



PODOLSKI

version 1.2.2

USER GUIDE



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Introduction

About Podolski

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

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
- *2 LFOs* – one global (i.e. for all voices) and one per voice
- *Filter* – classic owpass, Bandpass or Highpass with extra parameters Drive, Click (an impulse at Note On) and AutoFM (bipolar frequency modulation from the oscillator)
- *Arpeggiator* – combined arpeggiator, step sequencer and modulator, like in Zebra2
- *2 effects* – stereo delay and chorus / flanger with feedback
- *resizable GUI* – with 3 alternative skins. Version 1.2.1 introduces 10% GUI scaling

Installation

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:

Win

Presets (local)	C:\Users*YOU*\Documents\u-he\Podolski.data\Presets\Podolski\
Presets (user)	C:\Users*YOU*\Documents\u-he\Podolski.data\UserPresets\Podolski\
Preferences	C:\Users*YOU*\Documents\u-he\Podolski.data\Support\ (*.txt files)

Mac

Presets (local)	Macintosh HD/Library/Audio/Presets/u-he/u-he/Podolski/
Presets (user)	*YOU*/Library/Audio/Presets/u-he/Podolski/
Preferences	*YOU*/Library/Application Support/u-he/com.u-he.podolski... (*. files)
Resources	Macintosh HD/Library/Application Support/u-he/Podolski/

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

Team 2020

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GUI Elements

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 data 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" throughout this manual. Select from a menu via mouse-click, or scroll through the options using a mouse wheel.

Appearance

The window can be resized from (70% to 200%) by right-clicking anywhere in the background. There is a choice of 2 skins: *Cozy* and *Blue Steel*.

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

Control Bar

The bar at the top is used for switching the view as well as calling a few utility functions:



SYNTHESIS | ARPEGGIATOR | PRESETS

The 3 large buttons select the panel view. Each has its own chapter in this user guide.

PODOLSKI

Either side of the central label you will see information about the plugin format as well as the revision number.

MIDI

An indicator for any MIDI activity e.g. playing a note.

UNDO / REDO

Click on the curved arrows to UNDO or REDO an action. You can even undo a change of preset so that you don't lose edits made to the previous one. If an UNDO or REDO step is available, the arrow will be highlighted (white).

SAVE

Stores the loaded preset in either the User folder or the currently open folder, depending on the status of the *Save Presets To* preference.

Right-clicking on the [SAVE] button lets you select the preset format you will be using. Standard is .h2p, which has the great advantage of being cross-platform compatible. The .h2p extended format is similar but also allows per-line comments (the preset files are therefore a bit larger). If you loaded the VST2 version you will also see the option .nks in the list. See the NKS chapter.

Selecting *Tag this patch* opens a window where you can specify one or more Categories, Features and Characters for the currently loaded preset. See [Preset Tagging](#).

U-HE Badge

Click on the badge to open a popup menu containing links to this guide, to our web-site, to our support forum at KVR as well as our address in various social networks.

Configuration cogwheel

Clicking on the cogwheel symbol top-right opens the configuration pages where you can set up remote control (via MIDI CC) as well as various global preferences. For details, read the [Configuration](#) chapter.

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**:



Data Display

The bar in the middle normally shows the name of the selected preset. While you are editing the preset, however, it shows the value of the parameter being adjusted. After a few seconds of inactivity it reverts to displaying the preset name again.

Clicking on the data 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 neighbouring folders.

Initialize function: Whenever you want to start programming a sound from scratch, simply right-click on the data display and select **init**.

Voice settings

There are six voice-related controls immediately above the data display...

Transpose

Adjusts the overall pitch in semitones within a +/- 2 octave range.

Glide

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

Mode

Selects one of 4 basic voice modes:

<i>poly</i>	polyphonic i.e. you can play chords and overlapping notes
<i>mono</i>	monophonic: each new note triggers the envelope
<i>legato</i>	monophonic: the envelope is not retriggered until after a space has been left between consecutive notes – great for expressive solos
<i>arpeggiator</i>	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:

<i>few</i>	4 voice polyphony (arpeggiator: 6)
<i>medium</i>	8 voice polyphony (arpeggiator: 12)
<i>many</i>	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.

Arpeggiator settings

Below the Data Display are four arpeggiator controls. For a description of these switches as well as all the other arpeggiator parameters, read the [Arpeggiator chapter](#).

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 the two signals can be phase-shifted apart, variable width *pulse waves* and other waveforms are available...

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.

