Phrase

Key Trigged Sequencer Player

Rack Extension for Reason

USER MANUAL

version 1.0.5

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1. Introduction

Phrase is a player device for the Reason rack which specializes in the creation of musical motifs and phrases. A great tool to inspire new ideas for melodies, bass-lines, chord progressions, even drums and percussion parts. The programming interface does away with the traditional piano roll and offers a less laborious way to get results fast. Thanks to several editing options, it's easy to create or modify sequences in just a few clicks. No drawing of notes required.

At the core of the device lies a 16 step sequencer which is triggered when you play a note. Like an arpeggiator, you play it with a keyboard or other MIDI device capable of sending notes, but you can also use a note track in Reason. With every new note, the sequence is automatically transposed and adjusted based on the step parameters. If you hold down more than one note at once, you can get different results from the same sequence just by changing the order in which the notes are played.

Each step of the sequence has the following parameters:

1. Step On: steps can be turned on or off. When a step is turned off, it acts like a note rest
2. Gate Length: there are 4 settings which determine the note length relative to the step duration
3. Velocity: the velocity of the outgoing note for the given step
4. Duration: independent for each step, from as short as 1/64th to as long as 1 bar
5. Transpose: incoming notes can be transposed up or down from the original pitch within a 4 octave range
6. Play Mode: when more than one note is pressed at the same time, this parameter determines which of the held notes is played

The step parameters can be set individually or for an entire row at once. Each parameter type has it own edit menu with various options for altering the values. For some parameter types, there are built-in presets which are great starting points for generating new sequences quickly.

Similar editing functions are also available at the sequence level, where all parameters for all steps can be altered at once. A customizable randomization engine can help spark new ideas. To keep things in check, the note correction algorithm will force all outgoing notes to the chosen key and scale.

Finally, you can have up to 4 sequence variations per patch, and these can be switched live during play.

Phrase is fast to program, fun to use and it encourages experimentation. Try it out and see for yourself!

2. Overview

Here is a quick overview of the main interface elements. For more details on each section, refer to later parts of this manual.

1. Main interface for programming the sequence. Each step has a set of parameters which can be set independently from the rest. These are described in details in section 3.2

2. Programmable displays for setting the number of steps in the sequence, the starting position offset, and the direction

3. Clicking on one of the labels opens an "Edit" menu for that specific parameter. The editing functions affect the selected parameter only for those steps which are included between the "Start" and "End" step locators shown with an "S" and "E" labels above the main sequencing area

4. Clicking on the "Seq Edit" label opens the edit menu for affecting all the parameters of the sequence which are included between the "Start" and "End" step locators. The black button remembers the last editing function which was performed from the edit menu and can be used to speed up successive edits. The orange button is used to set a scale and key for the correction of outgoing notes.

5. There are 4 sequence variations that can be selected during playback by using the numbered buttons. Clicking on the "Variation" label opens an edit menu with operations like duplicate and reset.

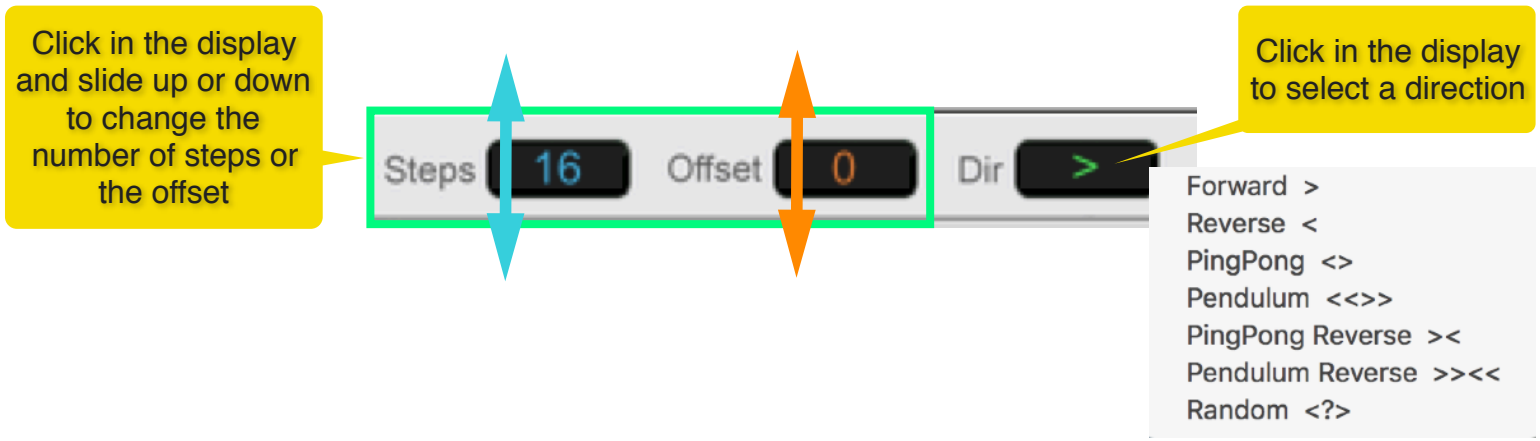
3. Usage

Phrase is a player device and hence it needs to be instantiated on top an instrument. This can be a synth, a sampler, a drum machine or anything which receives notes and is able to make noise!

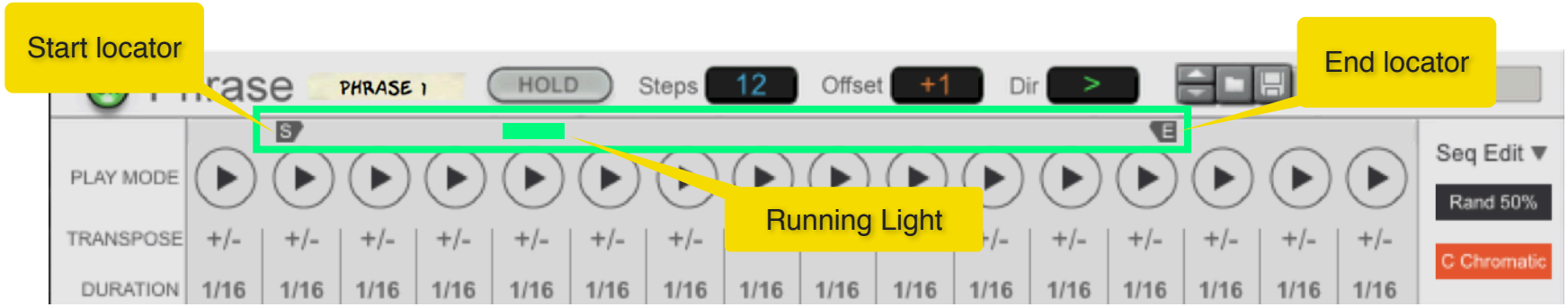
Just like the native Reason RPG-8, a sequence in Phrase is trigged by pressing a key on a MIDI device or by notes programmed on a track. Ideally you have a MIDI device connected to your computer which you can play. As you press a key, the selected note is played in a sequence according to the parameters set for each of the step, for example the note duration, the note velocity and the note transposition. If you have more than one key pressed at the same time, then the way the notes are played depends on the "Play Order" parameters. Here you can get some really interesting results just by pressing the same keys in a different order each time.

3.1 Sequencer basics

3.1.1 Setting the Number of Steps, Offset and Direction



When changing the number of steps or the offset, you can see which section of the sequence is selected by looking at the sequence start and end locators right above the main sequencing window. When the sequence starts playing, you will se a running light between the locators indicating the currently playing step.



As far as the directions are concerned, similar ones can be found in other Reason devices, for example Thor's step sequencer, and they should be familiar to the reader. Nonetheless, here is a brief description:

Forward > sequence proceeds from start to end point, and jumps back to start point after reaching the end point

Reverse < sequence proceeds from end to start point, and jumps back to end point after reaching the start point

PingPong <> sequence proceeds from start to end point, then immediately reverses its direction

Pendulum <<>> sequence proceeds from start to end point, plays the end step twice and it reverses its direction

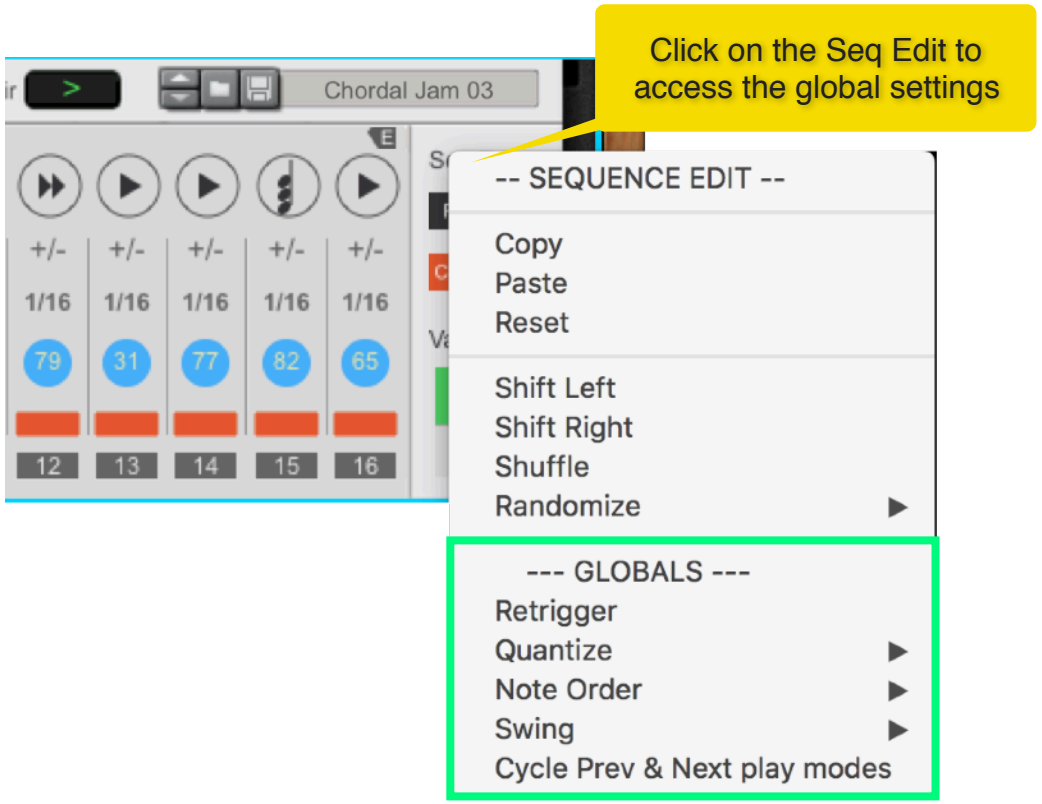
PingPong Reverse >< same as Ping Pong, but starting from the end step in reverse direction

Pendulum Reverse >><< same as Pendulum, but starting from the end step in reverse direction

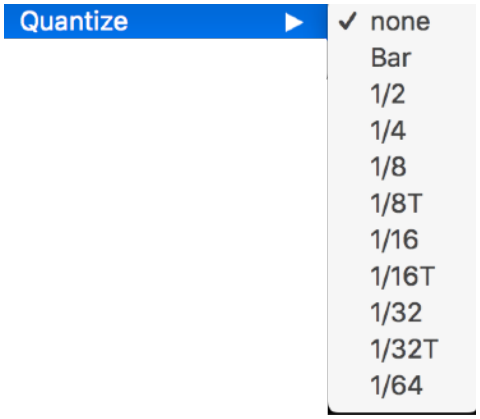
Random <?> sequence proceeds in random order between start and end steps

3.1.2 Sequence Global Parameters

The global parameters affect how the sequence is played. There are 4 global parameters and these can be accessed by clicking on the "Step Edit" label as shown below



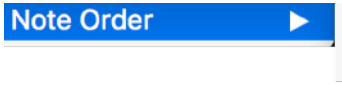
if Retrigger is enabled, pressing on a new key while another key is held down will restart the sequence from its start position. If Retrigger is disabled, pressing a new key while another one is held down will not restart the sequence which continues to play from its current position, also know as **Legato**.



Quantize forces the sequence to start at a precise grid division of the Reason sequencer.

If Quantize is set to something other than "**none**", the sequence will not start as soon as you press a key, but it will wait until the next time division is reached. This works when the Reason sequencer is running. If the playhead is stopped, the sequence is not going to start until you press "Play".

If Quantize is set to "**none**", the sequence starts as soon as you press a key, regardless of whether the Reason sequencer is running or not.

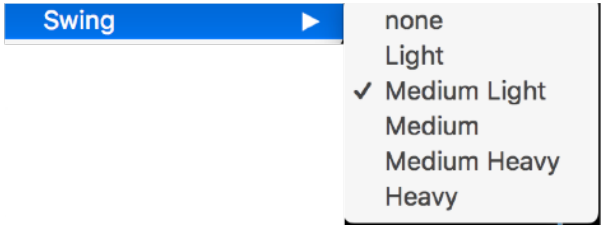


if you have more than one key pressed at the same time, then Note Order determines how the notes are ordered internally.

"**As Played**" stores the notes in the order they were received

"**Note Number**" stores the notes from lowest to highest

This setting has a profound effect on the way the "Play Mode" parameter works. For more on that, read on.



from the **Swing** menu, you can choose one of the swing preset settings. If "none" is selected, no swing is applied to the sequence. All other values will apply a varying amount of swing, from very "Light" swing to "Heavy" swing. Set to taste.

