



# PODOLSKI

SOFTWARE SYNTHESIZER

# USER GUIDE



VERSION 1.2

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# Introduction

## About Podolski

Podolski is a straightforward virtual analogue synthesizer featuring a flexible, Zebra2-style arpeggiator / step sequencer. Plus delay and chorus effects.

Originally a FilterscapeVA spin-off made for a major German music-tech magazine and now freeware, Podolski can sound exception-nally smooth for a synthesizer of its vintage – or exceptionally gritty. This is what Podolski used to look like (*retro* skin is also included in the new version):



## Main Features

- *Oscillator* – the Warp and Invert functions can be used to create many different waveforms, including (of course) the classic sawtooth, triangle and pulse / PWM
- *Envelope* – only one envelope here, but Gate can be used for the amplifier instead
- *two LFOs* – one global (i.e. for all voices) and one per voice
- *Filter* – classic Lowpass, Bandpass or Highpass with extra parameters Drive, Click (impulse at Note On) and AutoFM (bipolar frequency modulation from the oscillator)
- *Arpeggiator* – combined arpeggiator, step sequencer and modulator, like in Zebra2
- *two effects* – stereo delay and chorus / flanger with feedback
- *resizable GUI* – with 3 alternative skins. Version 1.2.1 introduces 10% GUI scaling

click on the [↓hyperlinks↓](#) to jump immediately to any chapter in this user guide

## Installation

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Go to the [Podolski page](#), grab the installer for Mac or PC, double-click on the downloaded file and follow further instructions. To update, simply install over the existing version.

## File locations

The precise locations depend on your installation paths:

<b>Win</b>	Presets	...\VstPlugins\u-he\Podolski.data\Presets\
	Preferences	...\VstPlugins\u-he\Podolski.data\Support\ (*.txt files)
<b>Mac</b>	Presets	MacHD/Library/Audio/Presets/u-he/Podolski/
	Presets (user)	[you]/Library/Audio/Presets/u-he/Podolski/
	Preferences	[you]/Library/Application Support/u-he/com.u-he.Podolski...
	Resources	MacHD/Library/Application Support/u-he/Podolski/

To uninstall, delete the plugin(s) and the associated files / directories.

## GUI Elements

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### Knobs

Podolski's knobs work like vertical faders (click and drag). You can also hover over any control and roll your mouse wheel if there is one. Values appear in the status display, which reverts to showing the name of the current preset after a few seconds.

For fine control, hold down a SHIFT key on your computer keyboard before moving a knob. Values can be reset to the default by double-clicking on any knob. Alternatively, try alt+click (Mac) or ctrl+click (Win).

### Switches

For the sake of simplicity, the pop-up menus dotted around Podolski's GUI are called "switches" in this manual. Select from a menu via mouse-click, or scroll through the options using a mouse wheel.

### Alternative skins / GUI resize

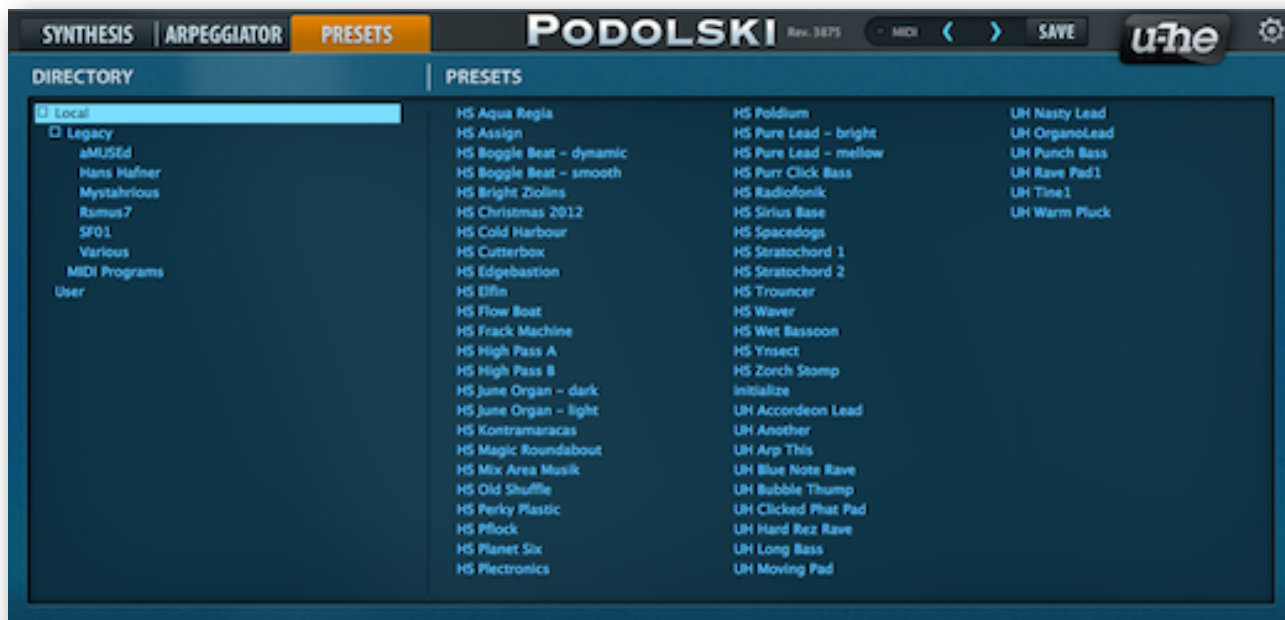
The GUI size can be changed by right-clicking anywhere in the background. Recent versions of Podolski also offer the same GUI resizing options (from 70% to 200%) as most other u-he plugins.

