PROCESSION Advanced

MANUAL

Changelog

v1.1

Import Pattern from Advanced Preset Added

v1.0

• Initial release

Introduction



Procession Advanced is a dedicated Midi Sequencer built for Kontakt 5. It allows using the Midi Output of Kontakt to Sequence any software or hardware synth you can direct it to. The idea was to create a Sequencer which allowed using different tempo and step length Sequences which are run through a Pitch Re-Scaler to easily create and explore complex Sequences. It also has a simple mode which locks all Sequencers to a single Frequency and Step Amount which is useful if you want to create chord style sequences

It uses 4 identical Sequencers, as well as independent Frequency and Step length for both the Trigger and Pitch Sequences, each sequencer also has Tuning, Length Percentage and Velocity controls which all support host automation. Additionally each of the Trigger sequencers can also be used to sequence an external CC plus a base value knob and it can run alongside a trigger sequence or just be used to sequence the CC.

The Scale Remapper has a list of 80 preset scales to choose from, however you can create your own over a 24 key range. All midi output is sent through the remapper and each note is converted to either the next up or next down value depending on the selected mode.

Procession has some interesting Modulations, Aftertouch will scroll through an alternative increasing tempo, the Mod Wheel is used to transpose upwards through the Scale, Pitch bend Up reduces the Step time and Pitch Bend Down Reduces the Velocity. These can be enabled per sequencer.

Procession Advanced adds 12 Patterns which can be changed using the Red Trigger octave in real-time. All Sequence controls are duplicated as well as the Pattern Scale, so that it is effectively 12 Processions in one.

There is a large selection of both local and global Randomizers which are tuned to provide interesting results. There are 3 Global Randomizers which have varying flavors ranging from Chaos to Order which mainly addresses the Frequencies and Step times used for each. Additionally there are 8 other options to customize the Randomization in various ways.

DDOCECCION	SHOW NAME EDIT CC NUM			
PROCESSION	Mod Wheel 1	LFO 3 Delay 26	Glide Mode 51	Filter 1 FM 76
PROFILE	Breath 2	OSC 1 Octave 27	OSC 1 Level 52	Filter 1 Pan 77
	Undefined 3	OSC 1 Semitone 28	OSC 1 Balance 53	Filter 1 Panmod 78
EDITOR	Foot Con 4	OSC 1 Detune 29	Ringmod Level 54	Filter 2 Type 79
	Glide Rate 5	OSC 1 FM 30	Ringmod Balance 55	Filter 2 Cutoff 80
PAGE 1 PAGE 2	Data MSB 6	OSC 1 Shape 31	OSC 2 Level 56	Filter 2 Resonance 81
	Channel Volume 7	Bank Select LSB 32	OSC 2 Balance 57	Filter 2 Drive 82
	Balance 8	OSC 1 PW 33	OSC 3 Level 58	Filter 2 Keytrack 83
SELECT PROFILE	Undefined 9	OSC 1 PWM 34	OSC 3 Balance 59	Filter 2 Env Amt 84
2 Waldorf Blofeld SAVE	Pan 10	OSC 2 Octave 35	Noise Level 60	Filter 2 Enu Vel 85
PROFILE NAME Waldorf Blofeld	Expression 11	OSC 2 Semitone 36	Noise Balance 61	Filter 2 CutoffMod 86
	Arp Range 12	OSC 2 Detune 37	Noise Colour 62	Filter 2 FM 87
ALL ON	Arp Length 13	OSC 2 FM 38	LSB 63	Filter 2 Pan 88
ALL OFF	Arp Active 14	OSC 2 Shape 39	🚺 Sustain Pedal 64	Filter 2 Panmod 89
	LFO 1 Shape 15	OSC 2 PW 40	Glide Active 65	Amp Volume 90
	LFO 1 Speed 16	OSC 2 PWM 41	Sostenatu 66	Amp Velocity 91
EXP NAME EXP STAT	LF0 1 Sync 17	OSC 3 Octave 42	Routing 67	Amp Mod 92
🔲 All General Names.nka	LFO 1 Delay 18	OSC 3 Semitone 43	Filter 1 Type 68	EX 1 Mix 93
📰 All General States.nka 📰 Blank Names.nka	LFO 2 Shape 19	OSC 3 Detune 44	Filter 1 Cutoff 69	FX 2 Mix 94
🔲 Blank States.nka	LFO 2 Speed 20	OSC 3 FM 45	Filter 1 Resonance 70	E Attack 95
🔲 Blofeld Names.nka 🔲 Blofeld States.nka	LF0 2 Sync 21	OSC 3 Shape 46	Filter 1 Drive 71	E Decay 96
E Common Names.nka	LFO 2 Delay 22	OSC 3 PW 47	Filter 1 Keytrack 72	
🔲 Common States.nka	LFO 3 Shape 23	OSC 3 PWM 48	Filter 1 Enu Amt 73	
	LFO 3 Speed 24	Sync 49	Filter 1 Enu Vel 74	
	LF0 3 Sync 25	Pitch Mod 50	Filter 1 CutoffMod 75	

