

ChordSQ

Chord Sequencer Player

Rack Extension for Reason

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CHORD	Maj 7	Maj 7	Maj 7	7sus2	Maj 6	Maj 7	Maj 7	Maj 7	7sus2	Maj 11	Single	Single	Single	Single	Single	Single
ROOT NOTE	F2	G#2	D#2	C2	C2	F2	G#2	D#2	C2	B1	C3	C3	C3	C3	C3	C3
VOICING	Inv2	Inv2	Inv2		Inv1	Inv2	Inv2	Inv2		Inv1						
BASS NOTE	F1	G#1	D#1	C1	C1	F1	G#1	D#1	C1	B0	C2	C2	C2	C2	C2	C2
DURATION	1/2	1/2	1/2	1/4	1/4	1/2	1/2	1/2	1/4	1/4	2 Bar	2 Bar	2 Bar	2 Bar	2 Bar	2 Bar
VELOCITY	90	87	94	91	93	90	87	94	91	89	100	100	100	100	100	100
GATE LEN	Full	Full	Full	Partial	Partial	Full	Full	Full	Partial	Partial	Full	Full	Full	Full	Full	Full
STEP ON	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

USER MANUAL

version 1.0.0

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1. Introduction

ChordSQ is a player instrument for the Reason rack designed to help you create chord progressions. The device interface does away with the traditional piano roll and offers an intuitive way to achieve results fast. It's easy to create or modify progressions in just a few clicks. No drawing of notes required.

At the heart of the player is a 16-step sequencer which is triggered when receiving a note from an external keyboard or MIDI track. For each step of the sequence, you select a root note and choose a chord from the many available presets. Then you can change the chord voicing, add a bass note, set a duration and velocity. Each parameter has dedicated edit menus so that the selected steps can be altered easily. To help you choose chords, set a key and scale and the interface highlights which notes and chords are in the scale. A customizable randomization engine can help spark new ideas but if you want to keep things in check, all outgoing notes can be quantized to the selected key and scale.

The device has three operation modes. In mode 1, any note triggers the sequence. In mode 2, a note triggers the sequence and it also transposes it up or down (no transposition when you play C3). Finally, in mode 3, notes C1 to D#2 play the chords in slots 1 to 16 without triggering the sequence. This last mode turns the player into a one-finger chorder which can store 16 different chords per variation for a total of 64 chords per patch. There are 4 sequence variations per patch, and these can be switched "live" during play.

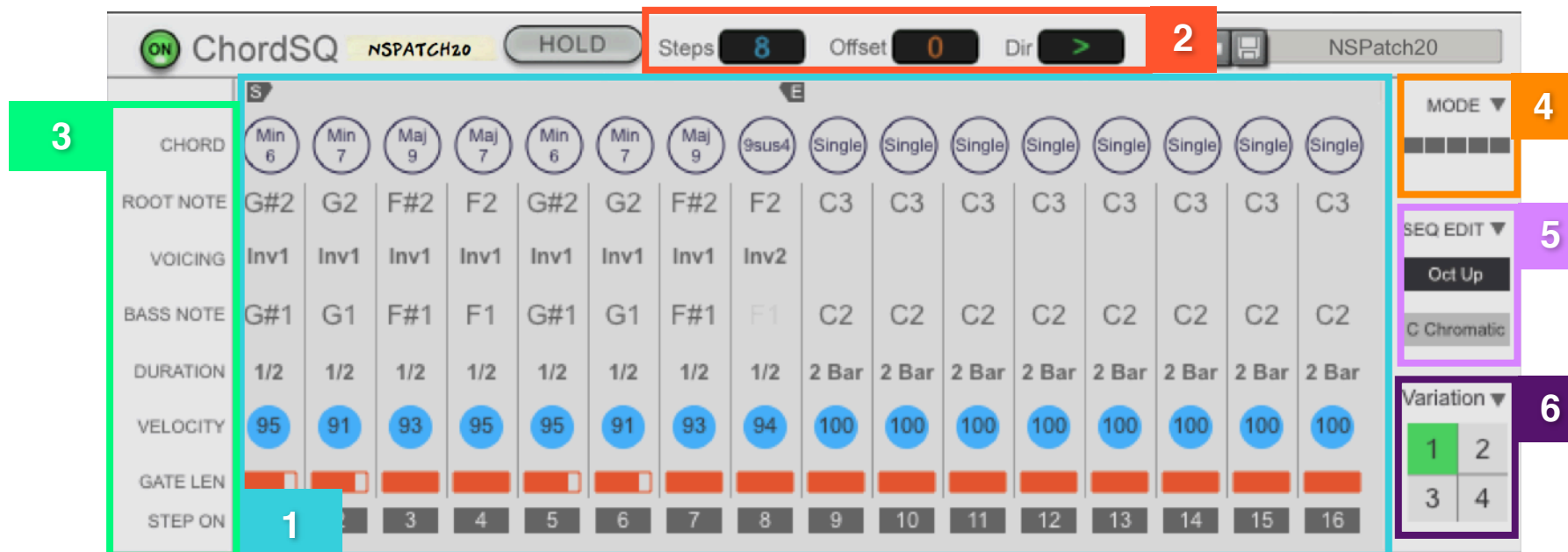
ChordSQ is fast to program, fun to use and it encourages experimentation. Try it out and see for yourself!

Product Details:

- Three operation modes on note input:
 1. triggers the sequence only
 2. triggers and transposes the sequence
 3. plays the chords individually, does not trigger the sequence (chorder mode)
- 16 step sequencer with adjustable number of steps, start offset and travel direction
- Each step 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 lengths relative to the step duration
 3. Velocity - the velocity of the outgoing notes for the given step
 4. Duration - independent for each step, from as short as 1/64 to as long as 4 bars
 5. Bass Note - additional note in the range from C-2 to B5 to be played with the chord (can be turned off)
 6. Voicing - 11 voicing types, including inversions and root-less options
 7. Root Note - base note of the chord in the range from C0 to B7
 8. Chord Type - 42 presets including major, minor, dominant, augmented, diminished and suspended chords
- Various editing menus to quickly create and modify sequences for a single row of parameters or for the entire sequence
- Fast edit button which remember the last editing function performed
- Visual representation of notes and chords in the selected key and scale, plus optional note quantization
- Hold button
- 4 variations per patch with easy duplication and reset
- Play quantization to a selectable time division
- Adjustable swing from light to heavy, plus three levels of velocity humanization
- Automation of sequence parameters, root note, voicing and chord type for all 4 variations
- Comprehensive Remote implementation