There is a choice of 3 skins: *Cozy* and *Blue Steel* are the larger more recent designs, *Retro* is the original from 2005.

Skin and GUI size can be made more permanent – see [Configuration](#).

## Preset Browser

Podolski's status display lets you select presets from the current directory and even step across folder boundaries while the SYNTHESIS window is open. However, no software synth is complete without a large preset browser...



Click on the button labelled **PRESETS** at the top left. The preset folder structure appears in the *Directory* panel on the left, and a list of presets contained in the currently selected folder appear in the larger *Preset* panels. Closed folders have a solid square next to the name – to open, click on that square.

All factory presets are now in u-he's own **.h2p** format so they can be easily exchanged between platforms (Mac, PC) and plugin types (AUI, VSTi, AAX).

## Loading presets

The *Directory* panel displays all presets in the folder you selected in the *Folders* panel. The root directory ('Local') contains several category folders, a selection of usable presets from those folders plus a preset called **--INIT--**, which you can use to make your own presets from scratch.

To load a preset, simply click on the name. After loading a preset in the browser you should be able to use the up/down cursor keys on your computer to step through the others – even across folder boundaries.

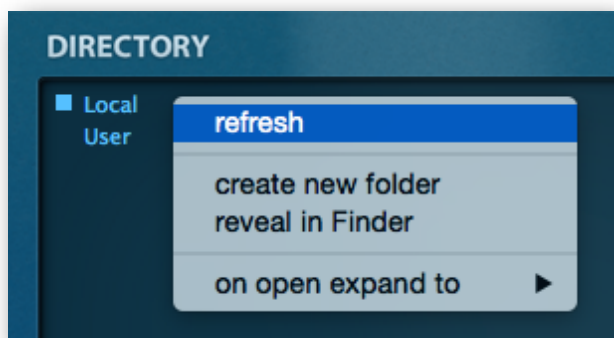
## Saving presets

Next to the u-he badge is a small button labelled **SAVE**. This will store the current preset *in the currently selected folder*, so you should always remember to select a suitable folder before saving your edited sounds!



## Context menu functions

Right-clicking in the *Directory* panel opens a menu containing 3 useful functions:



**refresh** is probably the most important one here. It updates the contents of the browser to reflect any changes you made.

**create new folder** does exactly what it says – a new folder is created.

**reveal in Finder / open in Explorer** opens an OS window and highlights the currently selected folder.

**on open expand to** specifies how many levels of nested directories will be shown whenever the browser is refreshed.

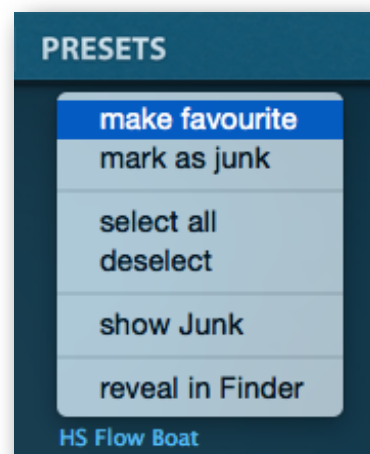
Right-click in the PRESETS panel to opens this context menu:

**make favourite** puts a yellow star next to the preset name so you can find it more easily.

**mark as junk** hides the selected preset(s). Junked presets become visible again (but marked with a 'no entry' icon) by selecting **show junk**. Of course you can then **un-junk** any junked presets using the same context menu.

**select all** marks all presets in the current folder, and **Deselect** cancels the selection. Use cmd+click (Mac) or ctrl+click (Win) to select / **deselect** individual presets.

To move presets between folders, **drag & drop** them from the presets panel into a folder in the DIRECTORY panel.



If you want to manipulate a lot of files, we recommend using **reveal in Finder / open in Explorer** instead. After editing, remember to **refresh** (see above)!

## The 'MIDI Programs' folder

*Local* also contains a special folder called *MIDI Programs*, which is initially empty. If you put a bunch of presets (up to 128) in there, they are **all** loaded (into a cache, for performance reasons) when the first instance of Podolski starts. Important: changes only take effect after restarting the host software: *MIDI Program* presets cannot be added, removed or renamed on the fly.

As presets are accessed in alphabetical order, it's a good idea to use numbers as the head of each name: '001 rest-of-name' to '128 rest-of-name' or similar.