Procession also includes a CC Profile editor. Internally there are 8 selectable profile slots and the profile editor allows naming the CCs for a particular synth as well as deciding which are visible. This takes all of the effort out of remembering the CC implementation of a synth you are working with. Profiles can also be exported and loaded using the inbuilt file browser. A profile for the Waldorf Blofeld is included.

Installation and Usage

Unzip to a place on your hard drive and using the Kontakt internal file browser locate the Instruments folder and Load 'Procession Advanced.nki'

Using VST Midi Output can be tricky and is handled differently in each DAW, hopefully most of you will have done this before as there is no way I could cover all DAWs. But basically VST plugins with Midi out appear as a selectable Midi Input which you can use as a midi input on the track you want to control.

I've made a video showing how it's done in all of the hosts I own as well Plogue Bidule and Metaplugin both of which make it simple and flexible.

https://www.youtube.com/watch?v=kcKY7F2si-I

I suggest doing a search on Google or Youtube for VST Midi output and the name of your DAW, it's well covered territory if I haven't covered yours.

Misc Notes

- Due to reasons only NI knows, when using Aftertouch as a destination it will also use this internally as though aftertouch is coming from your keyboard. This means that it can be used to sequence the Aftertouch>Freq Parameter which can be interesting. If you don't want this behaviour set Aftertouch>Freq to zero.
- When the 1st keyboard note is played all sequencers will reset to the start, if you then overlap notes the Sequencers will continue without resetting until no keys are held and a new one is played.
- Notes are generated from A to B so if an identical note was triggered by an upstream sequencer the note will not be triggered.
- Kontakt has a latency difference between the Note on from the midi input triggering and the clock pulse for some reason. As a result all midi is about 1500 micro seconds late and so a very small delay and shouldn't be noticed. You can always record the midi output to your DAW and quantize it if this bothers you.
- The knobs in Procession Advanced cannot be Automated because a Single set of Knobs represents all Patterns.

About Multiple Patterns



There are 12 Patterns and each Pattern has unique Sequencers, Tempos, Steps, Knobs and Option buttons. The only parameter that is not included is the CC ID. Each Pattern can also have it's own dedicated Scale or all can use a single Scale depending on the 'SINGLE' Button.

The Patterns are switched either by using the GUI buttons or the Red Octave Trigger Octave. The currently playing Pattern is always visible and editible.

You can copy any Pattern to the Currently selected/Visible pattern by using the 'C' button under each Pattern.

You can also use the 'TO ALL' button to copy the Current Pattern to All Patterns. Be warned there is no undo for the Copy Functions.

TO ALL

Sequencers

All 4 Sequencers function identically and so I will describe the behaviour of a single sequencer.

- ENABLE NOTE SEQUENCE (top left) Switches on the Note sequencer, the CC output has it's own enable.
- SOLO
 - Allows muting all other sequencers.
- OCT

Selects which Octave will be used for the Sequencer by -3/3 Octaves.

SEMI

Offsets the Sequencer by -12/12 semitones. If the 'Root' button is enabled then the Semitones will cycle up the scale, otherwise it will tune normally.

• LENGTH

The length of a note is calculated by determining the distance between the current note and the next to play. The Length setting allows setting the percentage of this time.