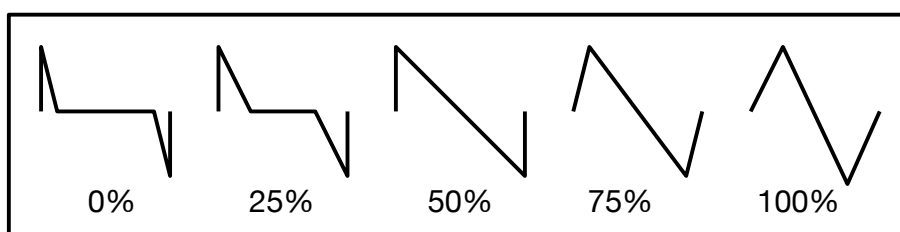
Vibrato

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.

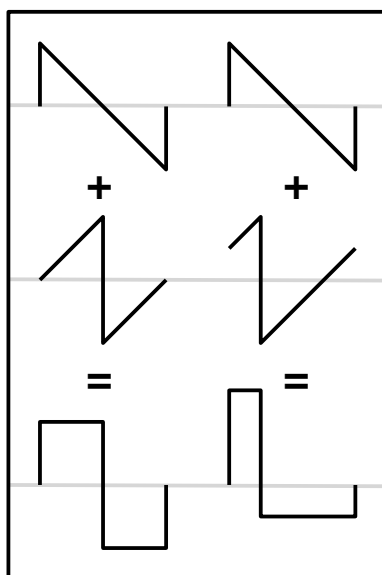
PhaseMod

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



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 relative 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 only shifted by about 90° , resulting in a much narrower pulse.

This means that cyclic PWM (pulse width modulation) can be achieved by e.g. using an LFO to modulate the phase difference...

1. Load **init** via right-click on the data display
2. Set oscillator Inv/PWM to the centre i.e. 0.00 (WaveWarp and Phase are at 50.00)
3. Select LFO1 as PhaseMod source and turn the amount up to about 20
4. Change the LFO VOICE Sync to 1s
5. Push the modulation wheel...

Of course you could try a different modulator for the Phase e.g. the 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:

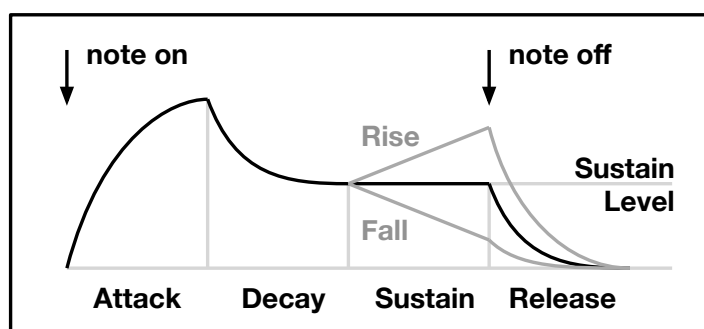
adsr.....classic envelope type with Attack, Decay, Sustain and Release stages, plus an extra Fall-Rise stage that modifies the sustain (see below)

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

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 in sync with the host application. 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

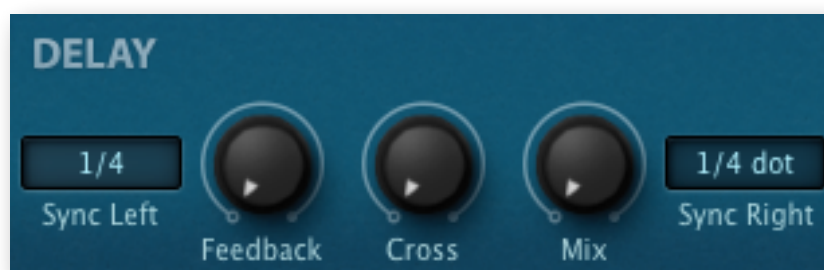
Click feeds a short impulse into the filter, which can be used to e.g. add punch or cause immediate resonance, whatever the signal from the oscillator.

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!

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

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 the filter (simplified) are shifted to the left. The remaining filter parameters and the oscillator are only visible in the SYNTHESIS view.