The *MIDI Programs* folder can contain up to 127 sub-folders (of 128 presets each), and these are switchable via MIDI Bank Select messages (1-127). The MIDI bank select message is CC#0 (Podolski only interprets the MSB) – send the Bank value, then a Program Change message to load the preset.

# Synthesis

## Global Settings

The main views, SYNTHESIS, ARPEGGIATOR and PRESETS are selected using the row of buttons at the top left of Podolski's window. The Synthesis and Arpeggiator views both have a few panels in common, including the global settings:



## Status display

This is the bar in the middle of the global panel. Most of the time it will show the name of the currently selected preset. While editing, however, it shows the exact value of the parameter. After a few seconds of inactivity it reverts to displaying the preset name.

Clicking on the status display lets you select a preset from the current folder. You can use the arrows to the left and right of the display to step through presets – even stepping “across the boundary” into a neighbouring folder.

## Voice settings

There are five voice-related controls immediately above the status display...



### Glide

Controls portamento (glide) rate. Turn this up to slew between consecutive notes.



**Mode**

Selects one of 4 basic voice modes:

- poly* polyphonic i.e. you can play chords and overlapping notes
- mono* monophonic: each new note triggers the envelope
- legato* monophonic: the envelope is not retriggered until after a space has been left between consecutive notes – great for expressive solos
- arpeggiator* polyphonic: arpeggios are defined in the Arpeggiator panel.

**Voices**

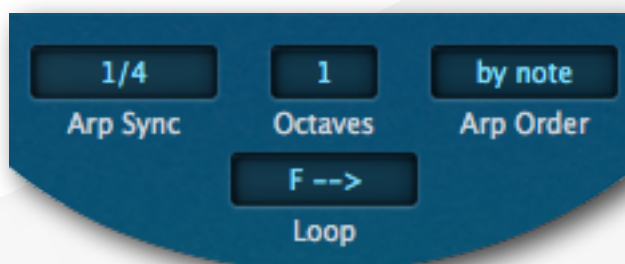
Specifies the maximum number of notes available at the same time, usually to save CPU but also quite useful for characterful “voice-stealing” effects:

- few* 4 voice polyphony (arpeggiator: 6)
- medium* 8 voice polyphony (arpeggiator: 12)
- many* 16 voice polyphony

**PitchBend**

These two small switches define the pitch bend ranges (down and up), from 0 to 24 semitones. Set *down* and *up* to different values (e.g. 12 and 3), then try the pitch bender on your MIDI keyboard.

## Arp settings



For details of the arpeggiator controls in the global panel as well as a full description of all the other arpeggiator parameters, go [here](#).

## Oscillator

Podolski's oscillator is basically a **sawtooth** wave with adjustable symmetry (via *Warp*).



Podolski's oscillator also includes an inverted wave that can be mixed in via the *Inv/PWM* knob. As these signals can be phase-shifted apart, variable *pulse* and other waveforms are available (see the image and accompanying explanation on the next page).

### Tune / TuneMod / Vibrato

#### Tune

The *Tune* knob adjusts the oscillators basic pitch by +/- 24 semitones.

#### TuneMod

The *TuneMod* knob sets the amount of *Tune* modulation from a source selected in the neighbouring switch. Experiment with different modulation sources and amounts.

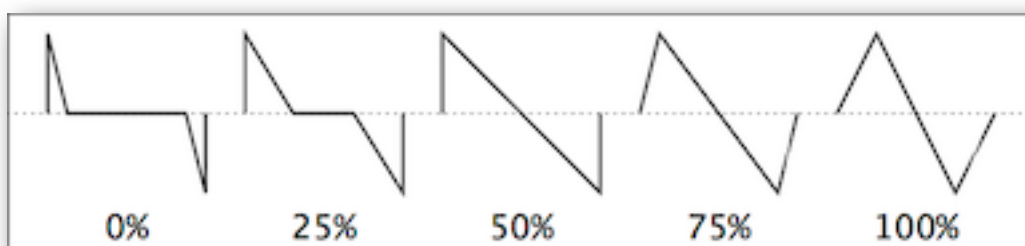
#### Vibrato

Sets the amount of Tune modulation from a fixed source, namely LFO voice (LFO1).

### WaveWarp / WarpMod

#### WaveWarp

Controls the basic oscillator shape.



The minimum setting gives you a bright spike, the centre position (50%) is a classic sawtooth which morphs into a triangle as you turn *WaveWarp* up to maximum.

### WarpMod

The knob sets the amount of *WaveWarp* modulation from a source selected in the associated switch. Experiment with different modulation sources and amounts.

## Phase / PhaseMod / Inv-PWM

### Phase

The Phase knob shifts (in opposite directions) the phases of the two oscillator signals.