• CC BASE

If a CC ID is selected then this control will always take control of the CC Parameter and becomes the Base Value for the sequencer Modulation when enabled.

• SEQ>CC

If CC is enabled then this is the amount of Trigger

Sequencer sent to the selected CC, the values are added to the CC Base value.

• CC

This enables CC Sequencing.

• FV

Forces the velocity for notes to be Full Value regardless of the sequencer Amount. Especially useful if using the CC Sequencer.

• PB

Enables Pitch Bend \rightarrow Velocity/Length for the Sequencer.

• MW

Enables Mod Wheel \rightarrow Pitch for the Sequencer.

• AT

Enables Aftertouch \rightarrow Frequency for the Sequencer.

• D

Sets the sequencer to a flat default state.

• R

Randomizes the Sequencer Section





The Sequencers are edited suing the mouse to set the values of each step. Dragging along will set all values crossed and right clicking and dragging allows drawing a line of values. With the Trig/Velocity Sequencer, a note will only play if the value is greater than zero, and as long as Full Velocity is disabled the value will determine the Velocity as a percentage up to the Velocity Knob setting.

MASTER

When enabled, all Sequencers will be changed to the same step size and the same values. It can used temporarily to quickly replicate settings across the other 3 Sequencers, plus it can be left on and the other Sequencers can be changed until A is edited again. It's also useful when using Simple Mode.

• <>

these buttons will shift the sequence Left or right

- D
 - Sets the sequence Flat
- R

Randomizes the Sequence

• FREQ

Sets the Frequency of the Sequencer in Multiples of 64ths so lower = faster.

• STEPS

Sets the step Amount between 1 and 32 Steps.



The Pitch Sequencer allows pitching above the played Midi Note Pitch up to 24 Semitones.

Master Section



• WHEEL

A Visual Representation of the Mod Wheel which can also be used instead, however it isn't stored with a preset

• MW > PITCH

Sets the amount that the Mod Wheel affects the Pitch

• AT > FREQ

How much the Aftertouch will affect the Frequency

• AT STEPS

When the Aftertouch is used, it cycles through alternative clocks to play the Sequences. This setting determines how many steps these alternative clocks use. Note that they can go past the Sequencers actual settings which can be interesting. Setting this to 1 will create a stutter effect using step 1 if it has a note.

RND VEL

Adds an amount of random velocity to all triggered Notes

RND PB

Adds an amount of Random Pitch Bend when a note is triggered.

• X-SPOSE

Transposes all Sequencers by -12/+12 Semitones.

Scale Remapper



All Pitch data goes through the Scale Remapper which makes sure that all notes are forced to the current selected Scale. The Mode can be selected between using the Next Up or Next Down modes when the note is forced to fit the Scale.

A Scale can be entered directly or a preset can be loaded via the Select Preset Menu choosing from a list of 80 Scales. The Randomize button can also select one Randomly. Note that when a scale is selected the name will still be visible until it is edited or the instrument/project is closed down.

Note that the scale is shown in C for simplicities sake, however the Note you play on your keyboard determines the Root Note.

OPTIONS

SINGLE	TO ALL	
ROOT	SIMPLE	RESET

• SINGLE

This will use a Single Scale across all Patterns

- TO ALL
 - This will copy the Current Pattern to All Patterns
- ROOT

This determines how the Semitone knobs work. If enabled then the Note will pitch up through the selected Scale, when disabled it will pitch the root note as well.

• SIMPLE

Simple mode makes all Sequencers use the same Step Amount and Frequency settings.

• RESET

When Switching Sequences using the Red Octave Trigger Keys the sequencers will all reset to the 1st Step.