2. Overview

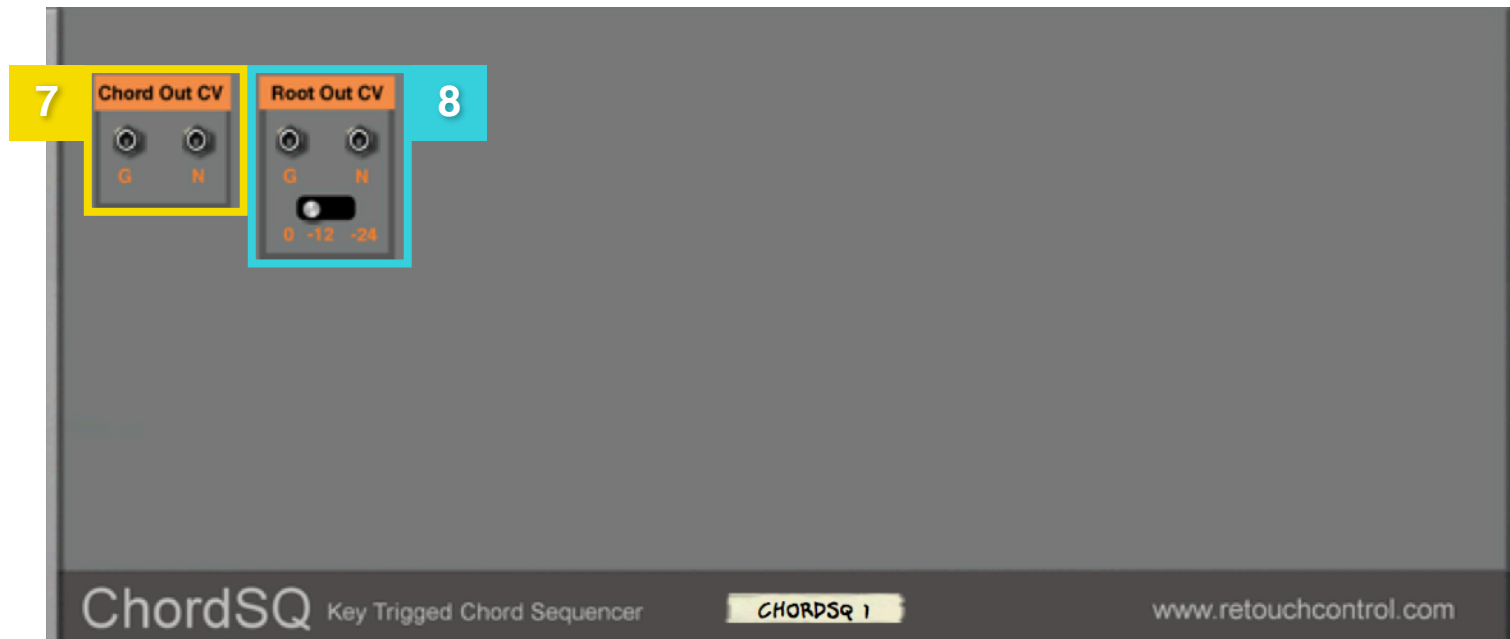
2.1 Front



1. Main interface for programming the sequence. Each step has a set of parameters which can be set independently from the rest.
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 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. There are 3 input modes. In mode one, any incoming note triggers the start of the sequence. In mode two, an incoming note triggers and transposes the sequence (C3 no transposition). In mode three, notes C1 to D#2 trigger the chord slots 1 to 16 respectively without triggering the sequence.

5. 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" locators. The black button remembers the last edit function which was performed from the menu. The grey button is used to set a key and scale.
6. 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 of sequence variations.

2.2 Back



7. Gate and Note CV outputs for the chords. You can connect these to any device and play the chords via CV. You can also use these outputs to connect one or more NoteSet players for correcting incoming notes based on the playing chord.

8. Gate and Note CV outputs for the root note. You can connect these to any device and play only the root note via CV. Additionally you can transpose down the root note by one or two octaves. Great for playing bass parts!

3. Usage

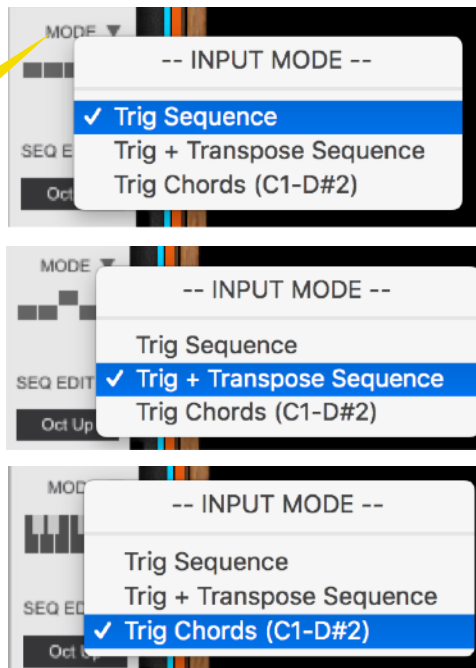
ChordSQ is a player device and hence it needs to be instantiated on top of an instrument. This can be a synth or a sampler.

Just like the native Reason RPG-8 or the Phrase sequencer, a sequence is triggered by pressing a key on a MIDI device or by notes programmed on a MIDI track. Ideally you have a MIDI device connected to your computer which you can play. As you press a key, the sequence of chords starts to play back. If input mode 3 is selected, instead of triggering the entire sequence, notes C1 to D#2 trigger the chords in slots 1 to 16 respectively.