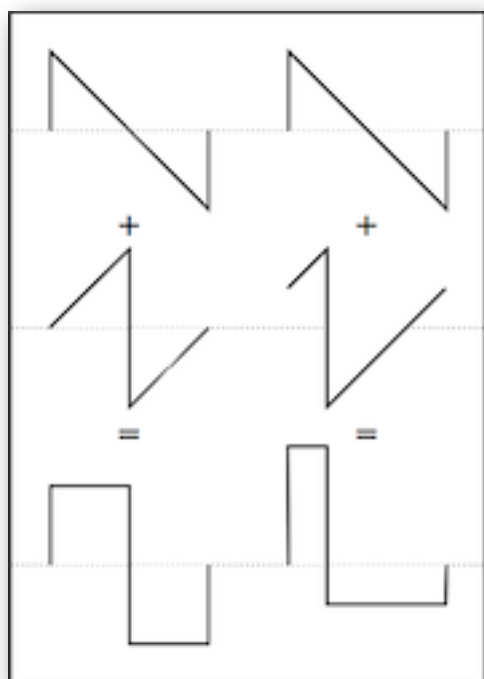
### PhaseMod

The *PhaseMod* knob sets the amount of *Phase* modulation from a source selected in the neighbouring switch. Experiment with different modulation sources and amounts!

### Inv/PWM

Controls the relative mix between the 'normal' and 'inverted' waves. Facilitates PWM...

## How to do PWM



First, a short explanation:

Although the oscillator is sawtooth-based, it is also capable of generating variable-width pulse waves. To achieve this, Podolski's oscillator includes an inverted version of the waveform, and lets you shift the phases apart.

The centre-left waveform in this image is the same as the one above it, but inverted vertically and precisely 180° (i.e. half the total wavelength) out of phase. Adding these two results in a square wave.

The phase of the centre-right waveform is much closer to the top wave, it is shifted by about 90°, resulting in a much narrower pulse.

This means that classic cyclic PWM (pulse width modulation) is easy to achieve by modulating the phase difference with an LFO. Try the following:

- 1) Load "--INIT--"
- 2) Set *Inv/PWM* to exactly 50% (both *WaveWarp* and *Phase* are already at 50.00)
- 3) Select LFO1 as *PhaseMod* source and turn up the amount
- 4) Adjust the LFO mode and rate to taste

Of course you should also try using other modulators e.g. *ArpModulator* or envelope...

## Envelope

Synthesizer envelopes are used to shape the volume and/or tone of each note...

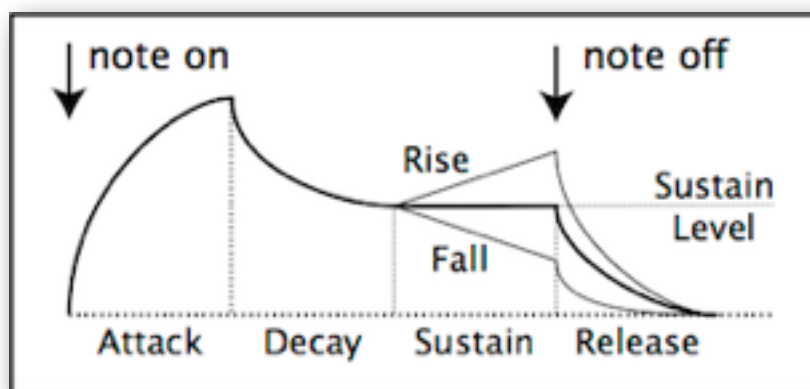


### Mode

Podolski lets you select one of four envelope modes – *adsr exp*, *adsr ln*, *hdsr exp* and *hdsr ln*. Those abbreviations have the following meanings:

- adsr* classic envelope type with Attack, Decay, Sustain and Release stages, plus an extra Fall-Rise stage that modifies the sustain (see below)
- hdsr* similar to *adsr*, but the *Attack* stage is replaced by a *Hold* stage: The level starts at maximum and remains there for the time set by the Attack knob
- exp* short for 'exponential': the attack, decay and release stages are all curves like in the image below
- ln* short for 'linear': the attack, decay and release are all straight lines

### Stages (Attack, Decay...)



#### Attack

This knob controls either the time it takes for the envelope to rise from zero to maximum level (in *adsr* mode) or the length of the Hold stage at maximum level (in *hdsr* mode)

#### Decay

The time it takes to fall from maximum down to the sustain level

#### Sustain

The level after Decay. Normally remains at this position until the note is released...

### Fall-Rise

...but what happens during the sustain stage can be modified by using *Fall-Rise*:

Negative values: time to 'fall' from the current sustain level down to zero

Positive values: time to 'rise' up from the current sustain level to maximum

Note: Fall-Rise settings close to the centre (0.00) are slow, larger values are faster

### Release

After a note is released, the time it takes to fall from the current sustain level to zero.

### Velocity

How much *MIDI velocity* (how 'hard' a note is played) affects the level of the envelope.

Note: Remember that Podolski's envelope can modulate various parameters, not just the amplifier. For instance, if you want the envelope to control e.g. filter frequency without affecting the volume in any way, you could try switching the VCA switch in the amplifier section to *Gate* instead of *Envelope1*...