Global Randomizers

CURRENT GLOBAL		
	OCTAVE	SCALE
R SANE R	R PITCH	FREQS
	MODS	STEPS
R ORDER R	HALF	TRIGGERS

There are 3 flavours of Global Randomizer, Chaos to Order, the difference is mainly in the Tempos and step size possibilities. The Current Rows will only Randomize the Current Pattern and the Global Row will Randomize all Patterns plus the Global parameters. There are also the following options that affect all Randomizers:

• OCTAVE

When enabled the Pitch sequencers will be limited to 1 Octave only

• R PITCH

When Enabled Root Pitches will be used often in the generated sequences, otherwise Pitches will be totally random

• MODS

When Enabled the AT, PB and MW buttons will be Randomized

- HALF When Enabled all knobs will be randomized to smaller values up to 50%
- SCALE

The Scale will be randomized

• FREQS

The Sequencer Frequencies will be Randomized

• **STEPS** The Sequencer Step Amounts will be Randomized

TRIGGERS

The Trigger sequences will be Randomized.

Triggers



Procession includes 2 octaves of real Time triggers for modifying the Sound. The Triggers octave setting determines when on your Keyboard the Triggers appear.

The Red Octave (Pattern Switching)

These Triggers will switch the pattern instantly and are basically the equivalent of uing the 1-12 buttons on the GUI. If RESET is enabled then the pattern will be reset to step 1 when it is switched.

The Yellow Octave (Pitch)

This octave allows changing the pitch of the playing Sequencers in various ways depending on the TRIG MODE setting:

• ROOT

TRIG MODE Both TRIGGERS OCTAVE 2

Changes the pitch of the Root used by the Rescaler to calculate the notes. This one can sound a bit strange sometimes, perhaps have no effect on some keys depending on the current Scale, yet can provide some very interesting variations.

• SCALE

The notes sent to the rescaler are pitched which provides some great variations.

• BOTH

Both the Root and Scale are changed in pitch so it acts as a regular transpose just like playing a different note to trigger the Sequences, however the difference is that this modifies the notes and therefore does not Retrigger/Reset the playing Sequencers.

CHORD

This is a preset set of Alternate scales for the Triggers which uses:

- C Major
- C# Minor
- D Major 7th
- D# Minor 7th
- E Diminished
- F Augmented
- F# Augmented 7th
- G Sus 2
- G# Sus 4
- **A** 6th
- A# Minor 6th
- B Root + 7th

• USER 1-4

These are 4 sets of triggers like Chord Mode except in Procession you can define what Scales they use with the Scale Editor (see below).

The Scale Editor



This allows altering one of the 4 editable Scale Trigger profiles for use by the Trigger Octave. You can select which one to use from the Trigger Mode menu in Procession or Chordian.

Changes are saved automatically so be sure you have a profile selected that you want to overwrite. If you have made changes you will need to click the refresh button next to the trigger Mode menu in Procession to reload the profiles. If you leave the refresh button ON it will reload the profiles continuously which makes it easier to work on them, don't forget to switch off after editing though!

Browser



Procession uses it's own Preset System and Presets can be loaded or Saved using the Preset Browser. The Preset Folder is called 'Procession ADV Presets'

Procession Advanced does not come with any Presets of it's own, due to the complexity of it, it's more about making your own Sequences. However it does include Presets from the standard Procession and Chordian Presets which can be loaded into a single Pattern.

• SAVE PRESET

When you save a Preset, unfortunately Kontakt always opens the File Browser showing the data folder which stores all the configuration files for the Synth, so you must select the Presets Folder and save your preset there so it will be visible next time you load the synth. You can create sub folders in this directory if you wish, they will be listed on the Left hand side.

LOAD PRESET

This is only needed to load a preset which isn't visible in the File Browser. Useful because Kontakt script provides no way of refreshing the browser except by reloading the Instrument. This provides a way of loading a preset in that situation.

SAVE DEFAULT

All Homegrown Sounds Kontakt Instruments use a Default File for referencing when using any section or Global Default button. This Button will allow you to overwrite the file with the current state of the instrument, which will be used from then onwards.

PRESET PREVIOUS AND NEXT

These Buttons will navigate through the presets. However a Preset must be loaded in the Browser first to create the start point.

LOAD CC

CC information is stored with Presets, however usually you wouldn't want to load it when loading a preset as it's a very synth specific setting. It's disabled by Default so that they will not load.

PATTERN IMPORT ID

If this is set to a Pattern ID then it will load only the selected Pattern into the Currently Selected Pattern which provides a means of importing Patterns from other Procession Advanced Presets. When set to OFF then it will load the entire Preset as normal.