3.1 Input Mode

The input mode dictates how the player reacts to incoming MIDI notes. To select an input mode, click on the "MODE" text in the upper right corner of the device, as shown below.

click on the
Mode label



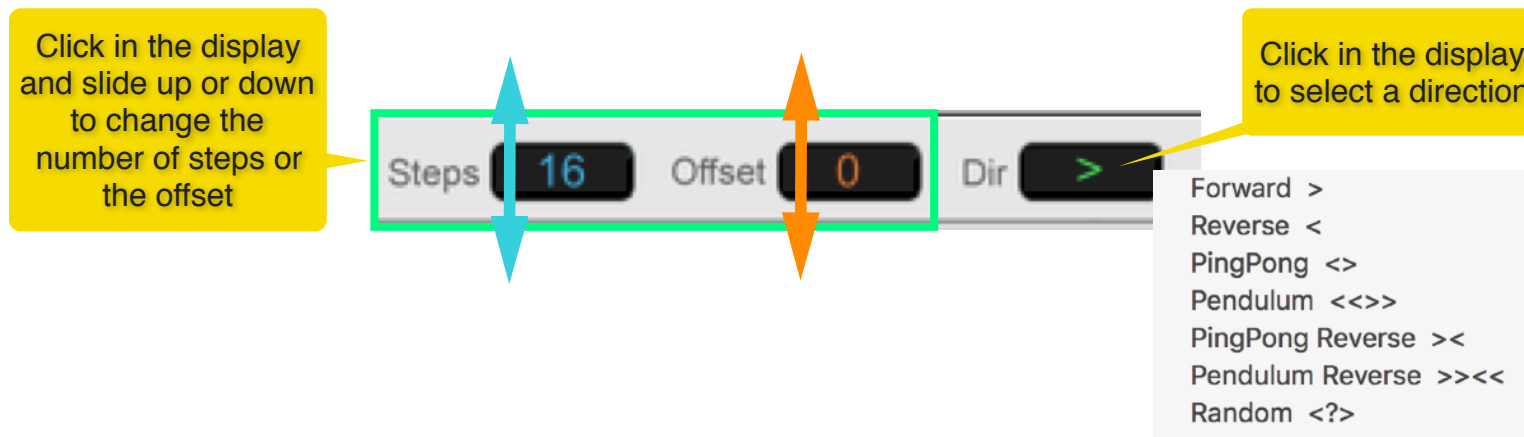
Mode 1: any incoming midi note will trigger the sequence

Mode 2: any incoming midi note will trigger the sequence and transpose it up or down (C3 no transposition)

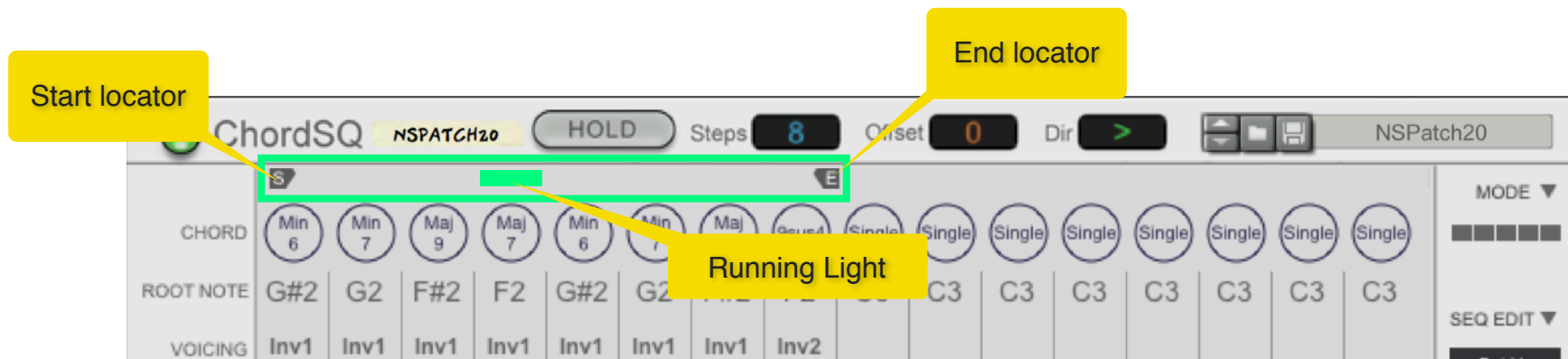
Mode 3: midi notes C1 to D#2 will trigger the chords stored in slots 1 thru 16 respectively and the sequence in **not** triggered

3.2 Sequencer basics

3.2.1 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 see 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

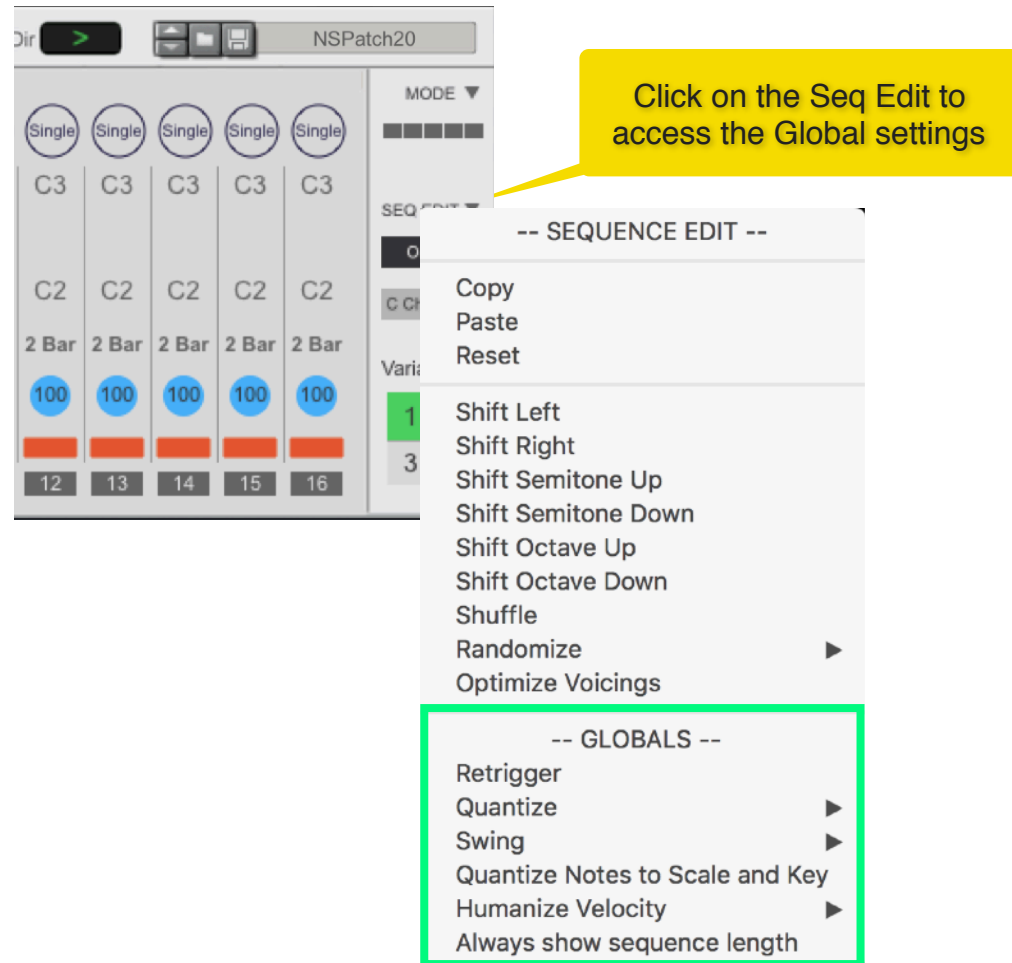
PingPong Reverse >< same as Ping Pong, but starting from the end step in reverse direction

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

3.2.3 Sequence Global Parameters

The global parameters affect how the sequence is played. These can be accessed by clicking on the "Step Edit" label as shown below



✓ Retrigger

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 known as **Legato**.