Switches 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

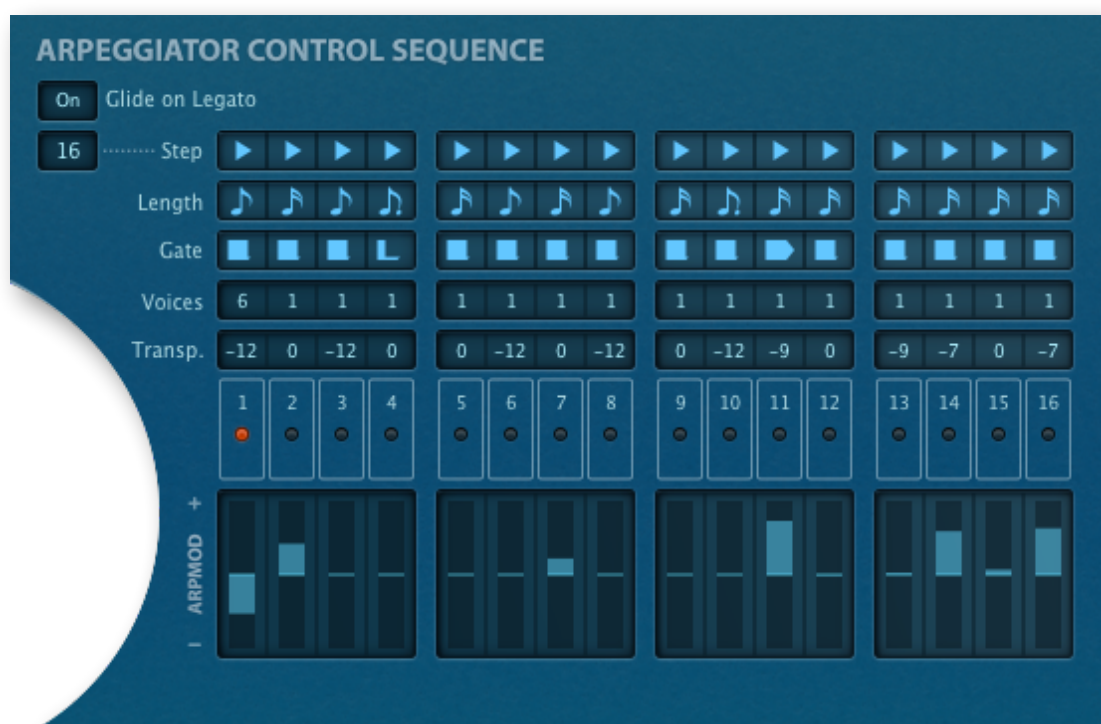
Determines the direction in which the note buffer is played back. See *Arp Order*.

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 sets the number of steps used. Tip: For longer sequences, you don't always need more than a few steps. 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!

ARP MOD

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.

Preset Browser

To open the preset browser, click on the PRESETS button in the upper bar.



Folders appear on the left, presets appear in the centre and information about the currently active preset appear on the right. If you can't see any presets at all, click on **Local**. If you can't see the PRESET INFO panel on the right, click on the button in the top right and select *Show Preset Info*.

The **Local** root directory contains a representative selection of presets copied from the subfolders. After selecting a preset here you can step through the others using your computer's cursor keys.

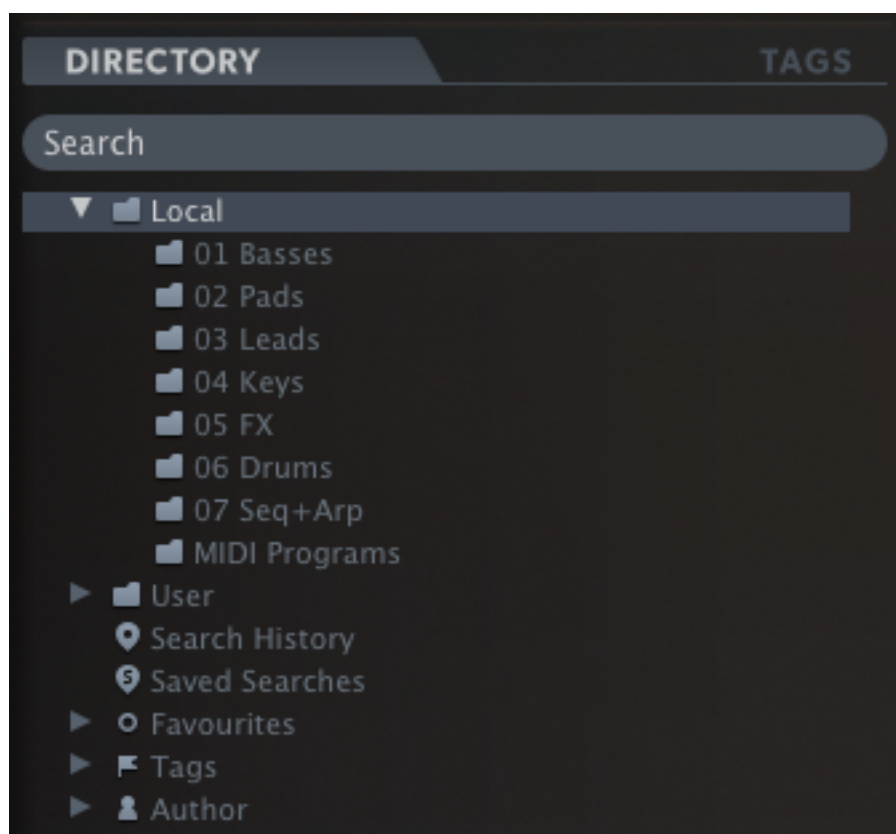
If you want the preset browser to open automatically every time you load a new instance of Podolski, right-click on the [PRESETS] button while the browser is active and select *set as default view*. To revert to showing the synth panels by default, do the same while the preset browser is closed.