Cycle Prev & Next play modes

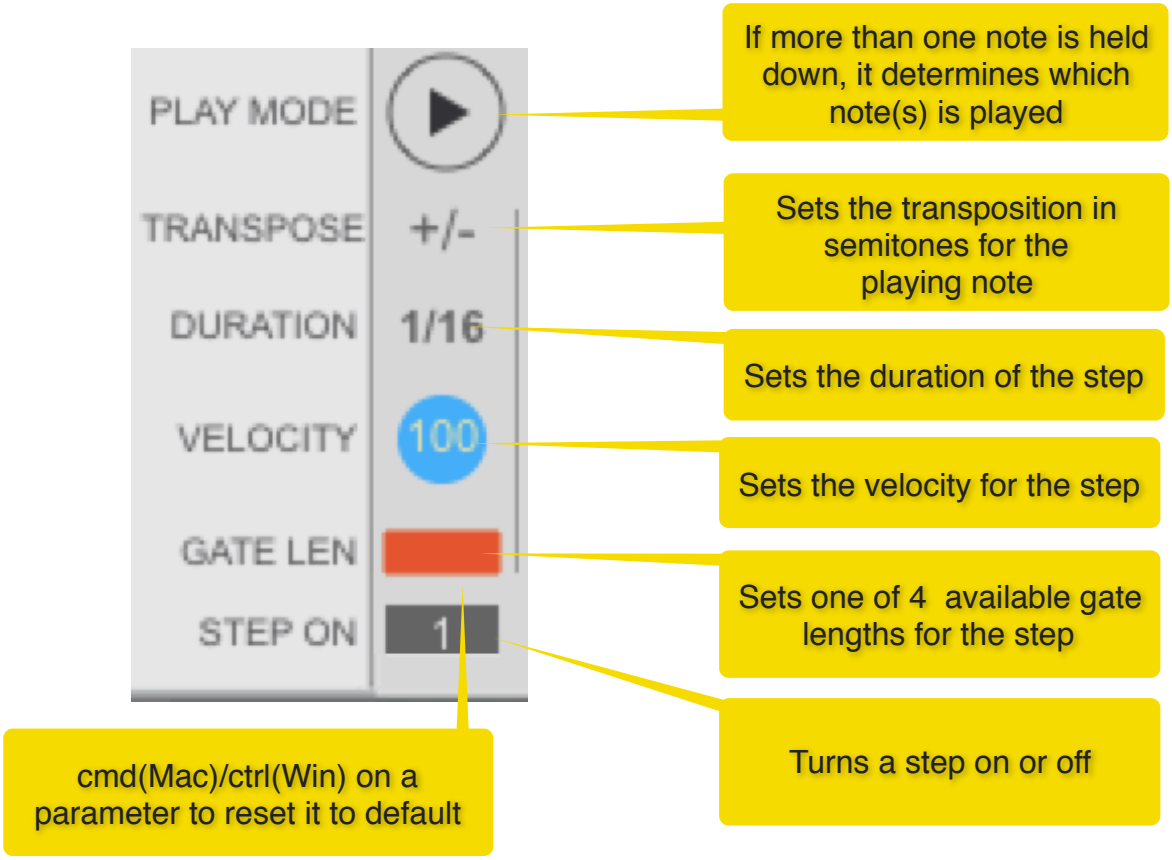
if **enabled**, when steps with the Prev play mode reach the bottom of the array of notes in memory, they'll continue to play from the top of the array, continuously cycling through the notes. Similarly, when steps with the Next play mode reach the top of the array, they'll continue to play from the bottom of the array.

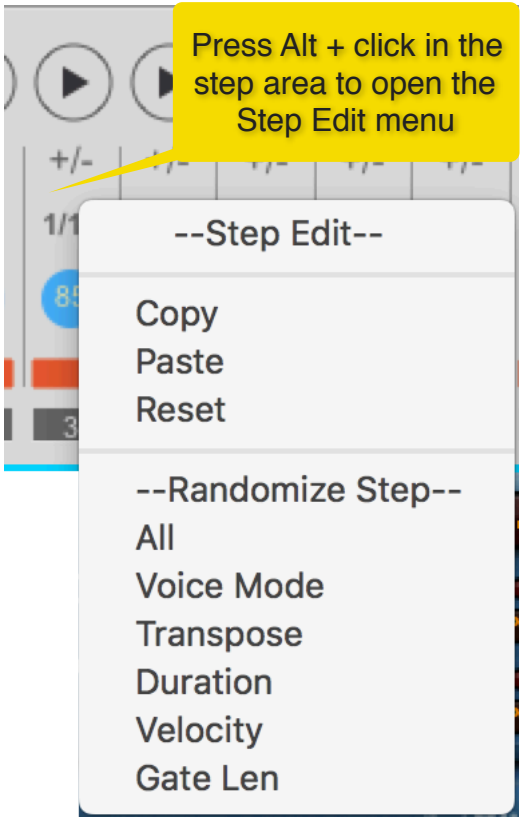
if **disabled**, when steps with the Prev play mode reach the bottom of the array of notes in memory, they'll continue to play the bottom note. Similarly, when steps with the Next play mode reach the top of the array, they'll continue to play the top note.

3.2 Programming Steps

3.2.1 Anatomy of a Step

Each step has a set of identical parameters which can be set independently of each other. You create sequences by adjusting these parameters. To make editing faster, each parameter as its own editing menu which makes it possible to edit multiple steps at once. If you press Alt and then click on in the step area, a "Step Edit" menu opens with various options for editing.

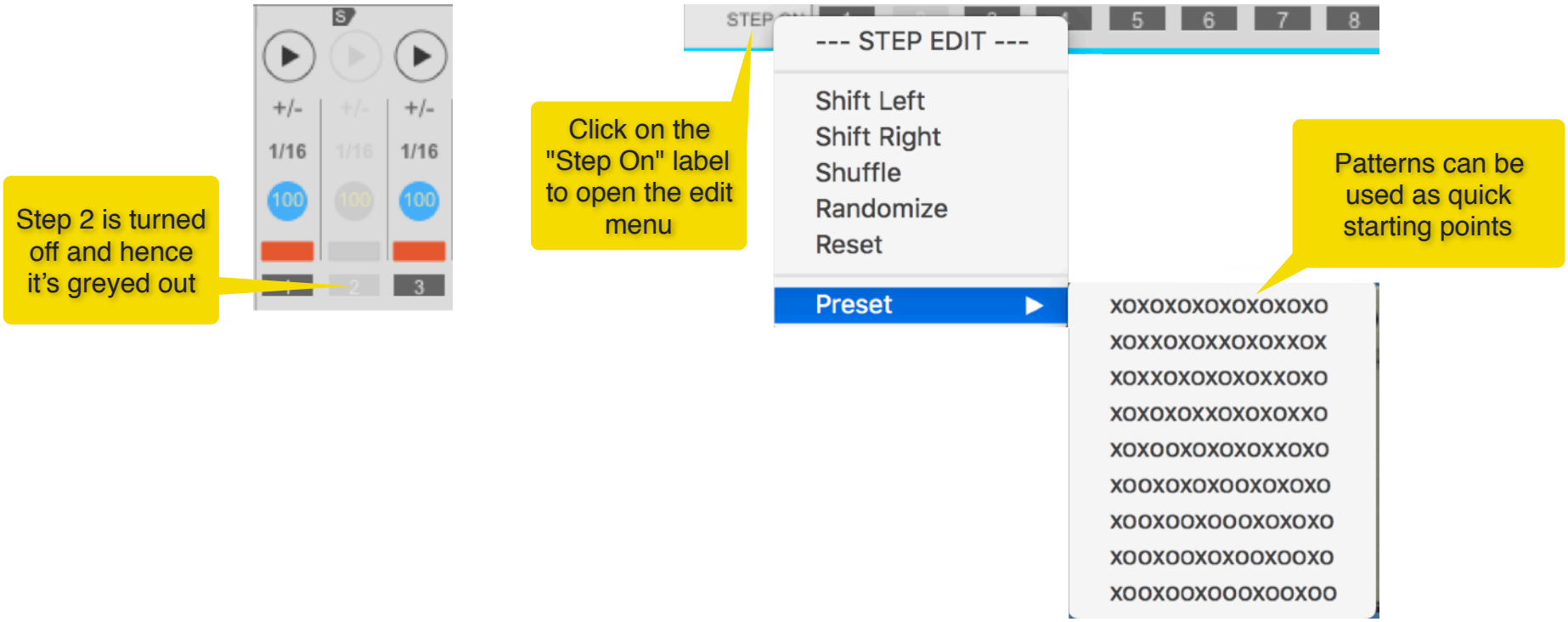




3.2.2 Step On

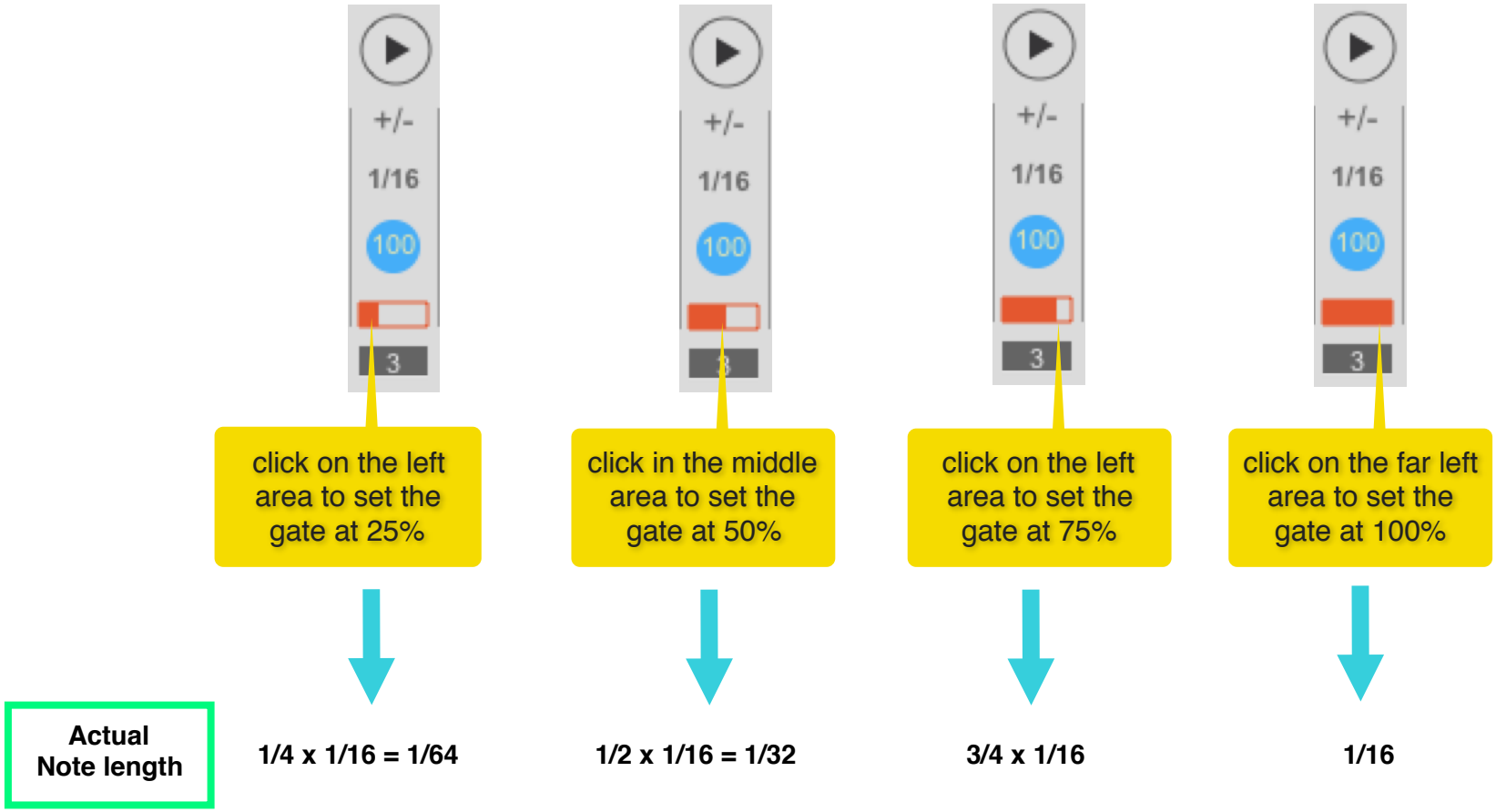
Here you turn steps on and off. When a step is turned off, it is greyed out. Please keep in mind that even if a step is turned off, it still remains part of the sequence and it is played through (i.e. it is not skipped), but the note is NOT played.

You can quickly modify the "Step On" parameter of multiple steps by accessing the Step Edit menu, as shown below. You can shift, shuffle and randomize the steps. There are also presets with some interesting patterns which can be used as great starting points. Please note that editing actions are restricted to the steps between the start and end point locators (see **section 4.1** for more info).