Quantize

✓ none

Bar

1/2

1/4

1/8

1/16

1/32

1/64

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.

Swing

none

Light

✓ Medium Light

Medium

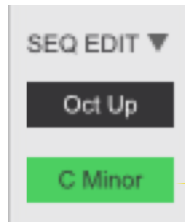
Medium Heavy

Heavy

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.

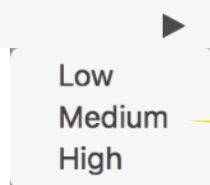
Quantize Notes to Scale and Key

if **enabled**, any note leaving the player will be corrected to match the selected Key and Scale. As a visual indication, the Key and Scale button turns green.



Button turns green when Quantize to Scale and Key is enabled

Humanize Velocity



if **enabled**, the notes in the chord will be played with a random amount of velocity variation note to note. The amount of the variation depends on the intensity level.

Three levels of random velocity variation from note to note

Always show sequence length

if **enabled**, the length of the sequence between the Start and End point locators is always shown in the top display area.

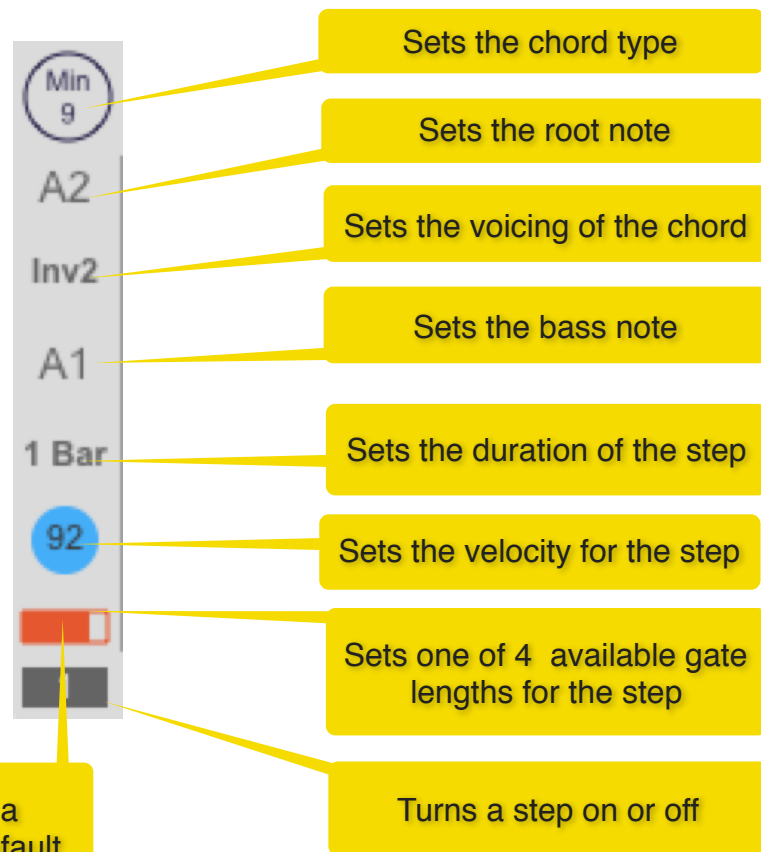


sequence length shown in the top display area

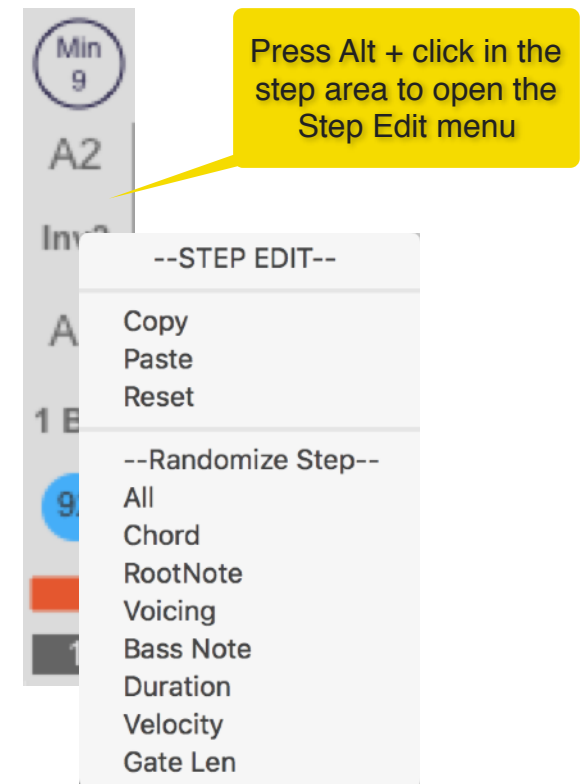
3.2 Programming Steps

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 has its own editing menu which allows 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.