Default preset

Whenever Podolski is started it checks whether Local contains a preset called *default*. If this file exists, it is loaded instead of the 'vanilla' preset. Note that *default* will not appear in the browser.

Check that the 'Local' root directory is currently open then [SAVE] your preset under the name *default*. If a fresh instance of Podolski doesn't automatically load your new preset it probably landed in 'User' instead of 'Local'. If so, go into the [Preferences](#) and change the Save Presets To option to selected folder instead of user folder, then repeat the above.

Directory Panel



Local

Podolski's factory presets are sorted into folders 1 through 7. We recommend that you do not add or remove presets here, but save all your creations and other soundsets in the 'User' folder (see below).

MIDI Programs

'Local' also contains a special folder called 'MIDI Programs' which is normally empty. When the first instance of Podolski starts, up to 128 presets from that folder are loaded into memory, to be selected via MIDI Program Change messages.

All presets (up to 128) present in this folder will be loaded into memory when the first instance of Podolski starts and can be switched via 'Program Change' messages.

As MIDI Programs are accessed in alphabetical order it makes sense to prefix each name with an index '000 rest-of-name' to '127 rest-of-name'.

IMPORTANT: Unlike regular presets, MIDI Programs can't be added, removed or re-named on the fly. Changes will only take effect after the host software is restarted!

The MIDI Programs folder can contain up to 127 sub-folders of 128 presets, switched via MIDI 'Bank Select' messages (CC#0) preceding the Program Change message. The MIDI Programs folder itself is bank 0, sub-folders are addressed in alphabetical order starting with bank 1.

When Podolski receives a program change message, it will display the bank and program numbers to the left of the preset name e.g. “0:0” for the first preset in the first bank. In certain hosts, however, the first bank / preset is designated “1” instead of the more correct “0”.

To avoid another possible source of confusion, make sure that there are no junked presets in the MIDI Programs folder. All files there are addressed, even if hidden!

User

The best address for your own creations as well as soundsets from other sources. You can either select User immediately before saving the preset, or set a global [preference](#) (Save Preset To) which ensures that it will always be saved to this folder.

Tip: It's worth finding out where the User folder actually resides on your computer. Right-click on *User* and select *reveal in Finder* (Mac) or *open in Explorer* (Win).

Smart Folders

The other folders don't contain files, but display the results of querying a database of presets. The content is dynamic i.e. it will change whenever the data changes.

Search History

Click on this folder to display the results of past searches (maximum 10). Whenever you need to make the results of a search more permanent, right-click and select *save Search...* The entry will be moved to the Saved Searches folder – see below. To remove all searches from the list, right-click on the Search History folder and select *clear*.

Saved Searches

This folder contains searches that have been saved via right click from Search History. To remove individual saved searches, right-click on the search and select *delete*.

Tip: Entries dragged from Saved Searches and dropped onto real folders within Local or User will create a folder containing copies of all found presets!

Favourites

8 smart folders, one for each Favourite colour. See Presets context menu on the next page. Presets dropped onto one of the Favourites folders will be marked as such.

Junk

A smart folder pointing to all junked presets. See Presets context menu on the next page. Pre-sets dropped onto this folder will be junked, and will therefore disappear from the rest of the browser unless made visible (see *show junk* in the Presets context menu).

Tags

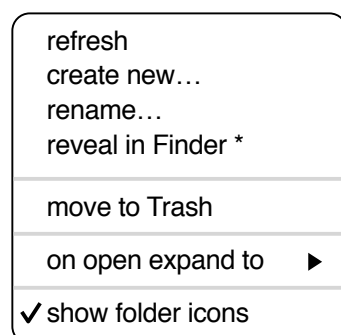
Smart folders for each Category/Subcategory, Features and Character tag. Presets dropped onto these folders will adopt the tag. Presets dropped onto the Untagged folder will have all Category/Subcategory, Features and Character tags removed.