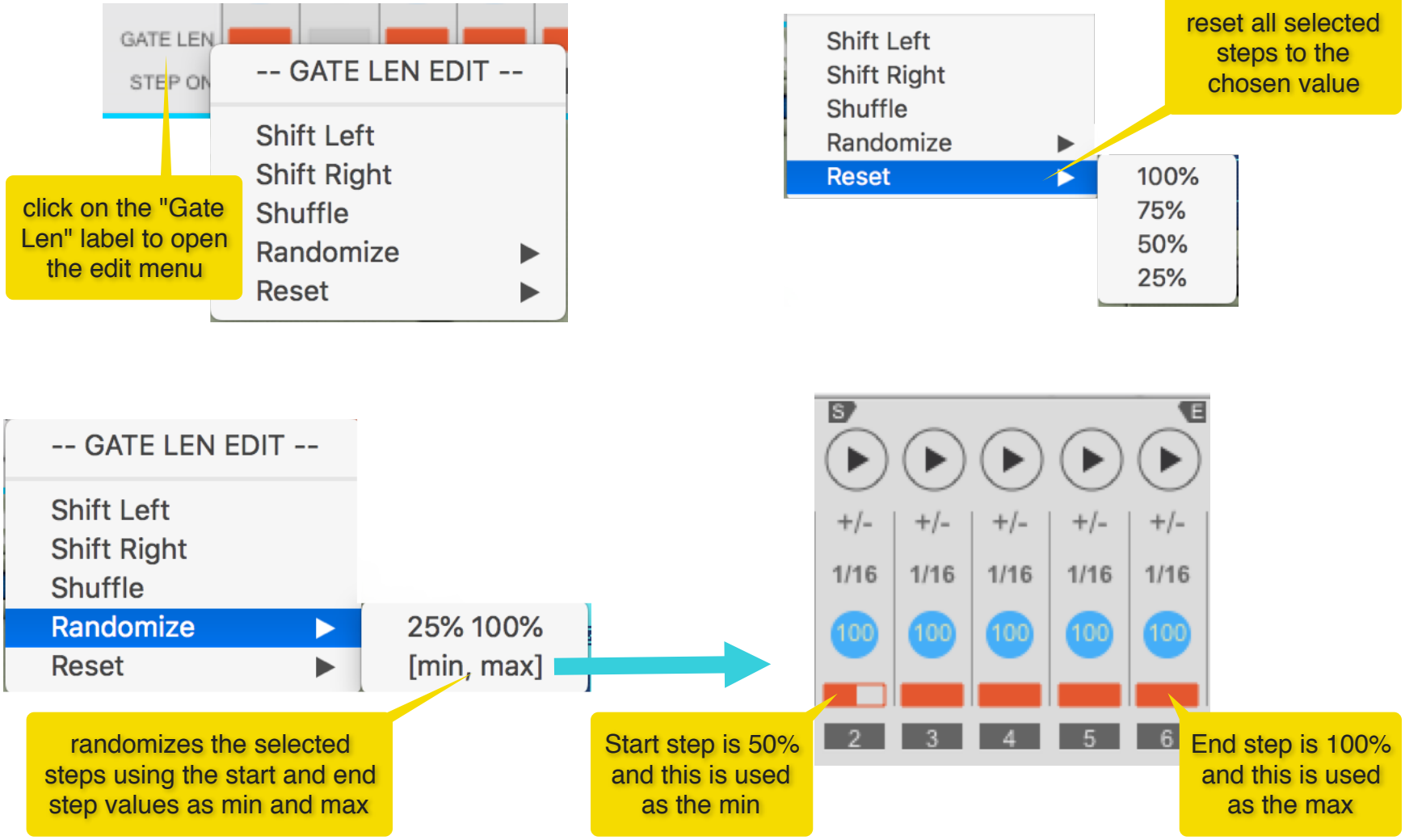


3.2.3 Gate Length

The gate length determines for how long the note(s) is played during the duration of the step. There are 4 possible settings and these correspond to 25%, 50%, 75%, and 100%. For example, if the step has a duration of 1/16 and the gate length is set to 50%, then the note will only play for half of 1/16, which is 1/32. Gate length is a great parameter to experiment with for creating interesting grooves out of repetitive sequences.

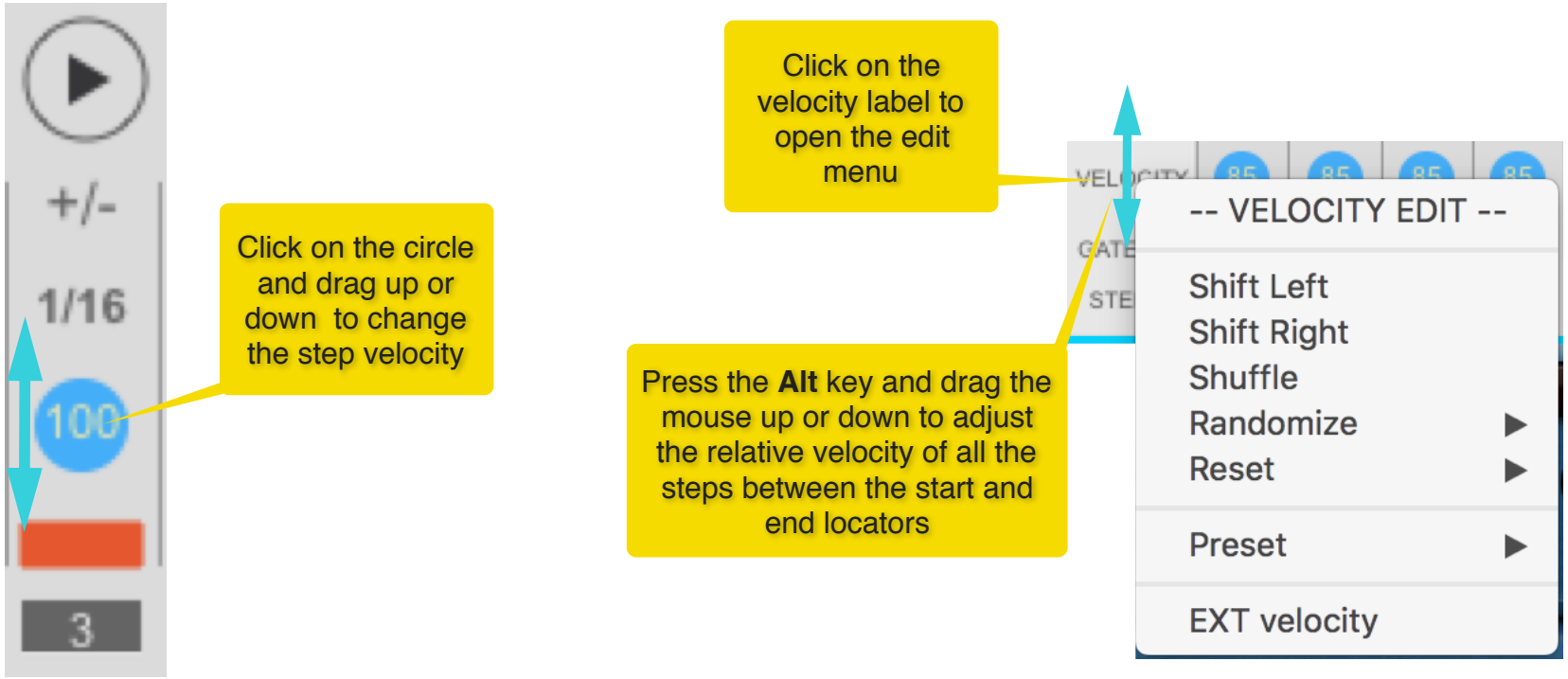


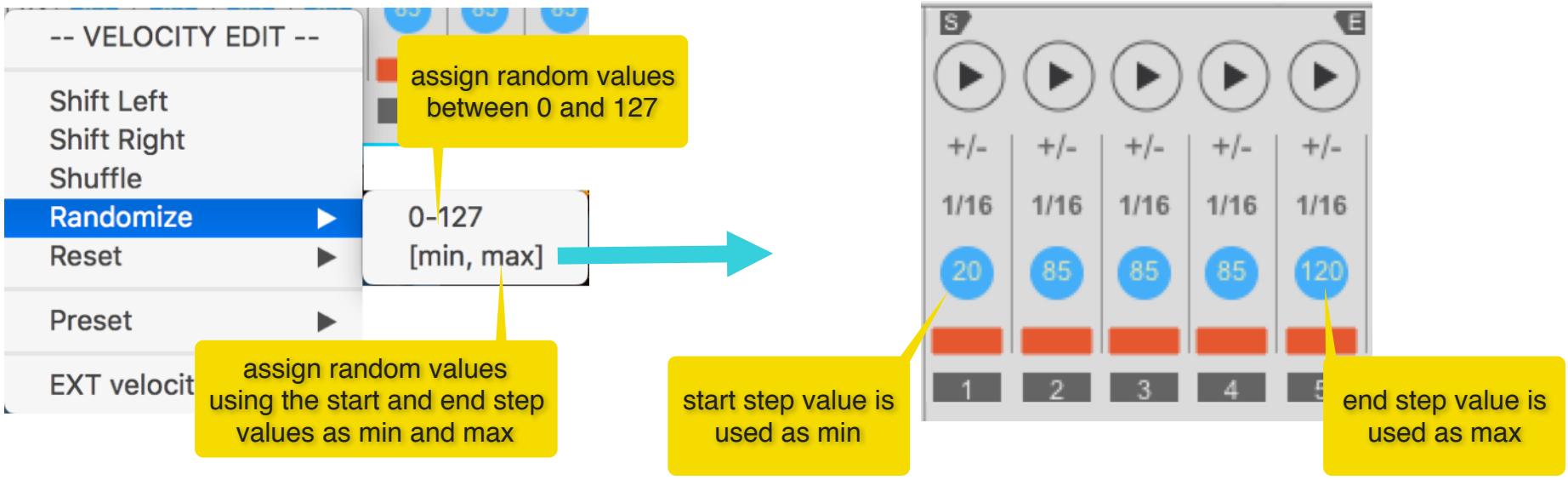
Clicking on the "Gate Len" label opens the Gate Length edit menu which allows quick editing actions for all the steps between the start and end locators. There are options for shifting, shuffling, randomizing and resetting the gates. With the Randomize [min, max] option you can choose the min and max values to be used in the randomization process. This is done by looking at the values of the start and end step which will be used respectively as the min and max values.

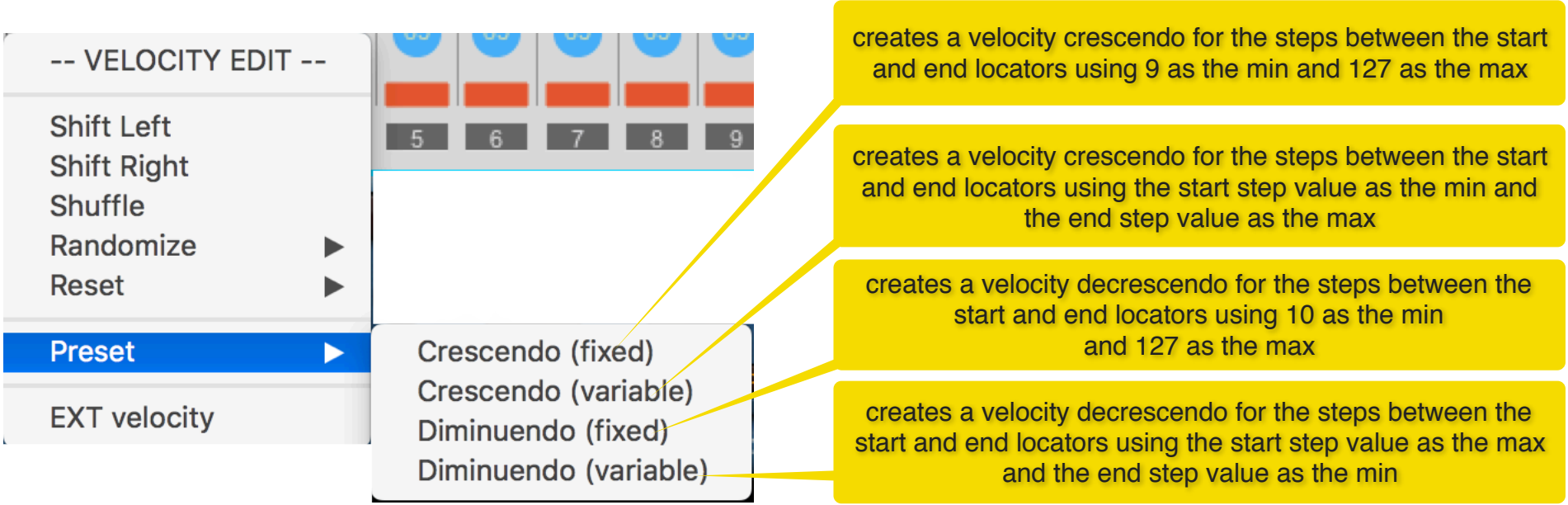


3.2.4 Velocity

Each step has it own velocity setting. You can change it by simply clicking and dragging on the numbered circles. If you click on the "Velocity" label, the Velocity Edit menu opens with several options for affecting all the steps included between the start and end point locators. You can randomize the velocities, reset them, or use presets for crescendo and diminuendo. If you select "EXT velocity", the steps will use the velocity of the incoming MIDI notes instead.

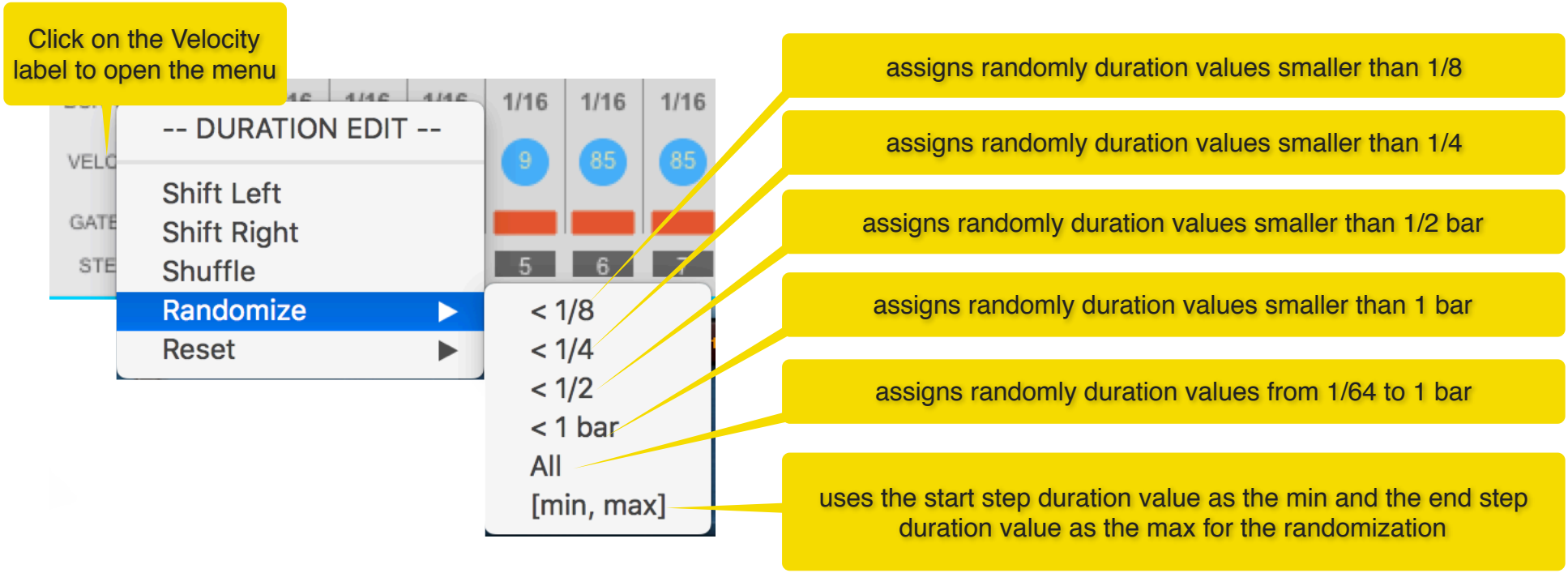



-- VELOCITY EDIT --
Shift Left
Shift Right
Shuffle
Randomize
Reset
Preset
EXT velocit
assign random values between 0 and 127
0-127
[min, max]
assign random values using the start and end step values as min and max
S
E
+/-
1/16
20
85
85
85
120
1
2
3
4
start step value is used as min
end step value is used as max