## Amplifier

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This panel contains the main volume control plus a few extras...



### Pan

The stereo position. Can also be useful for balancing the stereo image of presets that have a lop-sided delay effect.

### VCA

*Envelope1* uses the envelope to control volume

*Gate* notes start immediately, are held and have just enough release time to avoid clicks. Using *Gate* here frees up the envelope for other tasks.

### Output

The main volume control. Note that some presets – those with very high filter resonance – have relatively low *Output* values to prevent unwanted distortion.

### Modulation

Output level modulation e.g. for tremolo effects (LFO), or to balance levels across the keyboard (KeyFollow). The neighbouring knob controls the amount.

## LFO global / LFO voice

Podolski has two LFOs (low frequency oscillators) which can be either synchronized to the host tempo (from 1/64 to 8 bars) or set to absolute times (0.1s, 1s or 10s).



The main difference between the LFOs is that there is only one **global LFO**, while each note gets its own **voice LFO**. The parameters on this page are common to both LFOs:

### Sync

Sets the LFO speed. Except for three absolute times (see the note below), LFO rates in Podolski are synchronized to the song tempo. The range is from a 64th to 8 bars, including several triplet (“3 in the space of 2”) and dotted (“half as much again”) values.

Note: At the top of the list are three *absolute times* measured in seconds (0.1s, 1s, 10s). LFO speeds in Podolski can’t be modulated, however – consider them a bonus!

### Waveform

<i>sine</i>	pure sine wave
<i>triangle</i>	pure triangle wave
<i>saw up</i>	rising saw (‘ramp’)
<i>saw down</i>	falling saw
<i>sqr hi-lo</i>	square wave, restarted at the higher level
<i>sqr lo-hi</i>	square wave, restarted at the lower level
<i>rand hold</i>	random steps
<i>rand glide</i>	random curves

### Restart

Determines when and how the LFOs are retriggered. The options differ:

#### Global LFO

The global LFO can be restarted after a specific number of bars (in the song) have elapsed. The values are *off*, *each bar*, *2 bars* ... *32 bars*.

#### Voice LFO

<i>sync</i>	never restarts – LFOs for all notes are always in phase
<i>gate</i>	restarts per note at the specified <i>Phase</i> (see below)
<i>single</i>	similar to sync, but restarts at the next note after all notes are released
<i>random</i>	restarts at a random phase per note (the value of <i>Phase</i> is ignored)

### Phase

Sets the phase (i.e. the position within its cycle) at which the LFO will be restarted according to the *Restart* setting. Ignored by the voice LFO if *Restart* is set to *random*.



## Delay

Voice LFO only. The level of the LFO is faded in whenever a note is played – this knob controls how slowly this happens.

Tip: you can use the Delay feature to turn the voice LFO into a simple ramp envelope by setting it to a slow square wave in *Gate* mode – see the preset *HS Mix Area Musik*.

## DepthMod

Unlike the global LFO, the level of the voice LFO can be modulated. A typical use of this feature is to control vibrato amount from a modulation wheel.

## Filter

Podolski's filter offers you the classic choice of Lowpass, Bandpass or Highpass...



## Cutoff

The edge-frequency. In Podolski, integer steps are precise semitones apart.

## Resonance

Resonance is an internal feedback loop that emphasizes the cutoff frequency. Tip: High resonance can lead to a very hot output signal, so you might need to turn that a long way down to compensate. Even as little as 5.00.

## Type

The basic filter mode: *Lowpass*, *Bandpass* or *Highpass*.

## Modulation 1 / Modulation 2

The filter has a pair of cutoff modulation switches / knobs. In the above image, cutoff is modulated by a random amount as well as the voice LFO. The most commonly used modulation source here is probably *Envelope1*.

## KeyFollow

The key-follow parameter controls the amount of cutoff modulation from the played MIDI note – the higher the note, the higher the cutoff. At 100%, it follows semitones exactly. Note that the ‘pivot note’ (where key-follow always outputs zero) in Podolski is E3.

## Drive

The filter has its own *Drive* parameter which can be used to distort the filtered signal. The effect can be subtle, but is particularly strong when *Rez* is turned up.

## Click

*Click* feeds a short impulse into the filter, which can be used to e.g. add punch or cause immediate resonance, whatever the signal from the oscillator.

## AutoFM

Podolski's filter can be frequency-modulated from its own input signal i.e. the oscillator, either negatively or positively. This feature is rare in digital synthesizers, although it can deliver very lively timbres which, depending on the polarity and amount of FM, range from silky-smooth to dirty-grungy. Especially effective with very low notes and/or PWM!

# Effects

These days, no synthesizers comes without at least a few 'post synthesis' effects, and the most common of these are delay and chorus...