Author

Smart folders for each Author. Tip: Instead of signing each of your creations, you could sign just one of them, then select them all and drag them onto Author/(You)/. As the process cannot be undone, please use this feature with caution!

Directory context menu

Right-clicking on any folder within Local or User will open this menu:



refresh: Update the contents of the browser. This is necessary after you have moved, added, removed or renamed any folders or presets using Explorer / Finder.

create new: Insert an empty subdirectory.

rename: Edit the folder name.

reveal in Finder / open in Explorer: Opens a system window for the clicked folder. After adding, removing or renaming preset files or folders outside of Podolski's own browser, it is best to refresh the directory.

move to Trash / Recycle Bin: Moves the selected folder to the system trash.

on open expand to: These options determine how deeply the browser will open subdirectories whenever the GUI is (re)opened or the refresh function is called. The first none option collapses all folders, while the final all levels option reveals all nested folders.

Presets panel

Right-click to open a menu of functions that can be applied to individual presets.



mark as favourite: Choose one of eight 'favourite' marks. The selected entry in the menu will be replaced with unmark as favourite.

mark as junk: Instead of deleting any unloved presets, you can mark them as 'junk' so that they disappear from the browser...

show junk: Activate this option to display junked files (see above) instead, but mark them with a STOP symbol.

select all, deselect: See *Multiple Selection* below.

rename: You can change the names of presets using this function. Note that only the most recently selected preset can be renamed i.e. you can't rename multiple files at once.

copy to User folder / duplicate: This entry depends on the status of the *Save Presets To* preference as well as on the location of the source preset(s) i.e. whether they are in the *Local* or the *User* folder. Selected presets are copied with a number appended to the name, which increments so that presets can not be overwritten by mistake.

reveal in Finder / open in Explorer: Opens a system window for the selected preset. After adding, removing or renaming preset files outside of Podolski's own browser, remember to refresh the directory.

convert to native / h2p / h2p extended / nks: Converts selected preset(s) into the format previously specified via right-click on the [SAVE] button.

move to Trash / Recycle Bin: Moves selected presets to the system trash.

RESTORE

You can audition as many presets as you like in the browser without losing track of the one that was loaded immediately before you opened the browser: Clicking on [RESTORE] navigates to that preset and loads it again.

Multiple selection, drag & drop

A block of adjacent presets can be selected via shift+click, and individual presets can be added to the selection via cmd-click (Mac) / alt+click (Win). Presets can be moved to a different folder via drag & drop. Use SHIFT etc. on your computer keyboard to highlight the files you want to move, click and drag them from the files area and drop them onto a target folder. To deselect, either click on an unselected preset or choose *deselect* from the context menu.

Note: *unmark as favourite* (see *mark as favourite* above) will not appear in the presets context menu for multiple files unless you right-click on an existing favourite.

Preset Tagging

Tags are elements of metadata, information added to presets so that they can be found more easily.

IMPORTANT: The tags are updated automatically – clicking on the [SAVE] button isn't required. The main advantage is that presets don't have to be saved every time you edit a tag. However, this means you should only edit tags after saving your preset!

For instance, if you decide to edit tags while creating a second version of an existing preset, please remember that you are actually changing the tags in the original preset!

The Tagging Window

Right-click on the [SAVE] button and select *Tag this patch*:

CATEGORY

Bass
Pads
Leads
Keys
FX
Drums
Seq+Arp
Other

Acoustic
E-Bass
FX Bass
Plucks
Sub
Synth
Vocal

FEATURES

Mono
Poly
Chord
BPM
Modulated
Dry
Percussive
Soft Attack
Slow Release
Glide

CHARACTER

Bright	Dark
Constant	Moving
Clean	Dirty
Soft	Aggressive
Phat	Thin

Category describes a preset by analogy to instrument types or typical usage, and each one has an appropriate set of subcategories. **Features** are technical classifications, and **Character** tags are pairs of opposites from which you can choose only one.

Tagging via PRESET INFO

In the PRESET INFO panel, right-click on the **Category**, **Features** or **Character** and select or unselect tags from the menu. Note that this method only works for individual presets. If you right-click on an existing tag, the first option becomes *remove tag*. The function *create Search from Tags* finds all presets with exactly the same set of tags.

Tagging via smart folder

You can tag presets by dropping (“drag & drop”) any number of presets onto one of the *Tags* smart folders. To remove all tags, drag them onto the *Tags / Untagged* folder.