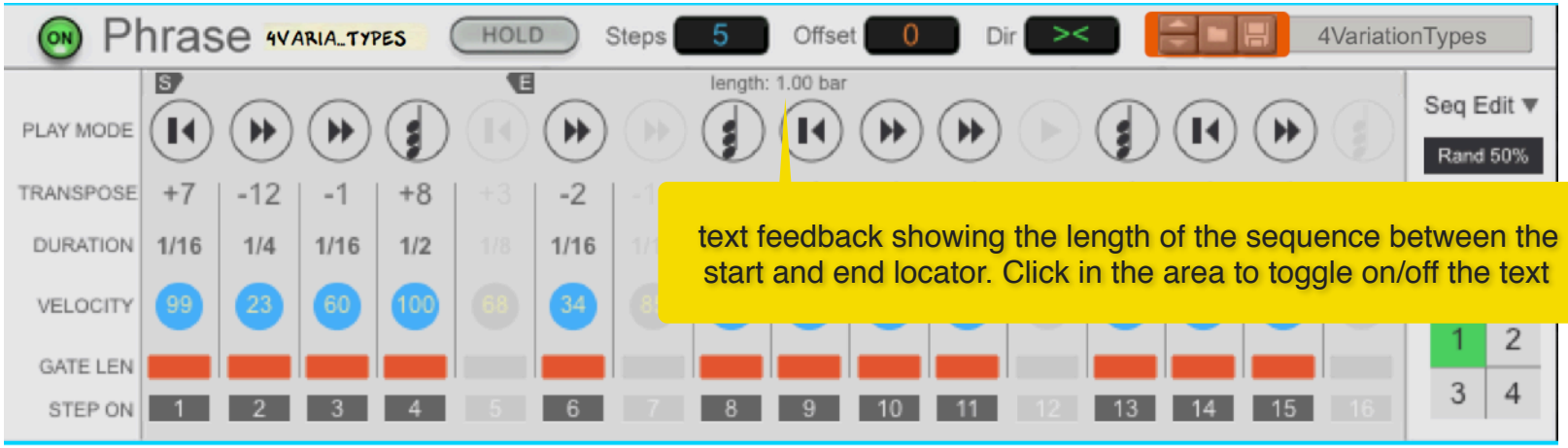

-- VELOCITY EDIT --
Shift Left
Shift Right
Shuffle
Randomize
Reset
Preset
EXT velocity
5
6
7
8
9
Crescendo (fixed)
Crescendo (variable)
Diminuendo (fixed)
Diminuendo (variable)
creates a velocity crescendo for the steps between the start and end locators using 9 as the min and 127 as the max
creates a velocity crescendo for the steps between the start and end locators using the start step value as the min and the end step value as the max
creates a velocity decrescendo for the steps between the start and end locators using 10 as the min and 127 as the max
creates a velocity decrescendo for the steps between the start and end locators using the start step value as the max and the end step value as the min

3.2.5 Duration

Unlike typical step sequencer and arpeggiators, Phrase lets you select a duration for each step which can be as short as 1/64 or as long as 1 full bar. For a given step, clicking on the duration value opens up a menu with the various length options. Also, clicking on the "Duration" label opens the "Duration Edit" menu with options for affecting the duration for all the steps between the start and end locators.

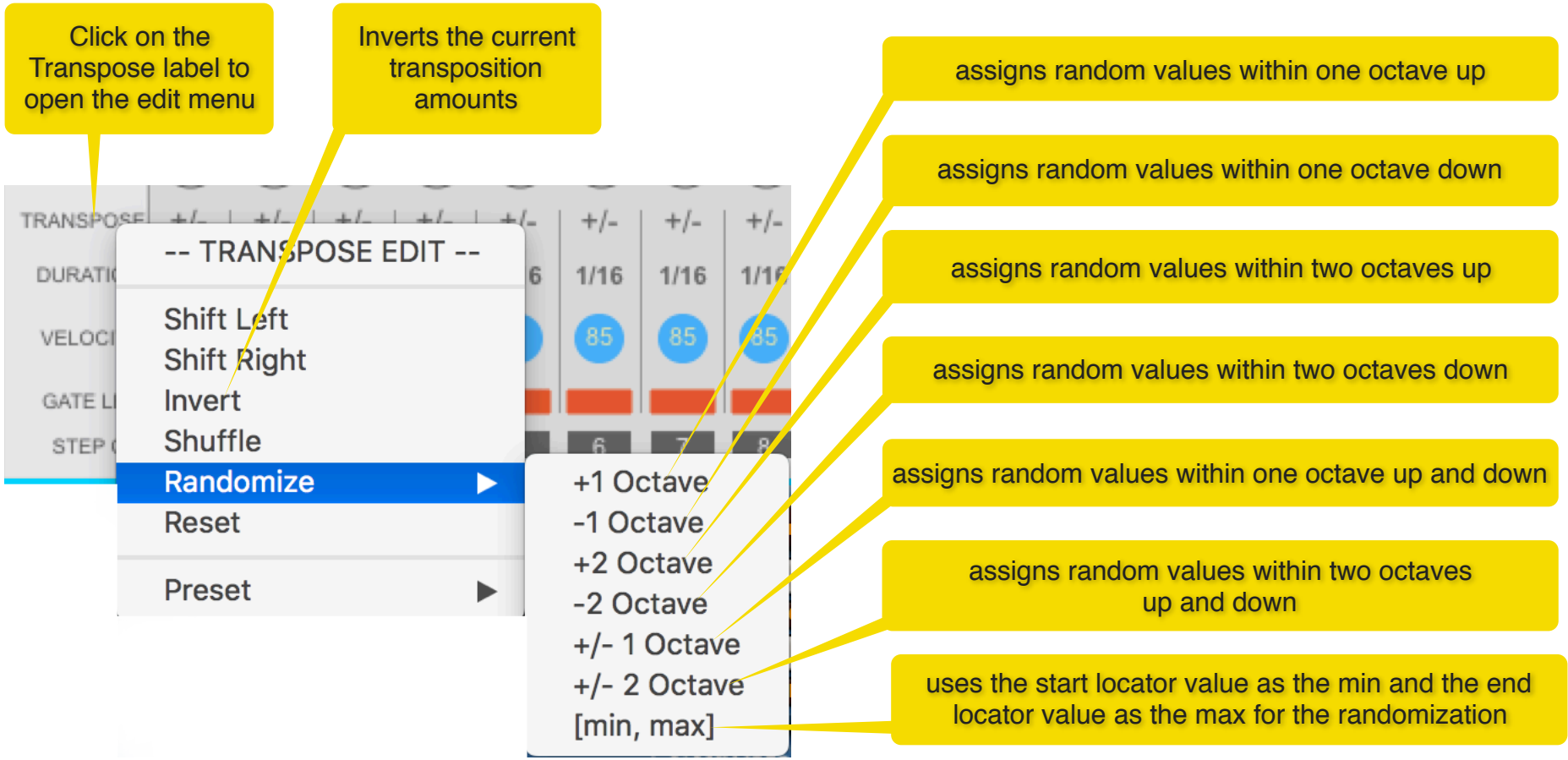


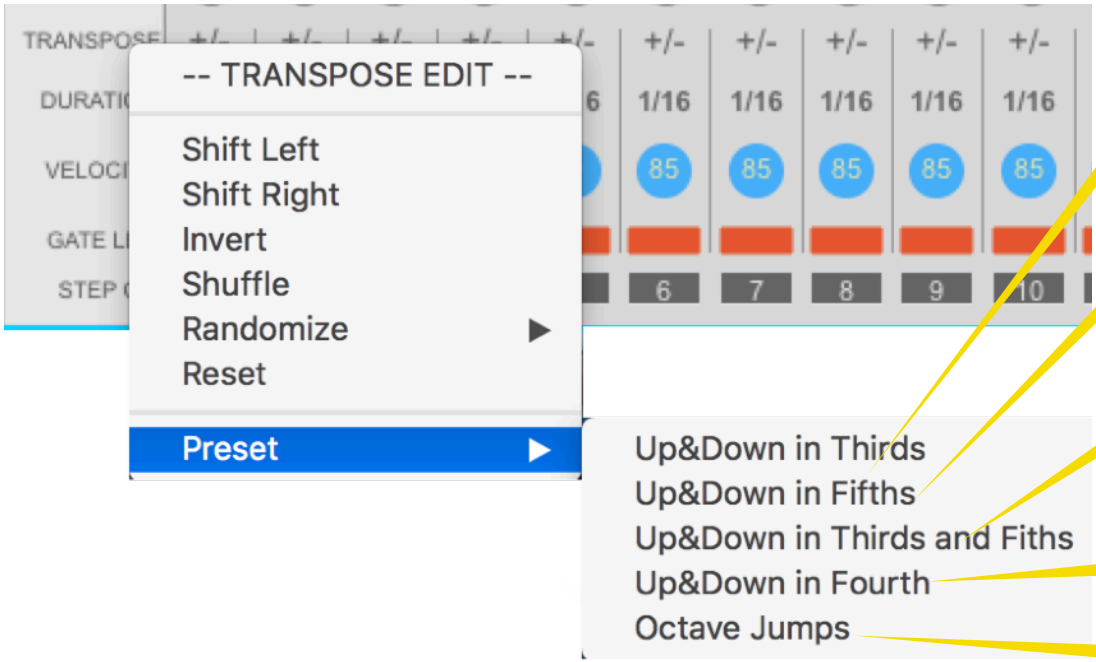
Whenever you change any of the duration parameters or you change the number of steps and offset, a temporary text feedback appears in the center of the running light strip to indicate the current length of the sequence included between the start and end point locators. This feedback can be toggled on and off by clicking directly in the area as shown below.



3.2.6 Transpose

For each step, you can set a transposition of the incoming note. You can add or subtract 24 semitones to the incoming note, which translates to a max transposition of 2 octaves up or down. Using the transpose parameter can create really interesting melodic results, but don't be afraid to experiment with other material, like drum or percussive samples. Clicking on the "Transpose" label opens the "Transpose Edit" menu with various options to affect the steps between the start and end locators.





every other step is either raised or lowered by 4 semitones

every other step is either raised or lowered by 7 semitones

every other step is either raised or lowered by 4 or 7 semitones alternating

every other step is either raised or lowered by 5 semitones

every other step is either raised or lowered by 12 semitones

3.2.7 Play Mode

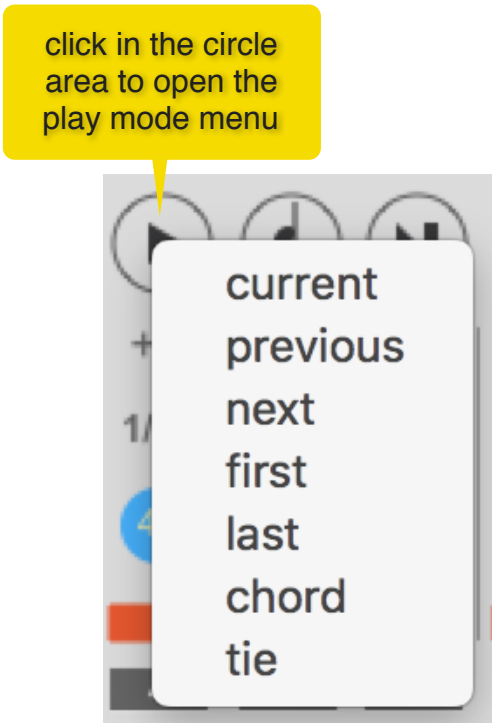
The Play Mode determines which note is played when you have more than one key pressed at the same time on your keyboard. By changing the play mode parameters you can go from classic arpeggiator patterns to more advanced sequences that go beyond typical arpeggios.

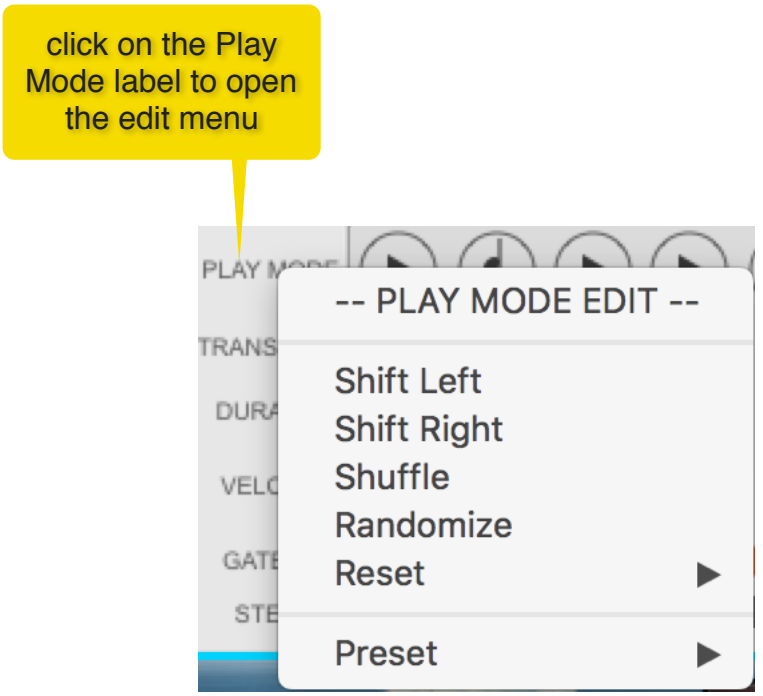
It is important to understand that the Play Mode options have a different effect based on the setting for "Note Order" (accessible from the "Seq Edit" menu). Basically, Note Order determines how the notes pressed on your keyboard are stored internally by the device. If Note Order is set to "*As Played*", then the notes are stored in the order they were received. On the other hand, if Note Order is set to "*Note Number*", then the notes are stored from the lowest to the highest note, regardless of when they were received.