## Delay

---

Podolski has a simple stereo delay unit featuring two host-synchronized delay times and two types of feedback:



### Sync Left / Right

The two Sync switches specify the repeat rate of each delay channel, measured in musical note lengths. The range is from one 64th to whole-bar triplets. Tip: You will usually find that the non-triplet times are more suitable for rhythmic effects, and a mixture of triplet and dotted times are often best for washy effects.

### Feedback

Controls how much of the signal is fed back into the same delay channel.

### Cross

Similar to *Feedback*, but this one controls how much of the signal from the right channel is fed into the left and vice versa. Experiment with *Feedback* and *Cross* together.

### Mix

Balance control between 100% dry and 100% wet (delay only).

## Chorus / Flanger

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Although often frowned upon by analogue synth purists, chorus is a popular effect in polyphonic synthesizers. Podolski's chorus is a fairly basic delay-based unit, but includes resonant feedback in two flavours (negative and positive)...



### Center

The Center knob controls the nominal delay times (from about 2 to 10 milliseconds).  
Tip: Use lower values for typical chorus/ensemble effects, and higher values for more complex flanging effects.

### Speed

The chorus effect requires an internal LFO to modulate the delay times. The *Speed* knob regulates its rate. Note that lower values are faster than high values i.e. the knob works in the opposite direction from what you might expect!

### Depth

Modulation intensity. Set fairly high values for deep effects, or turn all the way down for static colouration effects.

### Feedback

Sends some of the output signal back into the input. When fed back, the short delays create resonant frequencies that can sound very dramatic. Set to the centre for regular chorus, or set negative / positive values for different-sounding resonance.

### Mix

Balance control between 100% dry and 100% wet (delays only). Values above the centre (50%) increase the stereo width, but may reduce the tonal colouration.

# Arpeggiator

Clicking on the *Arpeggiator* button in the upper bar gives us the following view:



The right half of the window is now filled with arpeggiator parameters. The envelope panel stays where it was, while the global section and part of the filter are shifted to the left. Note: the remaining filter parameters and the oscillator panel are only visible in the SYNTHESIS view.

## Parameters in the global panel

First of all, you will need to select *arpeggiator* Mode. The parameters *Arp Sync*, *Octaves*, *Arp Order* and *Loop* are also here in the global panel:



## Mode

Remember: This is where you turn the arpeggiator on or off!



## Arp Sync

Sets the arpeggio rate relative to the song tempo received from your host program.

## Octaves

*0, 1 or 2 times*: How often the octave is shifted up after all notes in the buffer have been played back.

## Arp Order

Incoming notes are ordered within a note buffer in one of two ways. Note: The buffer is then played back in the direction set by the *Loop* parameter.

*by note*        notes are reordered according to MIDI note number  
*as played*      retains the original order in which notes were played is retained

## Loop

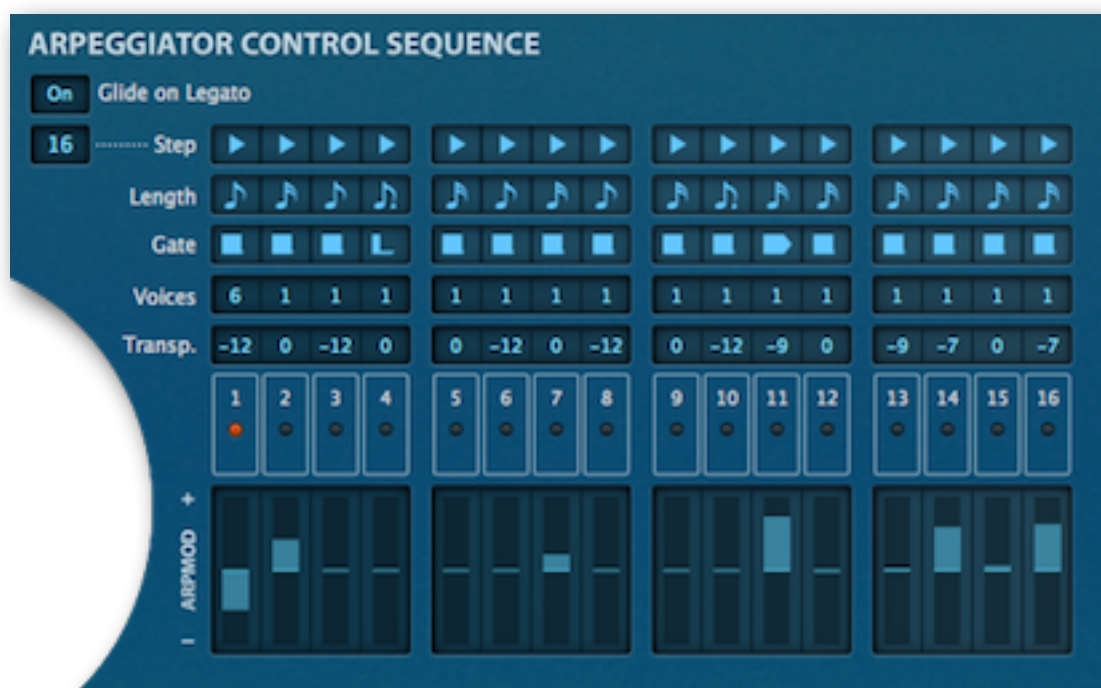
Determines the direction in which the note buffer is played back. See *Arp Order*.