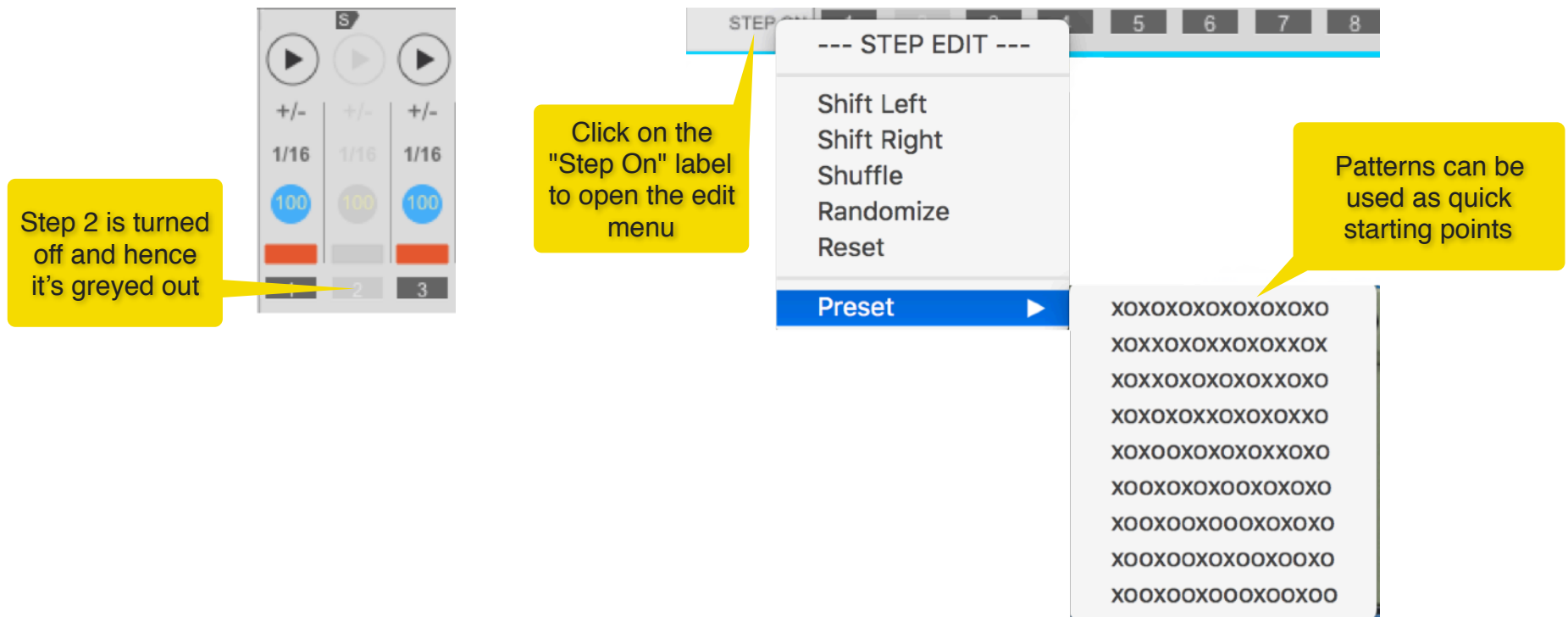
cmd(Mac)/ctrl(Win) on a parameter to reset it to default



3.2.2 Step On

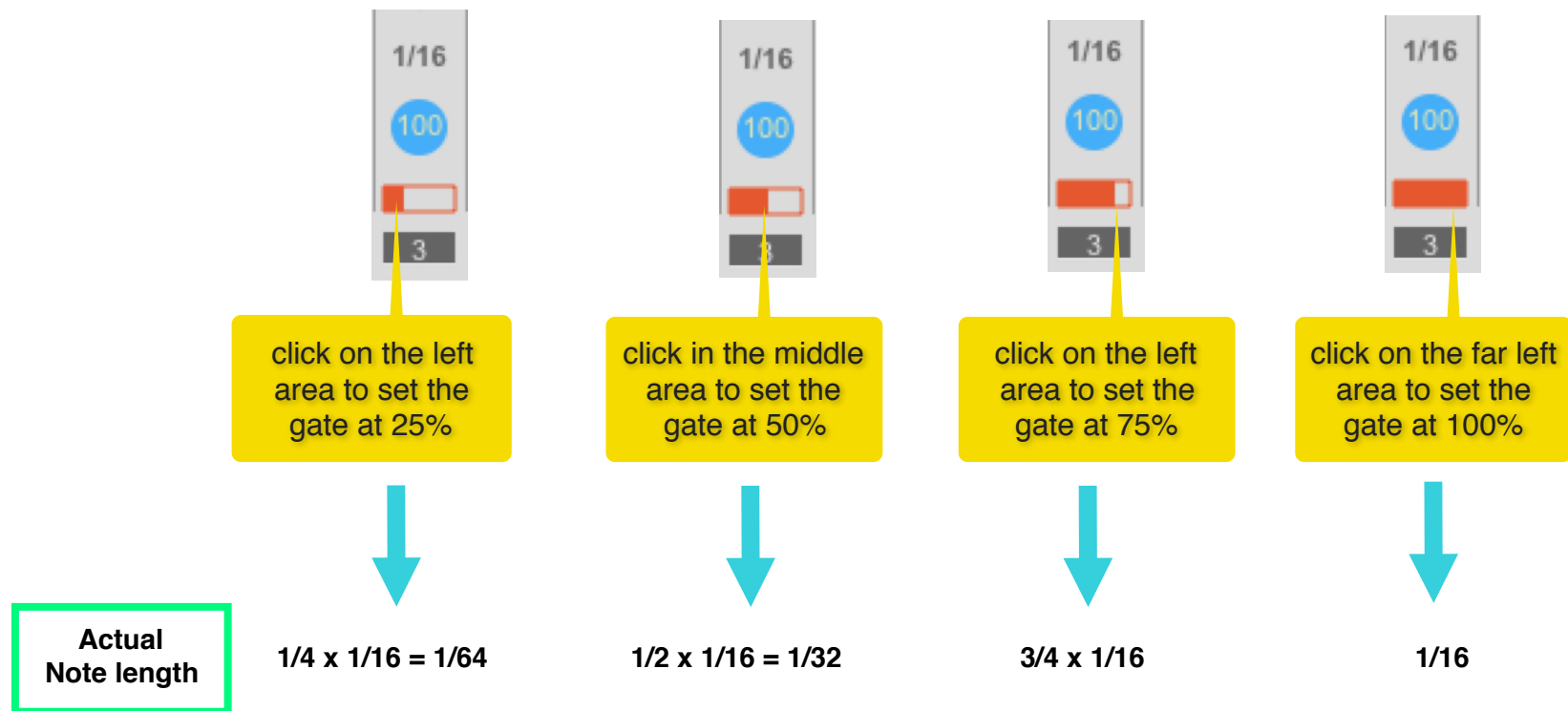
Here you turn steps on and off. When a step is turned off, it is greyed out. Please keep in mind that even if a step is turned off, it still remains part of the sequence and it is played through (i.e. it is not skipped), but the note is NOT played.