Note Order / PlayMode	*As Played*	*Note Number*
	of the notes currently held down, plays the note that was just pressed or continues to play the note that was playing in the previous step	
	of the notes currently held down, plays the first note pressed in temporal order	of the notes currently held down, plays the note with the lowest note number (pitch)
	of the notes currently held down, plays the last note pressed in temporal order	of the notes currently held down, plays the note with the highest note number (pitch)
	of the notes currently held down, plays the note pressed before the note played in the previous step (if it exists, or continues to play the previous note)	of the notes currently held down, plays the note which is lower than the note played in the previous step (if if exists, otherwise continues to play the previous note)
	of the notes currently held down, plays the note pressed after the note played in the previous step (if it exists, otherwise continues to play the previous note)	of the notes currently held down, plays the note which is higher than the note played in the previous step (if if exists, otherwise continues to play the last note)
	plays all the notes currently held down as a chord	
	ties the current step to the previous step and extends the previous step by the current step's duration. All other parameters are the same as those of the previous step	

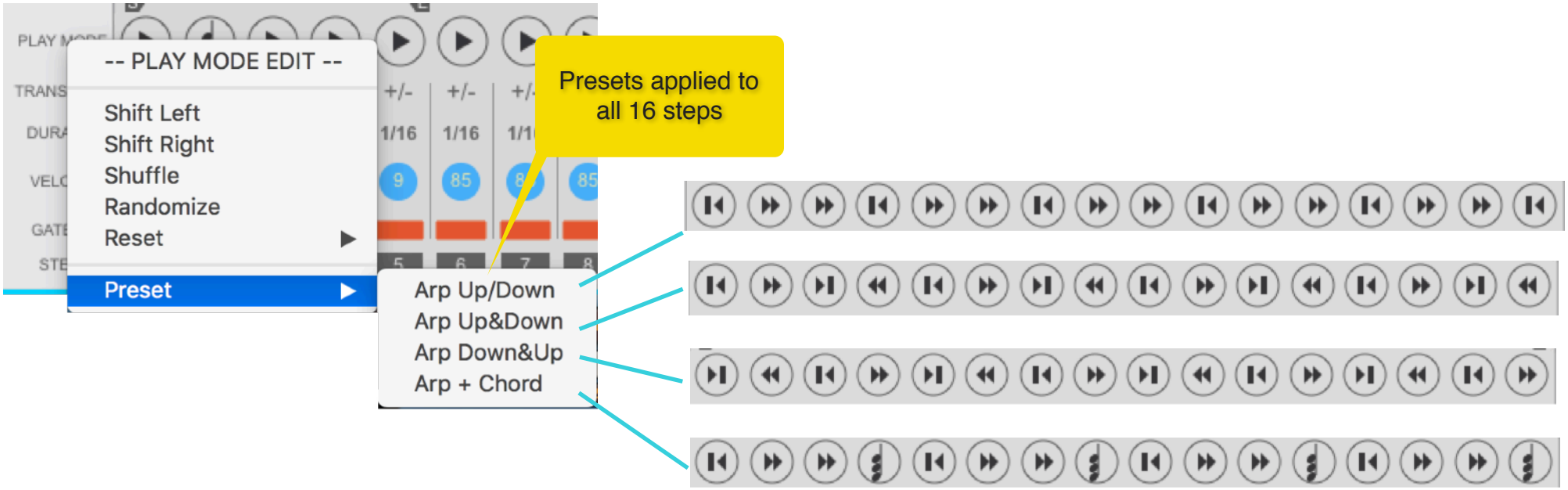
Of course if you have only one note pressed on the keyboard, all play modes parameter just play that note, so you don't need to worry about making adjustments even for sequences that were intended for multiple key presses at the same time.

To select a play mode for a step, simply click on it to open the selection menu. If you click on the Play Mode label, then you get access to the Play Mode edit menus which offers various options for altering all the steps between the start and end locators.





The Play Mode presets offer a quick way of creating classic arpeggio patterns, like Up/Down, Up and Down, and so on. The preset will be applied for the steps between the start and end loop locators, so if you change these locators for editing purpose, you can mix and match different patterns to create more complex ones.

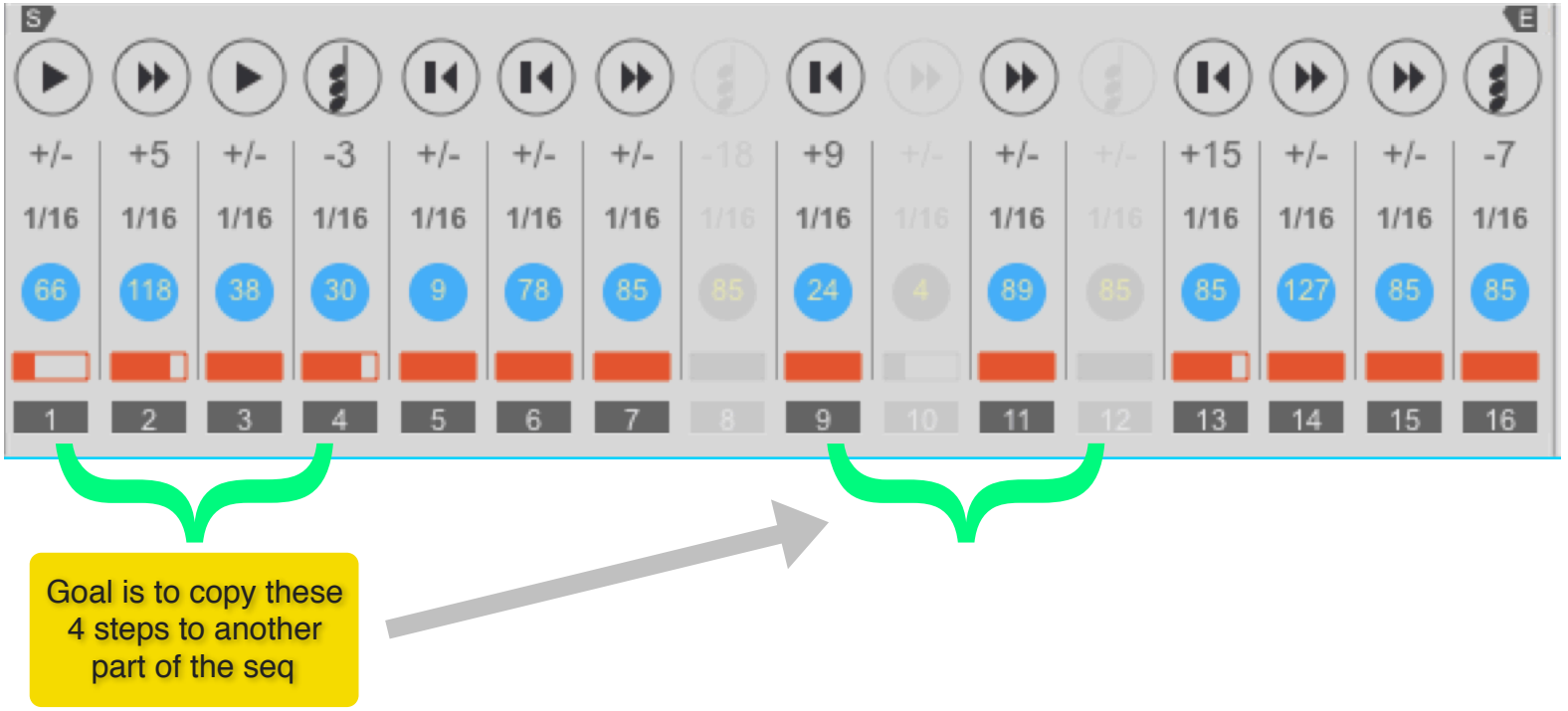


3.3 Sequence Edit

So far we have discussed the editing of a single step, or of rows for successive steps for a specific parameter only. With the Sequence Edit menu it is possible to alter all of the parameters at once for the steps contained between the start and end locators.

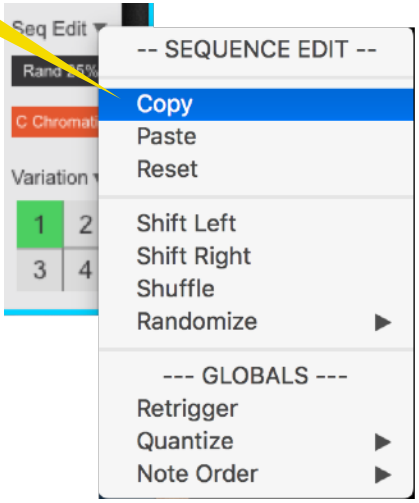
3.3.1 Copy and Paste

Let's say you are programming a sequence and you stumble on a combination of steps which sound quite good and you would like to repeat those same steps somewhere later in the sequence. One obvious options if to copy and paste each step one by one. But there is a faster way and it involves using the Start and End locators as selection tools. This technique is discussed in more details in **section 4.1** and it can be used for most other editing functions as well.

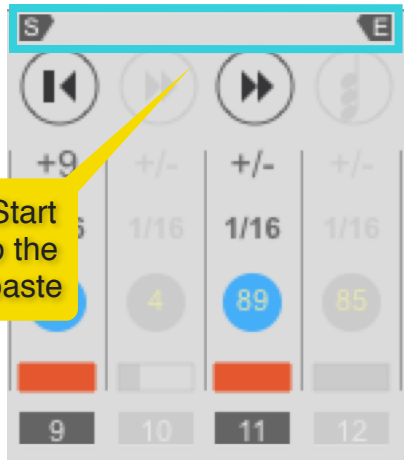


Step1: move the Start and End locators to the steps you want to copy

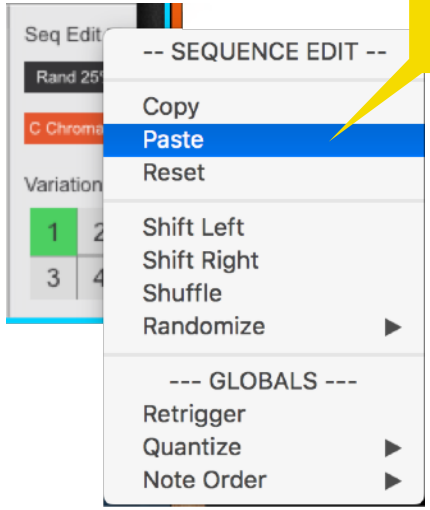
Step 2: click on Copy from the Seq Edit Menu



Step 3: move the Start and End locators to the steps you want to paste

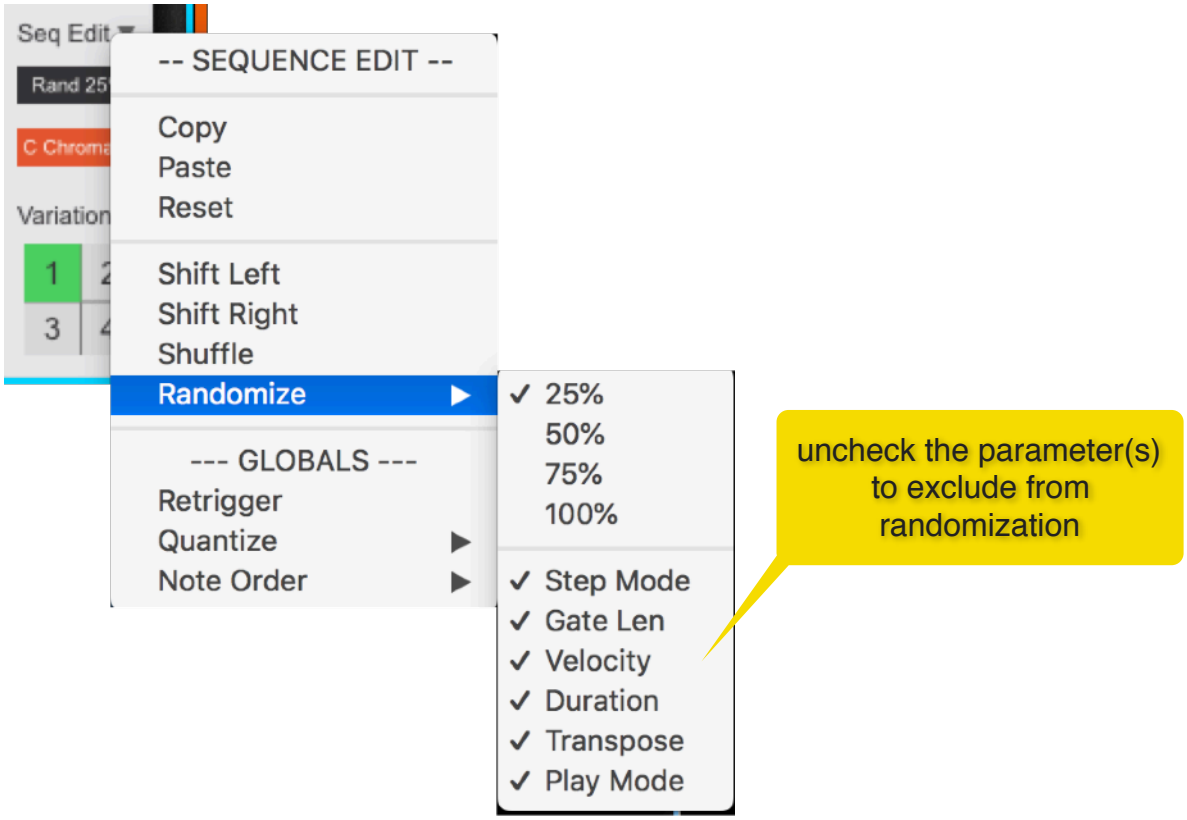


Step 4: paste the steps to the new location!