*f -->*            forwards  
*b <--*            backwards  
*fb <-->*          forwards / backwards  
*bf >--<*          backwards / forwards

Note: The *Loop* setting does not affect the direction in which the sequence runs.

## Arpeggiator Control Sequence

Half of the Arpeggiator view is taken up by 16 columns of note parameters:



It may look daunting at first, but like e.g. an audio mixer, once you have understood a single channel strip you are most of the way towards understanding the “whole shebang”.



## Glide on Legato

When the Slide switch is on, any Glide set in the global panel will only be applied to connected notes (see Gate below).

## Step

The switch to the left determines the number of steps used. Tip: For longer sequences, you don't always need more than a few steps. For instance, 3 steps are enough to create a 15-note sequence (or 24 in *fb* or *bf* Loop mode) if you set *Octaves* to 2 and play a 5-note chord.

The symbols to the right determine which note (in the buffer) is played. Tip: for typical monophonic arpeggios, set all steps to *last*:



*next:* play the next note

*same:* repeat the same note

*first:* play the first note (see Arp Order on the previous page)

*last:* play the most recent note (see Arp Order on the previous page)

## Length

Step lengths are defined as multiples of the *Arp Sync* value:



single, **2** times, **3** times, **4** times

## Gate

As arpeggiators automatically play / release notes, the gate times need to be defined:

0, 1, 2, 3, 4 from very short to almost the length of *ArpSync*

5 (legato) connected to the next step – see also *Glide on Legato* above

The step following a 5 (legato) will not be triggered unless it uses more than one Voice.

## Voices

Sets the maximum number of notes that can be played simultaneously, from 0 (mute the step) to a 6 note chord.

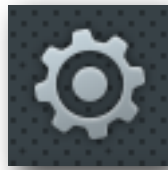
## Transp

Pitches may already be jumping around, but in addition to this movement the individual steps can be transposed +/- 12 semitones. Unpredictability is to be expected!

## ArpMod

At the bottom of the Arpeggiator panel is a row of bipolar sliders which can be used to modulate anything in sync with the arpeggiator. For instance, let the arpeggiator control cutoff by selecting *ArpModulator* in one of the filter's 'Cutoff Mod' switches.

# Configuration



Clicking on the cogwheel icon at the top right opens the global configuration pages where you can adjust the window size and brightness, or connect parameters to MIDI continuous controllers (CC) etc..

The 4 buttons are **MIDI Learn** [L], **MIDI Table** [≡], **Preferences** [tools] and **Close** [X]:



Tip: Right-click within the button area to set the currently selected page as default!

## About MIDI CC

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Before connecting knobs and sliders on your master keyboard to Podolski parameters (see the next page), it's best to know what a MIDI CC is...

CC stands for MIDI **continuous controller** (more recently '**control change**'), a multi-purpose message format used for editing and performing presets. CC isn't the only kind of MIDI performance data — there are specific messages for note on/off with velocity, pitch bend and two different types of aftertouch.

Although the MIDI Manufacturers Association (MMA) was kind enough to leave most of the 128 CC numbers undefined, a few of them have specific meanings that Podolski also recognizes. Please note that you don't need a real breath controller or expression pedal to make use of these!

- CC 01 = modulation wheel
- CC 02 = breath controller
- CC 11 = expression pedal
- CC 64 = hold pedal

Later MMA recommendations even included a bunch of esoteric CC definitions such as 'Celeste Detune Depth', probably at the request of a home organ manufacturer or two. We can safely ignore all such nonsense!

Although CC is mostly general purpose, please avoid controllers 120 to 127. These are reserved for channel mode messages such as Local Control On/Off.

FYI here's the official CC list: <http://midi.org/techspecs/midimessages.php#3>.

## MIDI Learn

The MIDI Learn page is where you can connect MIDI CC to Podolski parameters. The CC data can be generated by e.g. knobs or sliders on your hardware controller, or by a track in your host sequencer. Click on the configuration button and select the 'L' MIDI icon:



MIDI-learnable elements are outlined. Elements that have already been assigned a MIDI CC appear solid colour (like the three filter knobs in this image), and the outline of the active element awaiting MIDI CC is highlighted in white – like the *Cutoff Mod2* knob here.

Try it: Click on the Cutoff knob and send some MIDI CC data e.g. move a knob / fader on your MIDI controller — the connection is made instantly. Make a few more assignments in the same way, then go to the *MIDI Table* page and see what you have done...

## MIDI Table

Click on the configuration button and select the '≡' MIDI button...



### Parameter

The first field displays/selects one of Podolski's many parameters, which are sorted into sub-menus according to module (mainly). Click on the 'ADD' button at the bottom left and experiment with this field, then delete the assignment again by clicking on the small [X] to the right of the line you just created.