Search Functions

Search by Tags

Click on the TAGS tab to open this view. The buttons here let you set up search criteria according to existing tags with just a few mouse clicks:

TAGS

Search

CATEGORIES ^

Bass

Pads

Leads

Keys

FX

Drums

Seq+Arp

Other

FEATURES ^

Mono

Poly

Chord

BPM

Modulated

Percussive

Soft Attack

Slow Release

Glide

CHARACTER ^

Bright

Dark

Constant

Moving

Clean

Dirty

Soft

Aggressive

Phat

Thin

FAVOURITES ^

1

2

3

4

5

6

7

8

Below the Search field are four sets of buttons (CATEGORIES, FEATURES, CHARACTER and FAVOURITES). The first three correspond to the tags in the tagging window (see the previous page), while the bottom row lets you find any presets you have tagged as Favourites. Clicking on the [^] icon to the right of each heading hides the options for that set of tags.

Categories and Subcategories

Each Category has its own set of subcategories. Not selecting any subcategory here means “show me presets tagged with any subcategory”. Click on [Leads]...

You can select multiple categories without specifying any subcategory if you hold **cmd** (Mac) or **alt** (Windows) while clicking on the category. Try that with the [Keys] button.

Selecting the subcategory with the same name as the category means “show me presets tagged without a subcategory”. You will not find any in the factory presets.

Completed category+subcategory tags appear below the subcategories as buttons with 'off' switches [X] so you can add other main categories by simply clicking on them.

Features, Character and Favourites

Unlike multiple Category tags, which expand the search, selecting these types restrict the search. Let's find all thin sounding presets with a slow release:

Click on the TAGS tab. If any Categories are highlighted, deselect them. Then select FEATURES = [Slow Release] and CHARACTER = [Thin].

Summary / Recap

In the DIRECTORY panel, specify a search path via double-click. In the TAGS panel, select category tags. Add others if required to extend the search, but remember to hold down **cmd** (Mac) or **alt** (Windows) if you want to retain category tags that don't specify a subcategory. Select Features, Character and/or Favourites tags to refine the search. Exit any search path by clicking on the [X] to the right. You'll soon get the hang of it!

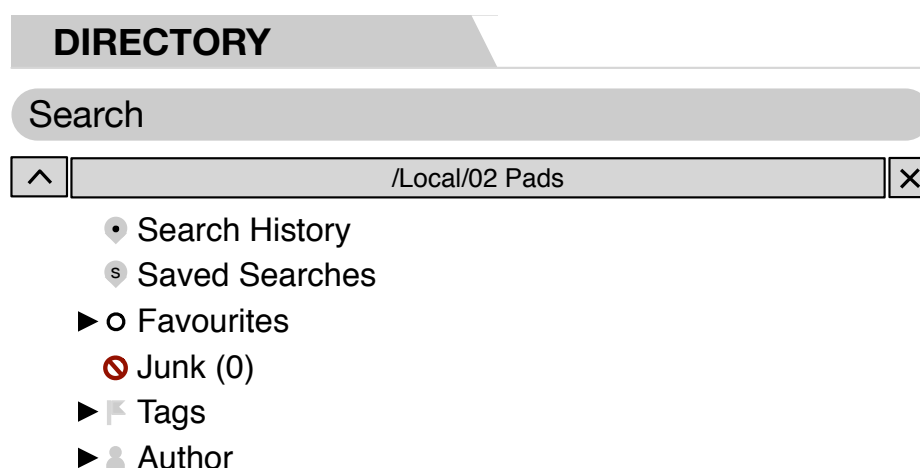
Search by Text

The Search field lets you find presets according to a string of characters i.e. text. Here's an easy example: If you remember that the preset you're looking for has the word "clock" in its name or description, enter "clock" into the Search field and hit Return.

The search normally looks into the preset name, author, DESCRIPTION and USAGE (see the PRESET INFO panel). Searches are not case-sensitive, and quotes are not required unless you need to include spaces.

To restrict the search to a particular path, for instance *Local/02 Pads*, double click on a folder. This path will appear beneath the Search field instead of the preset folders, and you will only see smart folders (unless the specified path contains sub-folders).

See the image below. The [^] button to the left moves the Search path up one level, in this case to /Local. The [X] button to the right sets the search path to the default Local plus User (i.e. all ACE presets), and the preset folders become visible again.



Try a text search: Enter three or four letters then hit Return. For instance, *star* will find all files containing the text string *star* (e.g. *mustard* or *starters*). Entering "*star wars*" (with the quotes) would find e.g. *Battlestar Warship*, if such existed in the presets.

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

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!