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.

click on the "Gate Len" label to open the edit menu

-- GATE LEN EDIT --

- Shift Left
- Shift Right
- Shuffle
- Randomize
- Reset

reset all selected steps to the chosen value

- 100%
- 75%
- 50%
- 25%

-- GATE LEN EDIT --

- Shift Left
- Shift Right
- Shuffle
- Randomize
- Reset

25% 100%
[min, max]

randomizes the selected steps using the start and end step values as min and max

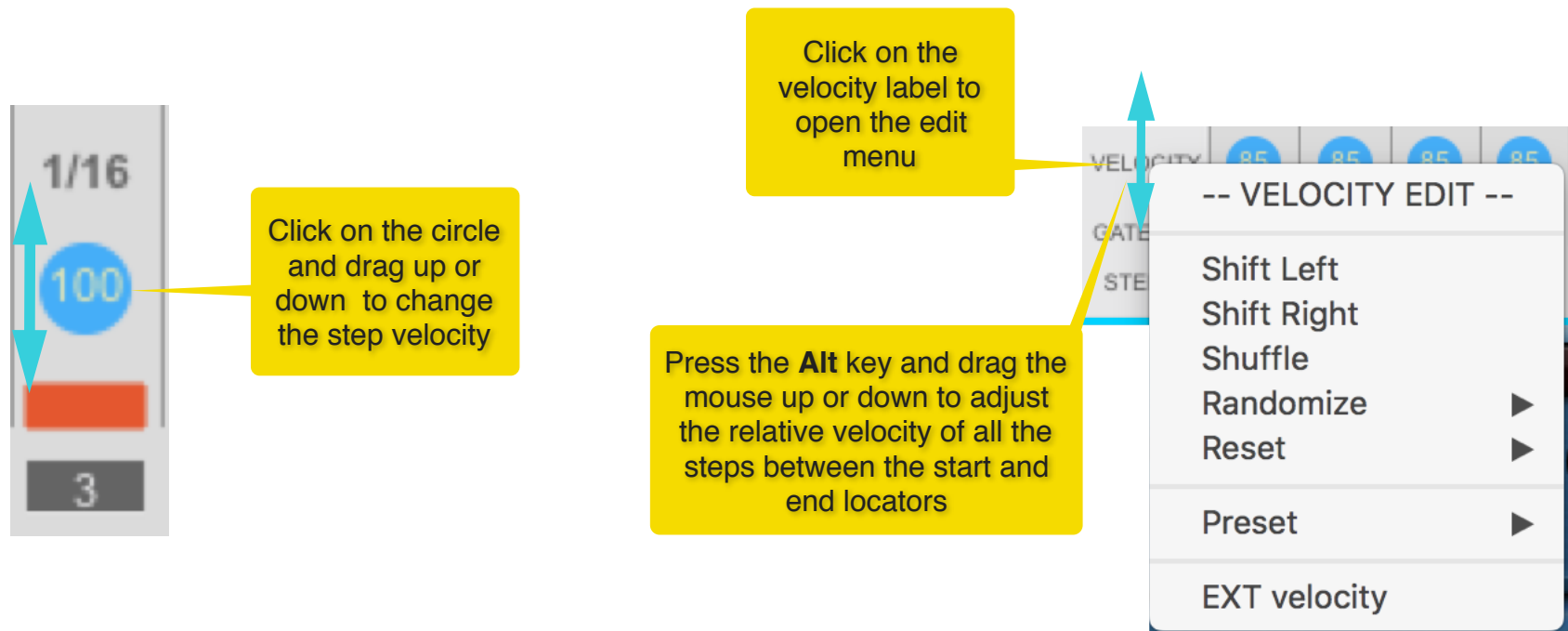
Start step is 50% and this is used as the min

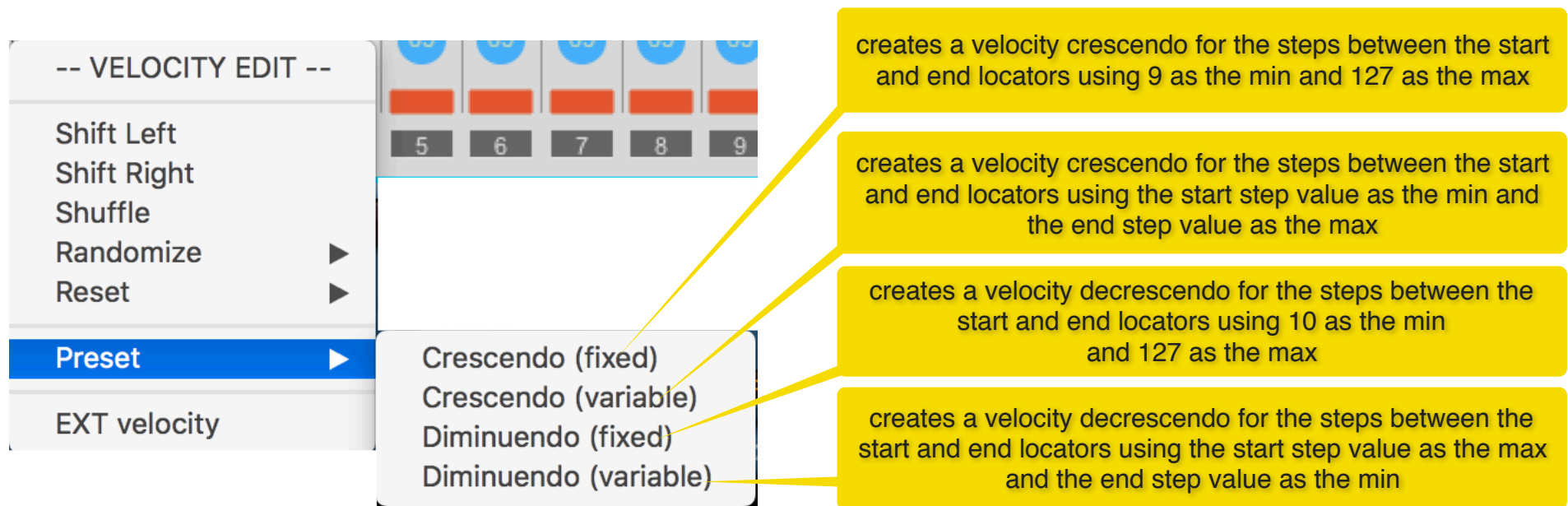
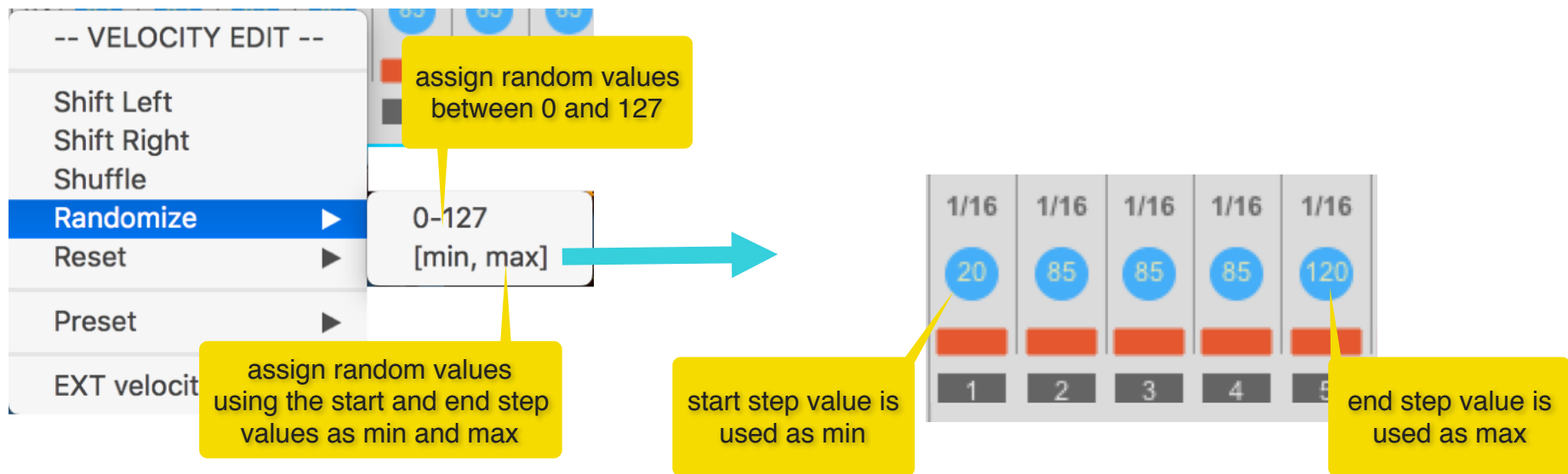
End step is 100% and this is used as the max