Profile Editor

PROCESSION	SHOW NAME EDIT CC NUM			
	Breath 2	OSC 1 Octave 27	OSC 1 Level 52	Filter 1 Pan 77
PROFILE	Undefined 3	OSC 1 Semitone 28	OSC 1 Balance 53	Filter 1 Panmod 78
EDITOR	Foot Con 4	OSC 1 Detune 29	Ringmod Level 54	Filter 2 Type 79
LUHOR	Glide Rate 5	OSC 1 FM 30	Ringmod Balance 55	Filter 2 Cutoff 80
PAGE 1 PAGE 2	Data MSB 6	OSC 1 Shape 31	OSC 2 Level 56	Filter 2 Resonance 81
	Channel Volume 7	Bank Select LSB 32	OSC 2 Balance 57	Filter 2 Drive 82
	Balance 8	OSC 1 PW 33	OSC 3 Level 58	Filter 2 Keytrack 83
SELECT PROFILE	Undefined 9	OSC 1 PWM 34	OSC 3 Balance 59	Filter 2 Enu Amt 84
2 Waldorf Blofeld SAVE	Pan 10	OSC 2 Octave 35	Noise Level 60	Filter 2 Enu Vel 85
PROFILE NAME	Expression 11	OSC 2 Semitone 36	Noise Balance 61	Filter 2 CutoffMod 86
Waldorf Blofeld	Arp Range 12	OSC 2 Detune 37	Noise Colour 62	Filter 2 FM 87
ALL ON	Arp Length 13	OSC 2 FM 38	LSB 63	Filter 2 Pan 88
ALL OFF	Arp Active 14	OSC 2 Shape 39	Sustain Pedal 64	Filter 2 Panmod 89
	LFO 1 Shape 15	OSC 2 PW 40	Glide Active 65	Amp Volume 90
	LF0 1 Speed 16	OSC 2 PWM 41	Sostenatu 66	Amp Velocity 91
EXP NAME EXP STAT	LF01Sync 17	OSC 3 Octave 42	Routing 67	Amp Mod 92
🔲 All General Names.nka	LFO 1 Delay 18	OSC 3 Semitone 43	Filter 1 Type 68	FX 1 Mix 93
📰 All General States.nka 📰 Blank Names.nka	LFO 2 Shape 19	OSC 3 Detune 44	Filter 1 Cutoff 69	D FX 2 Mix 94
Blank States.nka Blafeld Hames.nka Blafeld States.nka Common Names.nka Common States.nka	LFO 2 Speed 20	OSC 3 FM 45	Filter 1 Resonance 70	E Attack 95
	LF0 2 Sync 21	OSC 3 Shape 46	Filter 1 Drive 71	E Decay 96
	LFO 2 Delay 22	OSC 3 PW 47	Filter 1 Keytrack 72	
	LFO 3 Shape 23	OSC 3 PWM 48	Filter 1 Env Amt 73	
	LFO 3 Speed 24	Sync 49	Filter 1 Env Vel 74	
	LF0 3 Sync 25	Pitch Mod 50	Filter 1 CutoffMod 75	

The trouble with using CC numbers with hardware is that it often relies on having the Manual open in front of you, the profile editor is the way that Procession deals with that. Internally uses 8 Permanent profiles. In the Editor you select which one of those you want to edit/change and it will be loaded. Be aware that changes are permanent to the slot after Saving or loading a profile from the file browser.

To edit a Text box just click it. You can set the Profile Name in the Name box, and change the names for all available CCs (except bank Change 0) as well as the visibility so that you can only see the relevant options. The CCs are spread across 2 Pages which you access via the Page 1/Page 2 buttons.

Once you have finished editing clicking save will update the current slot.

It's also possible to export Profiles so that they are easy to send to others or as a backup. Note that you must export both the Names and the States separately due to the way Kontakt stores arrays, however this can actually be handy for applying different states to the same names etc... When you load presets from the browser it is automatically saved to the slot. After you have finished, you need to refresh the profiles in Procession using the Refresh button next to the Profile Selection.

CC PROFILE	
1 All General	C