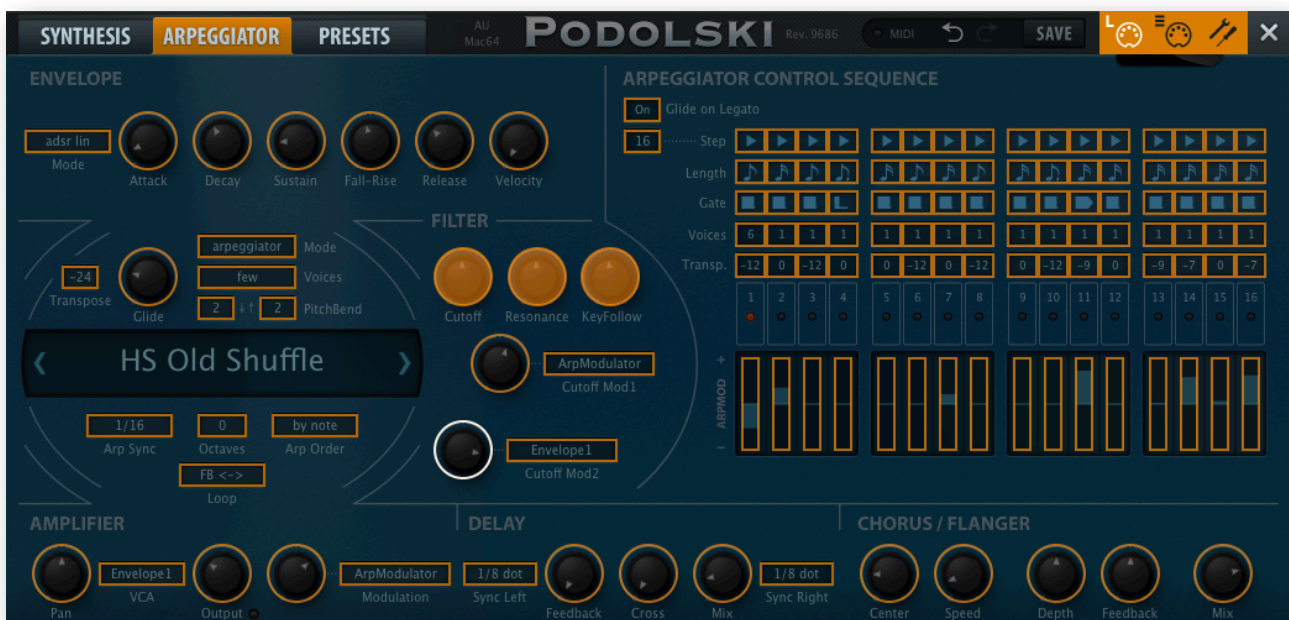
Although CC is mostly general purpose, please avoid controllers 120 to 127. These are reserved for channel mode messages such as Local Control On/Off.

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:



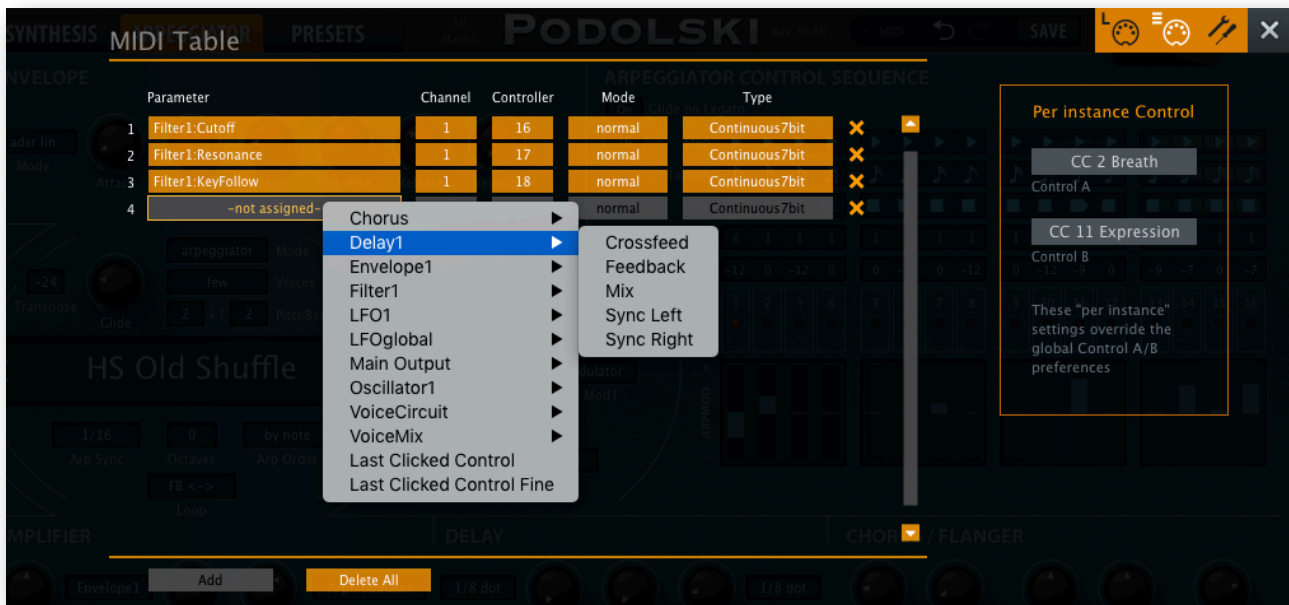
MIDI-learnable elements are outlined. Elements that have already been assigned a MIDI CC appear solid colour (like the three filter knobs in this image), and the outline of the active element awaiting MIDI CC is highlighted in white – like the *Cutoff Mod2* knob here.