### Channel / Controller

The next two fields are for MIDI channel and CC number. Podolski is channel-sensitive, so you can map up to 16 channels for a total of about 2000 control assignments.

### Mode

Specifies the range and/or resolution of values.

*Normal:* full range, continuous

*Integer:* full range, whole numbers only

*Fine:* 0.01 steps between the two integers closest to the current value

### Type

Specifies the type of hardware (by far the most common is Continuous 7-bit).

*Encoder 127:* unipolar encoder

*Encoder 64:* bipolar encoder

*Continuous 7-bit:* 7-bit MIDI CC (normal resolution, common)

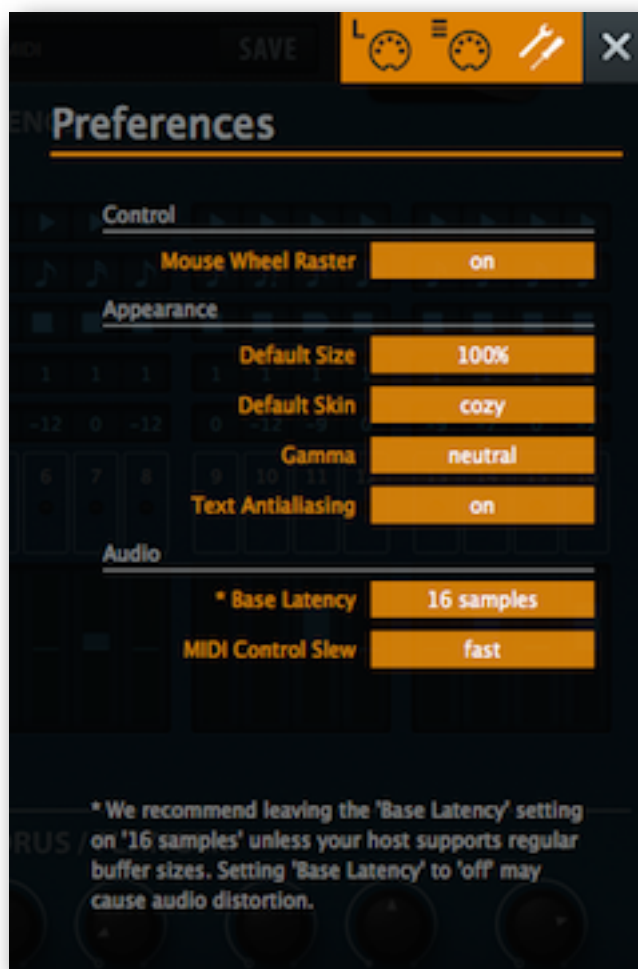
*Continuous 14-bit:* 14-bit MIDI CC (high resolution, rare)

### Remove

To remove individual assignments, click on the [x] to the right of each line. To remove all assignments, click on the DELETE ALL button at the bottom of the window.

## Preferences

Click on the 'tools' icon to open this overlay...



### Mouse Wheel Raster

If your mouse wheel is rastered (you can feel it clicking slightly as you roll the wheel), set this option to 'on' so that each little click increments the value in sensible steps.

### Default Size

The GUI size for each new instance. You can temporarily change GUI size without opening Preferences by right-clicking in the background.

### Default Skin

Sets one of the available skins as global default.

### Gamma

Determines how bright Podolski appears.

### Text Antialiasing

Switches the smoothing of labels and values on or off. Normally left on, only in certain cases will switching it off improve readability.

## Base Latency

If you are certain that your audio system – hardware as well as software – uses buffers that are a multiple of 16 samples in size (please refer to the respective documentation), you can safely disable Podolski's base latency. Otherwise leave it set to the default '16 samples' to prevent crackles.

Note that a new Base Latency setting will only take effect when the host allows e.g. on playback or after switching the sample rate. Reloading Podolski will always work.

### MORE ABOUT BUFFERS

Podolski processes audio in chunks of  $n \times 16$  samples. This so-called 'block processing' method significantly reduces the CPU load and memory usage of all our plug-ins.

If the number of samples to be processed is say 41, Podolski processes the first 32 and keeps the remaining 9 in a small buffer (16 samples is enough). Those 9 samples are then processed at the start of the next call... and so on.

The extra buffer is only necessary if either the host or audio driver processes 'unusual' buffer sizes. In the many host applications that process buffers of e.g. 64, 128, 256 or 512 samples (all multiples of 16), try switching it off so that Podolski can process latency-free.

## MIDI Control Slew

Adjusts the smoothing of *Pitch Bend*, *Mod Wheel*, *Breath* and *Expression*. Note that *Pressure* has a fixed slew rate and is therefore not affected by this parameter.

With *MIDI Control Slew* switched off, Podolski is much more responsive to modulation wheel data (for instance), but can sound too grainy. The default setting ('Fast') is a pretty good compromise between speed and smoothness.



# The End