Min 9	Maj 7	Sus4	Maj 7	Single	Maj 9	Tie
A2	A#2	C3	F2	C3	A#2	C3
Inv2	Inv2	Inv2	Inv1		Inv1	
A1	C1	C2	F1	C2	A#1	C2
1 Bar	1/2	1/4	1/2	1/4	1 Bar	1/2
92	92	98	97	96	95	100
1	2	3	4	5	6	7

3.2.4 Velocity

Each step has its 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.





3.2.5 Duration

ChordSQ lets you select a duration for each step which can be as short as 1/64 or as long as 4 full bars. 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.

The screenshot shows the ChordSQ interface with a 'DURATION' row. A yellow callout points to the 'DURATION' label, stating: 'Click on the Duration label to open the menu'. The 'DURATION EDIT' menu is open, showing options: 'Shift Left', 'Shift Right', 'Shuffle', 'Randomize' (highlighted), and 'Reset'. A secondary menu is open for 'Randomize', listing: '> 1/8', '> 1/4', '> 1/2', '> 3/4', 'All', and '[min, max]'. Yellow callouts explain each option: '> 1/8' assigns randomly duration values greater than 1/8; '> 1/4' assigns randomly duration values greater than 1/4; '> 1/2' assigns randomly duration values greater than 1/2 bar; '> 3/4' assigns randomly duration values greater than 3/4 of a bar; 'All' assigns randomly duration values from 1/64 to 4 bars; and '[min, max]' uses the start step duration value as the min and the end step duration value as the max for the randomization. The background shows a piano roll with notes and a 'DURATION' row with values like 1/16, 1/16, 1/16, 1/16, 1/16, 1/16, 1/16, 1/16, 1/16.

Click on the Duration label to open the menu

-- DURATION EDIT --

- Shift Left
- Shift Right
- Shuffle
- Randomize**
- Reset

- > 1/8
- > 1/4
- > 1/2
- > 3/4
- All
- [min, max]

assigns randomly duration values greater than 1/8

assigns randomly duration values greater than 1/4

assigns randomly duration values greater than 1/2 bar

assigns randomly duration values greater than 3/4 of a bar

assigns randomly duration values from 1/64 to 4 bars

uses the start step duration value as the min and the end step duration value as the max for the randomization

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 or by enabling the option in the "Global" section of the "Seq Edit" menu.

The screenshot shows the ChordSQ software interface. At the top, there's a header bar with a green 'ON' button, the text 'ChordSQ', a yellow 'NSPATCH10' button, a 'HOLD' button, and controls for 'Steps' (set to 7), 'Offset' (set to 0), and 'Dir' (set to '>'). There are also icons for a folder, a document, and a save icon, followed by 'NSPatch10'.

Below the header is a table with 16 columns representing steps. The rows are labeled: CHORD, ROOT NOTE, VOICING, BASS NOTE, DURATION, VELOCITY, GATE LEN, and STEP ON. The CHORD row shows various chord types like Min 9, Maj 7, Sus4, Maj 7, Single, Maj 9, Tie, Single, Single, Single, Single, Single, Single, Single, Single, Single. The ROOT NOTE row shows notes like A2, A#2, C3, F2, C3, A#2, C3, C3, C3, C3, C3, C3, C3, C3, C3, C3. The VOICING row shows inversions like Inv2, Inv2, Inv2, Inv1, Inv1, Inv1, Inv1, Inv1, Inv1, Inv1, Inv1, Inv1, Inv1, Inv1, Inv1, Inv1. The BASS NOTE row shows notes like A1, C1, C2, F1, C2, A#1, C2, C2, C2, C2, C2, C2, C2, C2, C2, C2. The DURATION row shows values like 1 Bar, 1/2, 1/4, 1/2, 1/4, 1 Bar, 1/2, 2 Bar, 2 Bar, 2 Bar, 2 Bar, 2 Bar, 2 Bar, 2 Bar, 2 Bar, 2 Bar. The VELOCITY row shows values like 92, 92, 98, 97, 96, 95, 100, 100, 100, 100, 100, 100, 100, 100, 100, 100. The GATE LEN row shows red bars of varying lengths. The STEP ON row shows numbers 1 through 16.

A yellow callout box is overlaid on the table, containing the text: "text feedback showing the length of the sequence between the start and end locator. Click in the area to toggle on/off the text".

3.2.6 Bass Note

For each step, you can set an additional note to the programmed chord. This is usually a bass or slash note, but feel free to use it creatively as you see fit. The range of available note choices goes from C-2 to B5. By default, the bass note is disabled. To enable it, Shift + Alt + Click on the note name. Clicking on the "Bass Note" label opens the "Bass Note Edit" menu with several edit functions which are explained below.