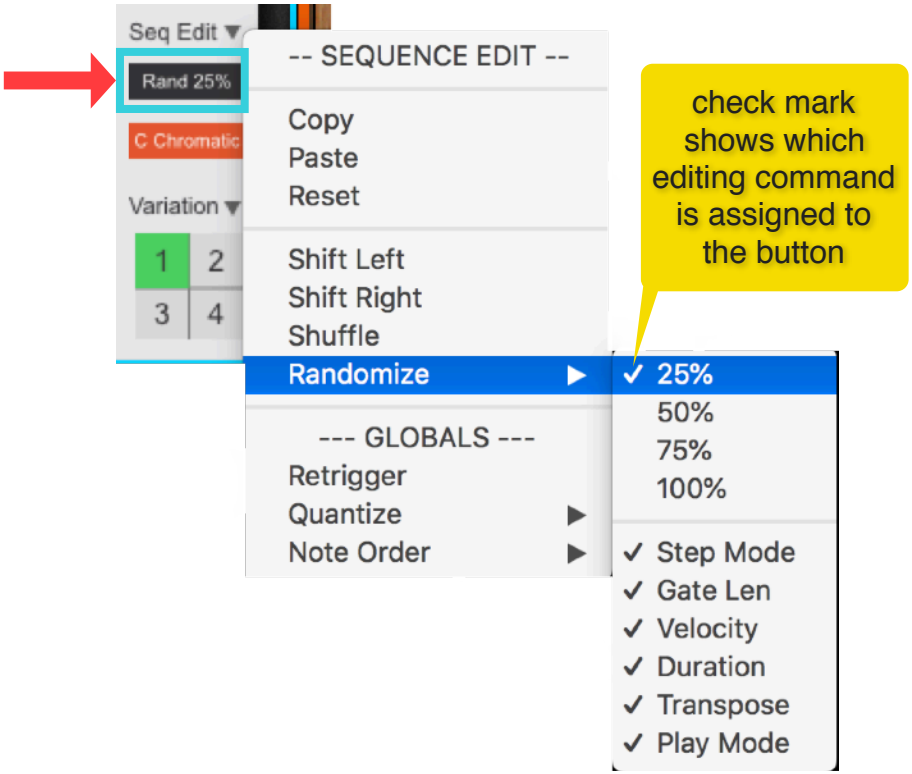
3.3.2 Randomization

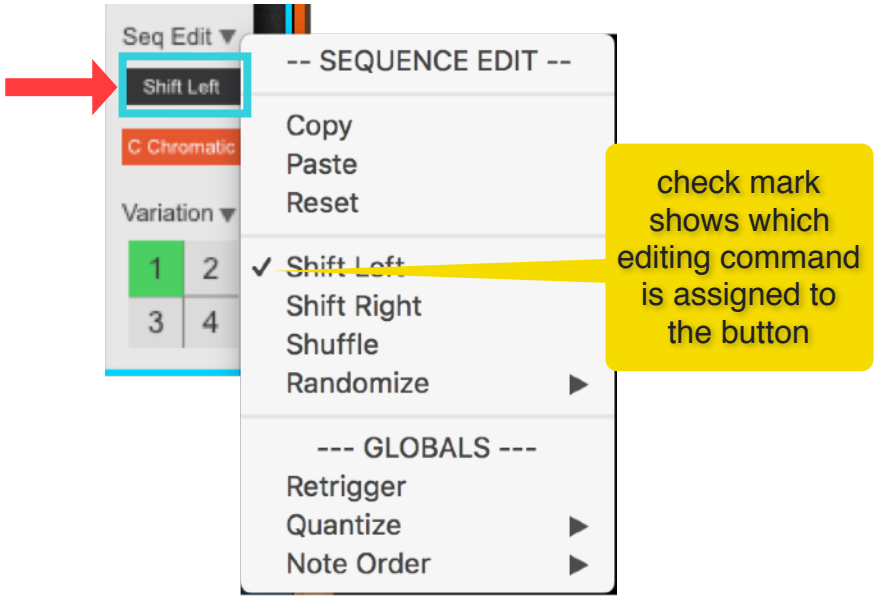
Randomization can be a great way to come up with interesting sequences with little effort. You have the option to control the "strength" of the randomization by choosing how many parameters you want to alter. There are 4 options, 25%, 50%, 75% and 100%. At 25% only few parameters will be altered, at 100% most parameters will be altered. If you want to exclude certain parameters from randomization, you can do that by unchecking them in the list.



3.3.3 Fast Edit Button

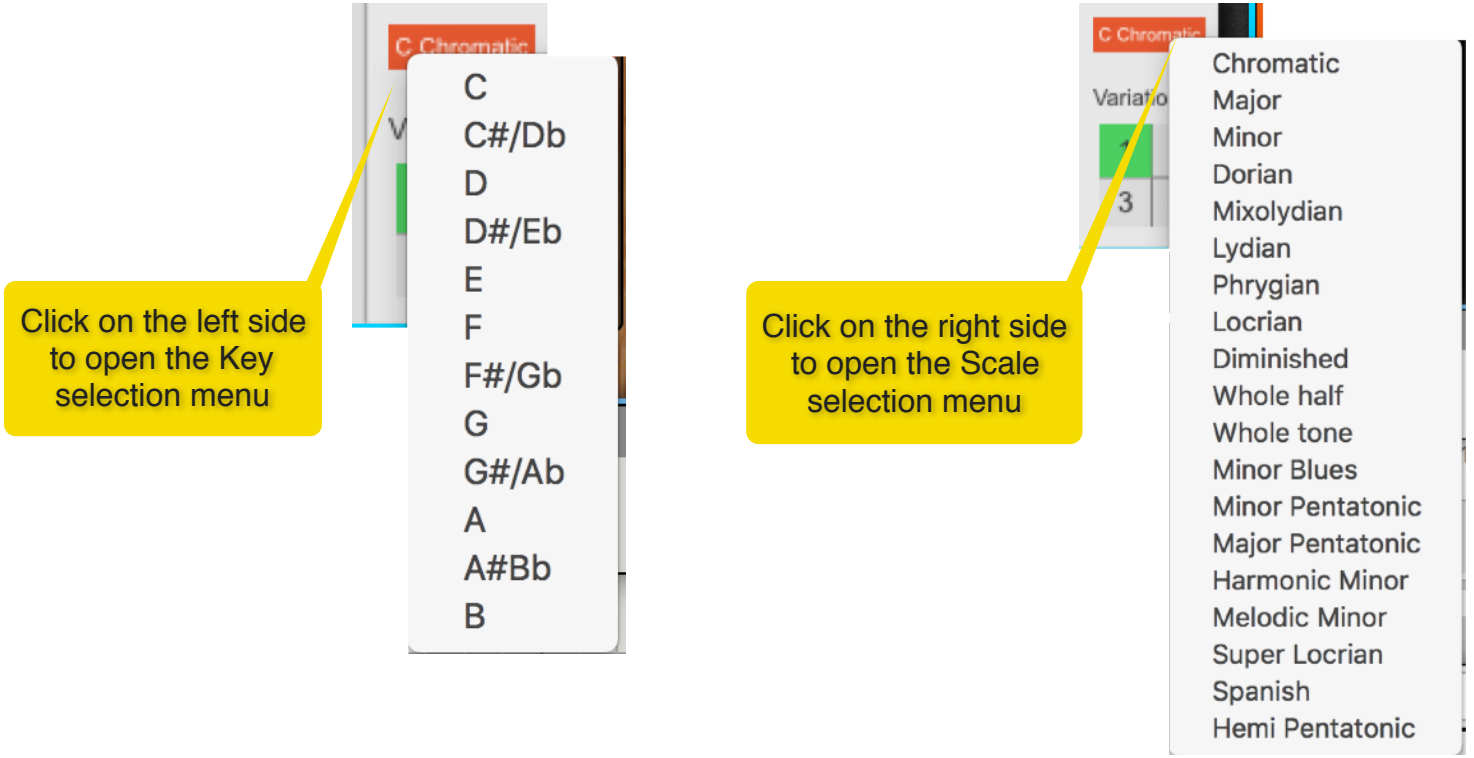
When you are executing editing functions like "Shift Left", "Shift Right", "Shuffle" and "Randomize", instead of using the edit menu multiple times to repeat the same action, you can use the "Fast Edit" button. Located just below the "Seq Edit" label, it remembers the last operation you performed from the edit menu and will repeat that operation again when you press it.





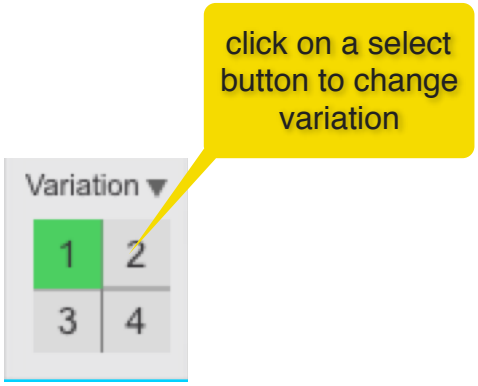
3.3.4 Scale and Key Correction

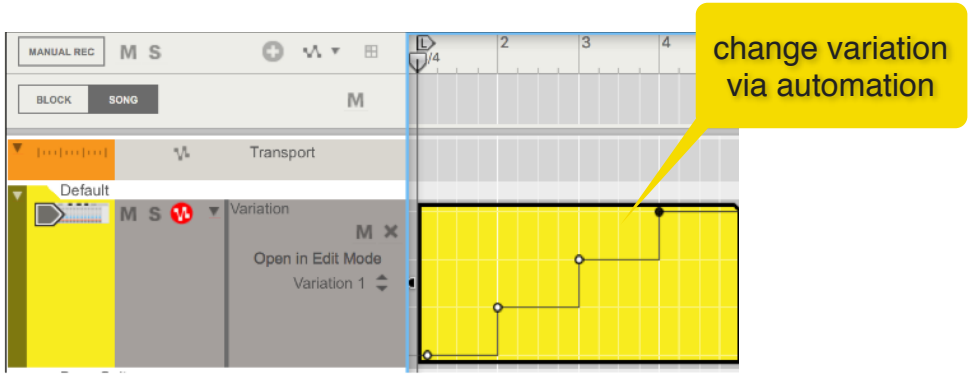
You can force the outgoing notes to a certain scale and key. The correction happens as the very last step, that is note transpositions as well as chords will be corrected. Very convenient to have enabled when you want to "tame" the results of randomizations!

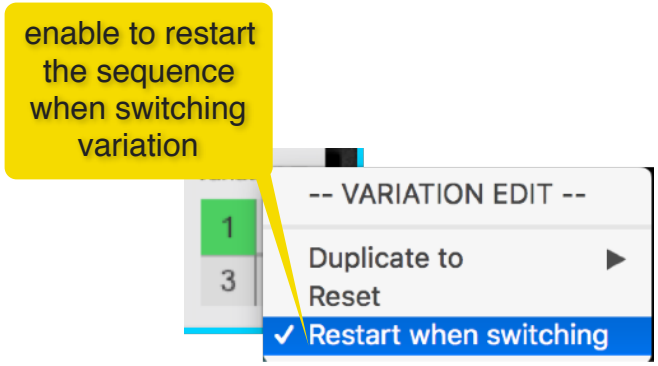


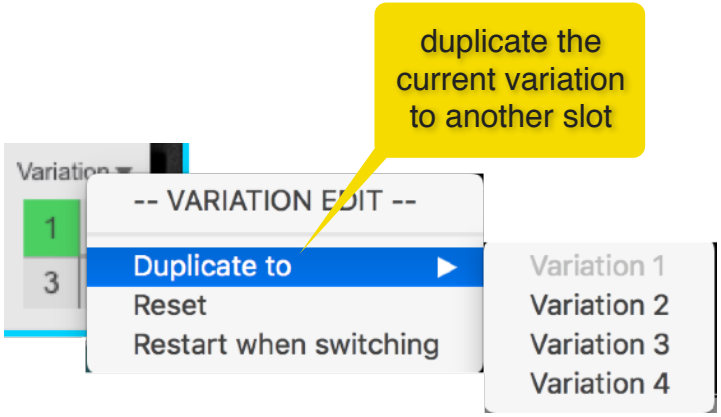
3.4 Variations

Phrase can have 4 different sequence variations per patch. You can change variation live during play, either by clicking on the 4 variation select buttons or by automating the variation parameter in the sequencer. Clicking on the "Variation" label opens the edit menu with various options like duplicating the current sequence to another slot or resetting the entire sequence. An important parameter is the "Restart when switching" option. By default, when you change variations, the sequence will continue to play from the current step in to the next variation. This is called "Legato". If you want the sequence to restart from the start step when you switch variations, then enable "Restart when switching". When enabled, you will see a check mark next to it.





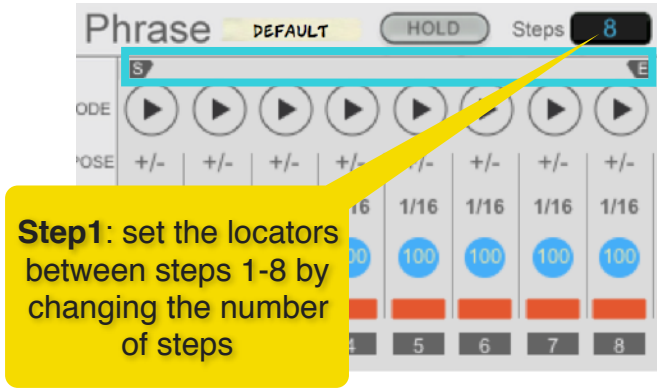




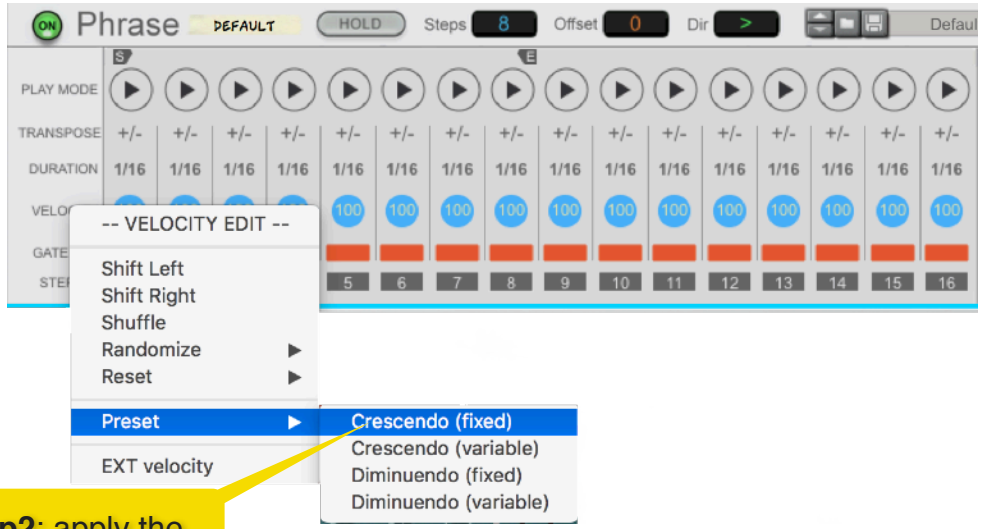
4. Tips and Tricks

4.1 Using the Start and End locators as selectors for editing

You can use the Start and End locators to perform editing functions. Basically, when used this way, you move the locators to a certain position in the sequence only temporarily, for the purpose of performing an editing task, and then you return them to their original positions. In section 3.3.1, there is already an example of using the locators as selectors for copy and paste of steps.
Here it's another example where the goal is to create a velocity crescendo from steps 1-8 and a velocity decrescendo from steps 9-16.