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 righthand (≡) MIDI button...



Parameter

The first field displays/selects one of Podolski's 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.

Per Instance Control

These two selectors override the [Control A/B Default](#) settings (see 2 pages down) for the current instance of Podolski. Note: They are a bit sensitive in this version, so hovering over the fields and rolling your mouse wheel is probably easier than click and drag.

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.

Auto Versioning

If switched on, an index is appended to the preset name and automatically incremented each time you save it. For instance, saving 'Space' three times in a row would give you three files: 'Space', 'Space 2' and 'Space 3'.

Save Presets To

The *user folder* option prevents Podolski from saving presets into the Local folder. Instead, they will land in the User folder (or a subfolder if selected).

Scan On Startup

Whether the preset library should be scanned and the database recreated when the first instance of Podolski is started, e.g. when you reopen a project.

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.

Control A/B Default

Apart from the modulation wheel, the list of sources in the previous version included two extra fixed MIDI controls: Breath (CC#02) and Xpress (CC#11). While retaining backwards compatibility, we have replaced those with the user-definable Control A and Control B sources. These settings can be overridden per instance – see [MIDI Table](#) above.

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.

NKS

Podolski now supports Native Instruments NKS format so that it can be integrated into the Komplete Kontrol software or Maschine environments. Podolski's factory presets are optionally also installed as tagged .nks files.

Saving in NKS format

While the native, h2p and h2p extended options cause Podolski to save presets into the currently selected preset directory, .nks files go directly into the preset location used for Komplete Kontrol or Maschine, so they do not appear in Podolski's preset browser. To make them visible in Komplete Kontrol, open its preferences and rescan the preset locations.

Batch conversion

First, right-click the [save] button and set the target format to nks. Via command-click (Mac) or alt- click (Win), select all presets in the current folder you want to convert, then right-click any of the selected presets and choose convert to nks. Note: The original files are not affected.

What to do if Podolski doesn't show up in Komplete Kontrol / Maschine.

First of all, make sure your NKS software is up to date: Komplete Kontrol V1.5+ or Maschine V2.4 are the minimum requirements for u-he. In Windows, Komplete Kontrol must know the plug-in folder containing Podolski: Open Komplete Kontrol preferences, go to Locations and add your plug-in directory if necessary, hit Rescan and check whether Podolski appears. Maybe the NKS preset folder is empty? If so, please reinstall Podolski with the correct VST path and the NKS option checked. The preset folder locations are:

Mac: Macintosh HD/Library/Application Support/u-he/Podolski/NKS/Podolski/

Win: C:\Users*YOU*\Documents\u-he\Podolski.data\NKS\Podolski\

Perhaps the XML-File is missing from this location (abbreviated to fit on one line):

*MacHD/Library/AppSupport/Native Instruments/Service Center/u-he-Podolski.xml or
C:\Program Files\Common Files\Native Inst\Service Center\u-he-Podolski.xml*

A re-install with the NKS-option checked should also remedy this issue.

What to do if Komplete Kontrol / Maschine is unable to load Podolski

Either Podolski wasn't installed as VST2, or it wasn't installed with the correct path. The default VST path is fixed in MacOSX, but in Windows it can be freely assigned:

Mac: Macintosh HD/Library/Audio/Plug-Ins/VST/u-he/

Win: <User VST Folder> / (path for the VST plug-in set during installation)

If Podolski's VST plug-in cannot be found in one of these locations, run the installer again making sure that you set the correct path and have activated 'VST' as installation option.