Pad - (position -64 / 0 / +63)</b>
<b>CC73 - fader Volume - Mixer/Bass - (value 0-127)</b> <b>CC74 - fader Volume - Mixer/Solo - (value 0-127)</b> <b>CC75 - fader Volume - Mixer/Pad - (value 0-127)</b> <b>CC76 - fader Volume - Mixer/Perc - (value 0-127)</b>
<b>CC81 - knob Boost - Bass section (value 0-127)</b>

MIDI-Out for Bass (MIDI-channel 1), Solo (MIDI-channel 2) and Pad (MIDI-channel 3).

Remark on this Version of X-Wheel of Fortune: MIDI-Out for Percussion will not be available due to the sample-based system with tunable drums. As well the preset channels for MIDI-Out will remain as set. MIDI Out does only work within certain hosts like Cubase, as the VSTi cannot be connected directly to a MIDI-Port.

For this program there is no update planned as changing the machine's inner structure makes patches incompatible to prior versions and viceversa. On the other hand if You would like to have a special modified version just ask, but be aware I can't do that for free. Third there are plans for an enhanced pro-version – but this will take time as this is going to be quite complex.

If You do patches for X-Wheel of Fortune don't be shy to send them in order to make them available to the public - Email: see below.

Yours  
H.G. Fortune

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



### Credits:

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

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

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

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,

**Dr Ambient** aka **Guido Goebertus** ([www.algomusic.nl](http://www.algomusic.nl)) for hosting X-Wheel of Fortune on his server for download.

**Hermann Seib** for providing SAVIHost to have X-Wheel of Fortune 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.

Abbreviations of the patch-authors

.TC. patches by Tim Conrardy

.CRN. patches by Carlos Needham

.VK. patches by Vera Kinter

### **Terms of License Agreement:**

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