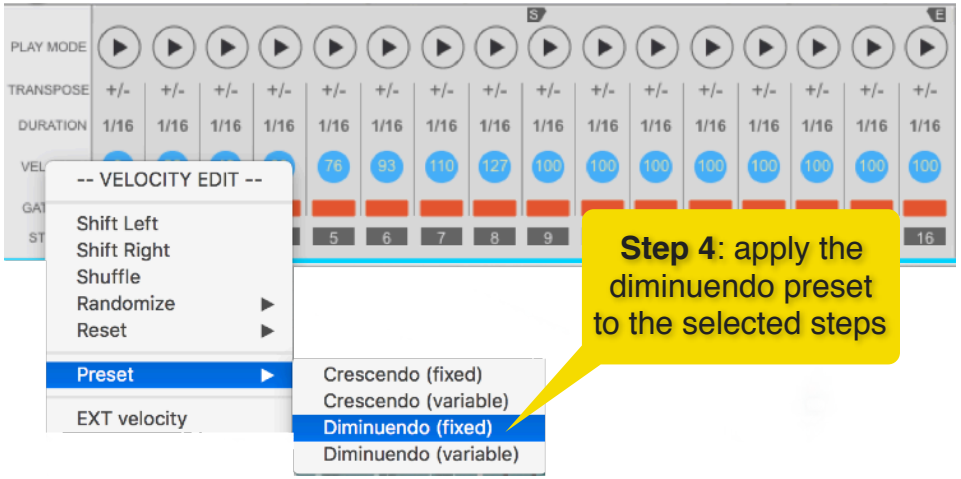


Step1: set the locators between steps 1-8 by changing the number of steps

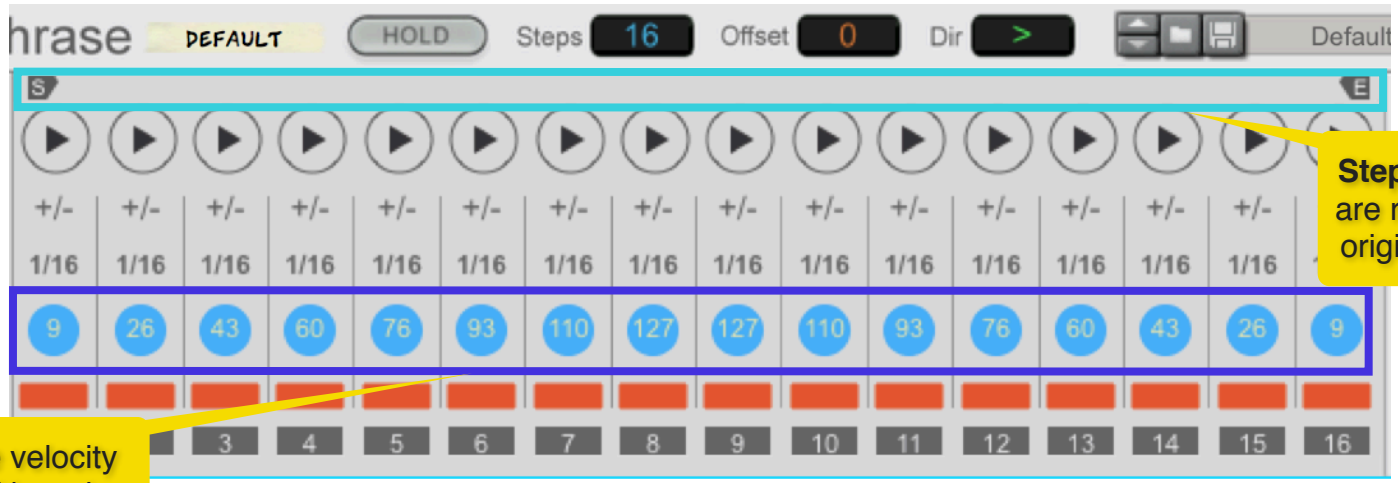


Step2: apply the crescendo preset to the selected steps

Step 3: move the locators to steps 9-16 by changing the offset



Step 4: apply the diminuendo preset to the selected steps



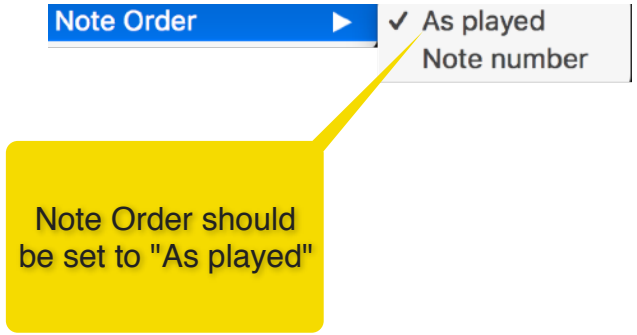
Step 5: the locators are returned to their original positions…

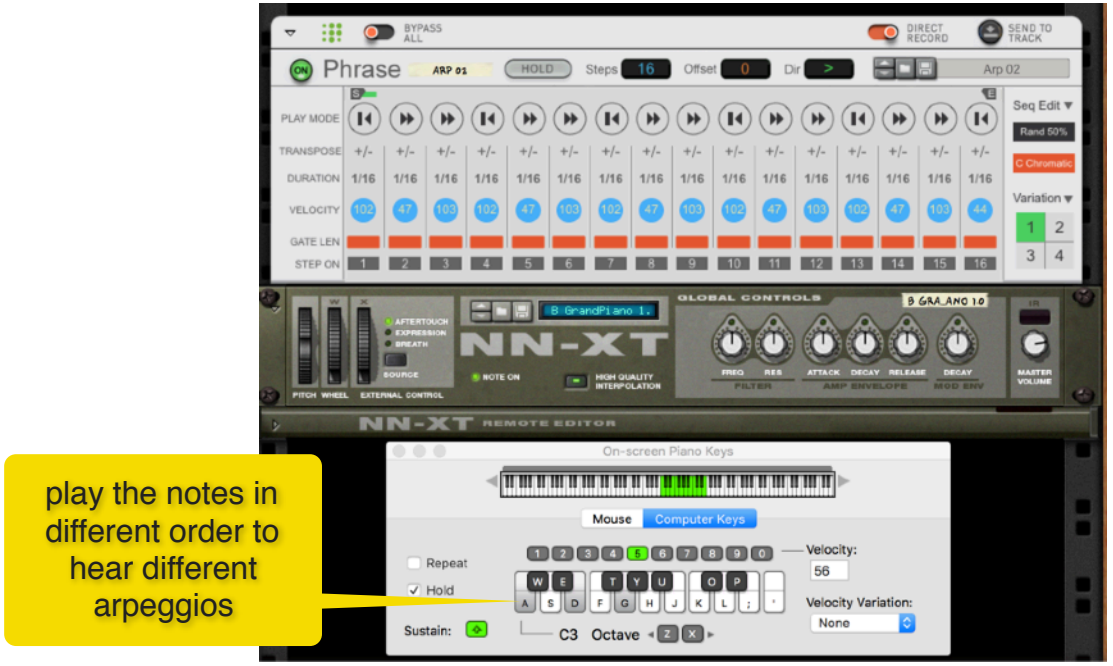
…and the velocity ramp up/down is done!

4.2 "As you go" arpeggios

In traditional arpeggiators, you set in advance the order in which the notes are played. Usually it's low to high or high to low, or a combination of those. With Phase, you can press the same three notes, and based on the order they were played, you get different results. As long as you have the Note Order set to "As Played", then this is true.

For example, load the factory patch "Arp 01" from the "Arp Variations" folder, and play a simple C Major chord (C, E, G). But instead of pressing all keys at once, press the keys one after the other. There is no reason for you to play chords this way but this makes it easier to see. You should notice that when you press the keys in different order, the resulting arpeggio will sound different. You can use this technique with more complex patches and change the sound of the sequence "as you go" just by rotating the key presses.



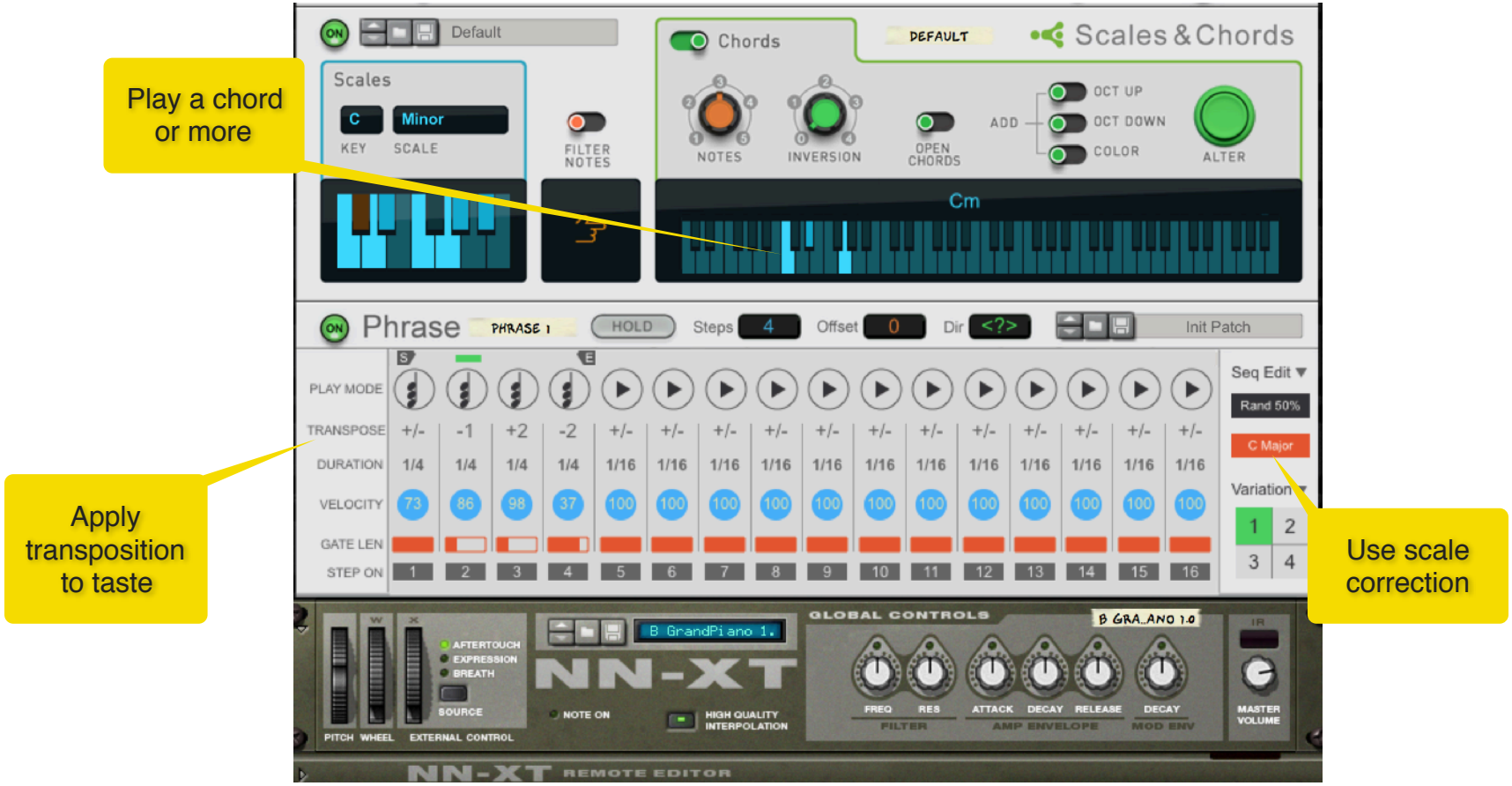


4.3 Experimenting with Chord Progressions

Since Phase is capable to outputting chords, you can experiment with progressions and get some interesting results (fingers crossed). There are multiple approaches to this, but in this section, we'll discuss two of them.

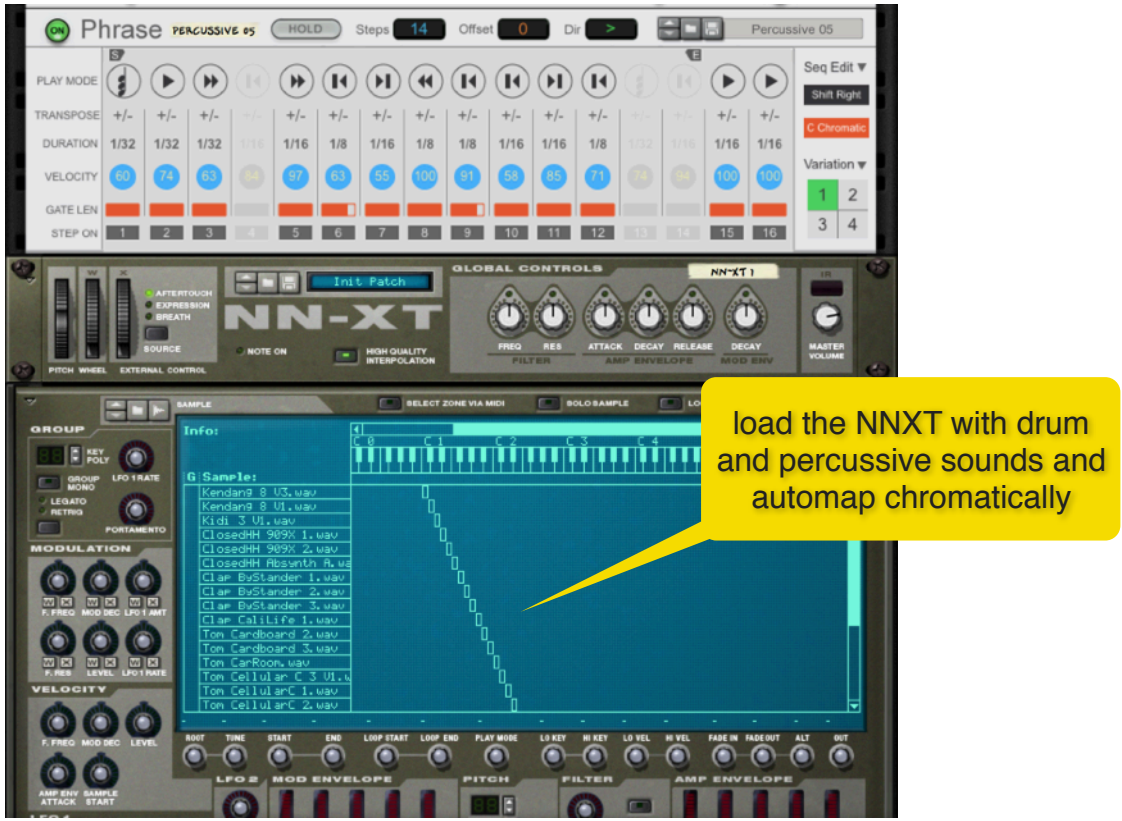
The first one is great for coming up with parallel progressions which are very commonly used in genres like deep house and some IDM. For that classic sound, the key is to play a single chord (typically some 7th chord) and then use transposition to create some interesting movements.

This second example is for more typical chord progressions. The concept is similar to the first example, in that you use step transposition to move the chord notes around, but this time with Scale correction enabled so that the notes are being forced to the same scale, thus creating chords which are fully diatonic. And in contrast to the other example, you don't have to play the same chord, but you can change chords as you like until you find a progression that works.



4.4 Percussive ideas

Some interesting results can be obtained when using Phrase with drum samples. The trick of using arpeggiators to create drum fills is well known. Because Phrase can also send multiple notes per step and each step can have its own duration, things can get even more interesting. You can hook up Phrase to one of the stock drum machines, like Kong or Redrum. But if you want to get even more bang for your buck, we recommend using an NNXT with loads of drum or percussive samples loaded. This will increase the chance for happy accidents. In the example below, an NNXT with over 30 drum samples is used. Try it with some of the patches from the "Percussive" folder and see what you can come up with!



4.5 Short and Sweet

Sometimes you only need a few steps to get interesting results. With the right synth patch, you can create some great textures by using fast steps and high transpositions. In the example below, we are using Europa with the default patch. In Phrase, the sequence consists only of 3 steps with some significant transpositions. By adjusting the Amp settings on the synth, you can go from staccato to more ambient textures with minimal effort. To keep everything within your working key and scale, you can use the built in note correction.

use only few steps with fast durations and high transpositions

turn on note correction if you want to stay within the chosen key and scale

adjust the Amp settings to create your desired texture

5. MIDI Implementation

MIDI CC - Parameter

[4] = Variation
[5] = NumberSteps_P1
[7] = NumberSteps_P2
[8] = NumberSteps_P3
[10] = NumberSteps_P4
[12] = OffsetSteps_P1
[13] = OffsetSteps_P2
[14] = OffsetSteps_P3
[15] = OffsetSteps_P4
[16] = Direction_P1
[17] = Direction_P2
[18] = Direction_P3
[19] = Direction_P4
[20] = Scale_P1
[21] = Scale_P2
[22] = Scale_P3
[23] = Scale_P4
[24] = Key_P1
[25] = Key_P2
[26] = Key_P3
[27] = Key_P4
[28] = Transpose1_P1
[29] = Transpose2_P1
[30] = Transpose3_P1
[31] = Transpose4_P1
[33] = Transpose5_P1
[34] = Transpose6_P1
[35] = Transpose7_P1
[36] = Transpose8_P1
[37] = Transpose9_P1

[39] = Transpose10_P1
[40] = Transpose11_P1
[41] = Transpose12_P1
[42] = Transpose13_P1
[43] = Transpose14_P1
[44] = Transpose15_P1
[45] = Transpose16_P1
[46] = Transpose1_P2
[47] = Transpose2_P2
[48] = Transpose3_P2
[49] = Transpose4_P2
[50] = Transpose5_P2
[51] = Transpose6_P2
[52] = Transpose7_P2
[53] = Transpose8_P2
[54] = Transpose9_P2
[55] = Transpose10_P2
[56] = Transpose11_P2
[57] = Transpose12_P2
[58] = Transpose13_P2
[59] = Transpose14_P2
[60] = Transpose15_P2
[61] = Transpose16_P2

[62] = Transpose1_P3
[63] = Transpose2_P3
[65] = Transpose3_P3
[66] = Transpose4_P3
[67] = Transpose5_P3
[68] = Transpose6_P3
[69] = Transpose7_P3
[70] = Transpose8_P3
[71] = Transpose9_P3
[72] = Transpose10_P3
[73] = Transpose11_P3
[74] = Transpose12_P3
[75] = Transpose13_P3
[76] = Transpose14_P3
[77] = Transpose15_P3
[78] = Transpose16_P3
[79] = Transpose1_P4
[80] = Transpose2_P4
[81] = Transpose3_P4
[82] = Transpose4_P4
[83] = Transpose5_P4
[84] = Transpose6_P4
[85] = Transpose7_P4
[86] = Transpose8_P4
[87] = Transpose9_P4
[88] = Transpose10_P4
[89] = Transpose11_P4
[90] = Transpose12_P4
[91] = Transpose13_P4
[92] = Transpose14_P4
[93] = Transpose15_P4
[94] = Transpose16_P4

6. Remote Implementation

To obtain the complete list of all the available parameters which are controllable via Remote, use the "Extract Device Remote Info" from the File menu in Reason. Here is a partial list of all available parameters.

Scope				
Manufacturer	Model			
Retouch Control	com.retouchcontrol.Phrase			
Remotable	Min	Max	Input type	Output type
Steps Var1	0	15	Value	ValueOutput
Offset Var1	0	15	Value	ValueOutput
Dir Var1	0	6	Value	ValueOutput
Scale Var1	0	18	Value	ValueOutput
Key Var1	0	11	Value	ValueOutput
Transpose1 Var1	0	48	Value	ValueOutput
Transpose2 Var1	0	48	Value	ValueOutput
Transpose3 Var1	0	48	Value	ValueOutput
Transpose4 Var1	0	48	Value	ValueOutput
Transpose5 Var1	0	48	Value	ValueOutput
Transpose6 Var1	0	48	Value	ValueOutput
Transpose7 Var1	0	48	Value	ValueOutput
Transpose8 Var1	0	48	Value	ValueOutput
Transpose9 Var1	0	48	Value	ValueOutput
Transpose10 Var1	0	48	Value	ValueOutput
Transpose11 Var1	0	48	Value	ValueOutput
Transpose12 Var1	0	48	Value	ValueOutput
Transpose13 Var1	0	48	Value	ValueOutput
Transpose14 Var1	0	48	Value	ValueOutput
Transpose15 Var1	0	48	Value	ValueOutput
Transpose16 Var1	0	48	Value	ValueOutput
Steps Var2	0	15	Value	ValueOutput
Offset Var2	0	15	Value	ValueOutput
Dir Var2	0	6	Value	ValueOutput
Scale Var2	0	18	Value	ValueOutput
Key Var2	0	11	Value	ValueOutput
Transpose1 Var2	0	48	Value	ValueOutput
Transpose2 Var2	0	48	Value	ValueOutput
Transpose3 Var2	0	48	Value	ValueOutput
Transpose4 Var2	0	48	Value	ValueOutput
Transpose5 Var2	0	48	Value	ValueOutput
Transpose6 Var2	0	48	Value	ValueOutput
Transpose7 Var2	0	48	Value	ValueOutput
Transpose8 Var2	0	48	Value	ValueOutput
Transpose9 Var2	0	48	Value	ValueOutput
Transpose10 Var2	0	48	Value	ValueOutput
Transpose11 Var2	0	48	Value	ValueOutput
Transpose12 Var2	0	48	Value	ValueOutput
Transpose13 Var2	0	48	Value	ValueOutput
Transpose14 Var2	0	48	Value	ValueOutput
Transpose15 Var2	0	48	Value	ValueOutput
Transpose16 Var2	0	48	Value	ValueOutput
Steps Var3	0	15	Value	ValueOutput
Offset Var3	0	15	Value	ValueOutput
Dir Var3	0	6	Value	ValueOutput
Scale Var3	0	18	Value	ValueOutput
Key Var3	0	11	Value	ValueOutput
Transpose1 Var3	0	48	Value	ValueOutput
Transpose2 Var3	0	48	Value	ValueOutput
Transpose3 Var3	0	48	Value	ValueOutput
Transpose4 Var3	0	48	Value	ValueOutput
Transpose5 Var3	0	48	Value	ValueOutput
Transpose6 Var3	0	48	Value	ValueOutput
Transpose7 Var3	0	48	Value	ValueOutput
Transpose8 Var3	0	48	Value	ValueOutput
Transpose9 Var3	0	48	Value	ValueOutput
Transpose10 Var3	0	48	Value	ValueOutput
Transpose11 Var3	0	48	Value	ValueOutput
Transpose12 Var3	0	48	Value	ValueOutput
Transpose13 Var3	0	48	Value	ValueOutput
Transpose14 Var3	0	48	Value	ValueOutput
Transpose15 Var3	0	48	Value	ValueOutput
Transpose16 Var3	0	48	Value	ValueOutput
Steps Var4	0	15	Value	ValueOutput
Offset Var4	0	15	Value	ValueOutput
Dir Var4	0	6	Value	ValueOutput
Scale Var4	0	18	Value	ValueOutput
Key Var4	0	11	Value	ValueOutput
Transpose1 Var4	0	48	Value	ValueOutput
Transpose2 Var4	0	48	Value	ValueOutput
Transpose3 Var4	0	48	Value	ValueOutput
Transpose4 Var4	0	48	Value	ValueOutput
Transpose5 Var4	0	48	Value	ValueOutput
Transpose6 Var4	0	48	Value	ValueOutput
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Transpose9 Var4	0	48	Value	ValueOutput
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Transpose11 Var4	0	48	Value	ValueOutput
Transpose12 Var4	0	48	Value	ValueOutput
Transpose13 Var4	0	48	Value	ValueOutput
Transpose14 Var4	0	48	Value	ValueOutput
Transpose15 Var4	0	48	Value	ValueOutput
Transpose16 Var4	0	48	Value	ValueOutput
Variation	0	3	Value	ValueOutput
Step1 Var1	0	1	Toggle	ValueOutput
Step2 Var1	0	1	Toggle	ValueOutput
Step3 Var1	0	1	Toggle	ValueOutput
Step4 Var1	0	1	Toggle	ValueOutput
Step5 Var1	0	1	Toggle	ValueOutput
Step6 Var1	0	1	Toggle	ValueOutput
Step7 Var1	0	1	Toggle	ValueOutput
Step8 Var1	0	1	Toggle	ValueOutput
Step9 Var1	0	1	Toggle	ValueOutput
Step10 Var1	0	1	Toggle	ValueOutput
Step11 Var1	0	1	Toggle	ValueOutput
Step12 Var1	0	1	Toggle	ValueOutput
Step13 Var1	0	1	Toggle	ValueOutput
Step14 Var1	0	1	Toggle	ValueOutput
Step15 Var1	0	1	Toggle	ValueOutput
Step16 Var1	0	1	Toggle	ValueOutput
Step1 Var2	0	1	Toggle	ValueOutput
Step2 Var2	0	1	Toggle	ValueOutput
Step3 Var2	0	1	Toggle	ValueOutput
Step4 Var2	0	1	Toggle	ValueOutput
Step5 Var2	0	1	Toggle	ValueOutput
Step6 Var2	0	1	Toggle	ValueOutput
Step7 Var2	0	1	Toggle	ValueOutput
Step8 Var2	0	1	Toggle	ValueOutput
Step9 Var2	0	1	Toggle	ValueOutput
Step10 Var2	0	1	Toggle	ValueOutput
Step11 Var2	0	1	Toggle	ValueOutput
Step12 Var2	0	1	Toggle	ValueOutput
Step13 Var2	0	1	Toggle	ValueOutput
Step14 Var2	0	1	Toggle	ValueOutput
Step15 Var2	0	1	Toggle	ValueOutput
Step16 Var2	0	1	Toggle	ValueOutput
Step1 Var3	0	1	Toggle	ValueOutput

7. Version History

Version 1.0.0: initial release

Version 1.0.3:

Added: Cmd(Mac)/Ctrl(Win) + click to reset a step parameter
Added: Locrian and Super-Locrian scales
Fixed: device error when controlling the scale parameter from a combinator knob
Fixed: shift up/down commands from the Transpose edit menu now only affects the steps which have transpositions
Fixed: "Last" play mode not working as expected when "Note Order" was set to "Note Number"
Fixed: "Scale" and "Key" are now properly labelled when automated in the sequencer

Version 1.0.5:

Added: option under Globals, "Cycle Prev and Next play modes"
Added: "Tie" play mode to tie steps together
Added: expanded Reset options unde the Play Mode edit menu
Fixed: in some instances, "Send Notes to Track" would create overlapping notes
Fixed: Variation label was not legible in the inspector when automated