Shift + Alt + click to enable the bass note

Click on the Bass Note label to open the edit menu

Turns on/off the bass notes for the steps between the start and end markers

Copies the root notes shifted down by either 1 or 2 octaves

Shifts Left or Right the bass notes

Shifts Up or Down the bass notes by either semitones or octaves

Quantizes the bass notes to fit the selected scale and key. A note in scale & key is shown in dark grey

Shuffles the bass notes between the selected steps

Reset all bass notes between the start and end steps

click to open the note select menu

Shift + drag up/down to change the note

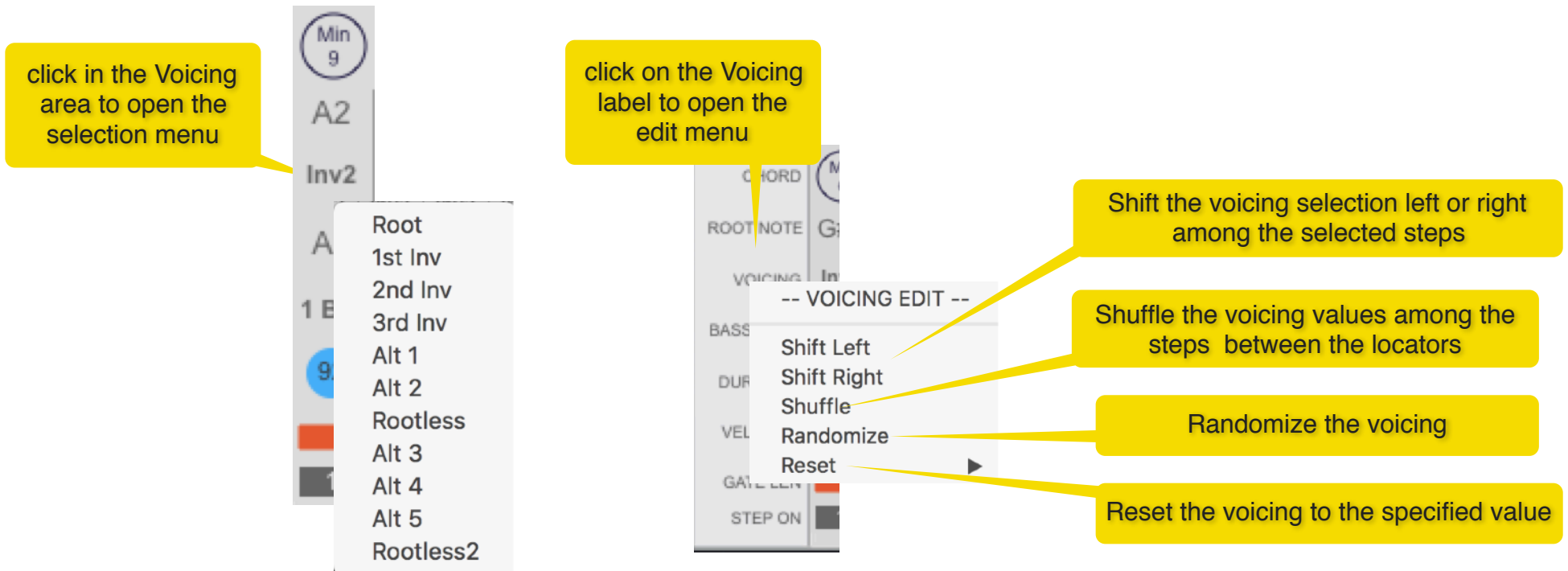


3.2.7 Voicing

The Voicing determines how the notes in the chords are played. The right voicing makes all the difference, so make sure to spend some time understanding this important parameter! The table below shows a summary of the available voicing options.

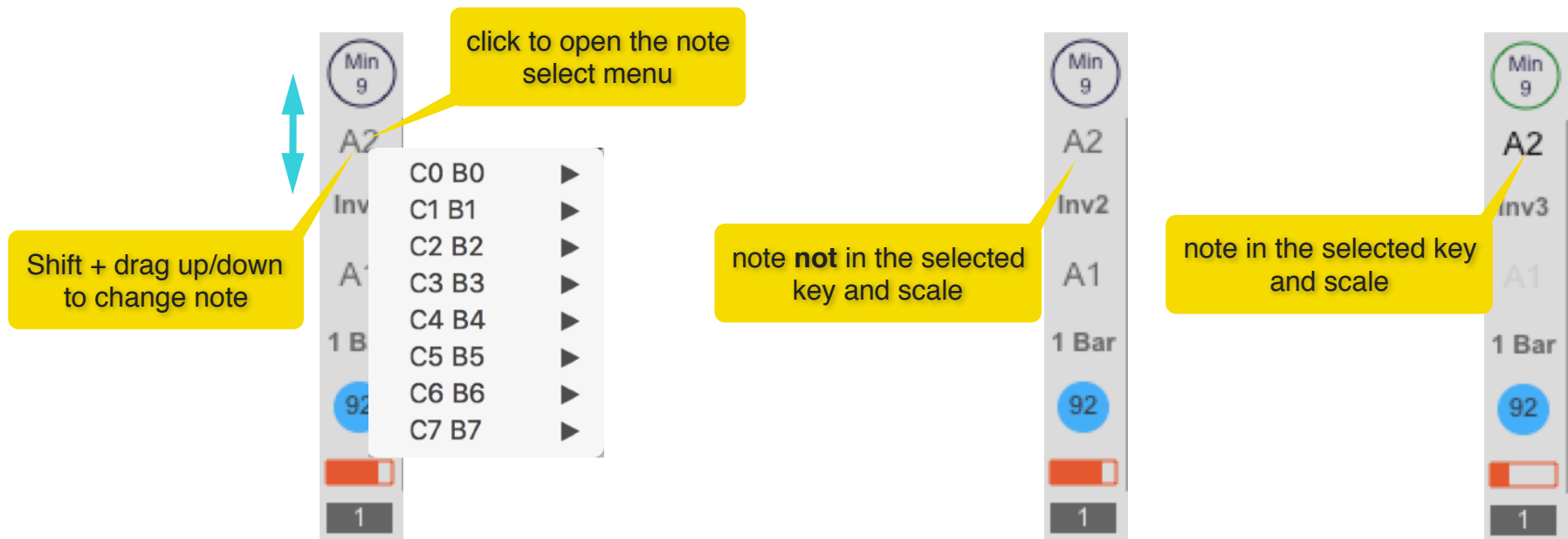
Voicing	Description
Root	plays the chord in root position, with the root at the bottom and the other notes stacked on top
1st Inv	plays the chord in first inversion, where the top note in the chord is shifted down by 1 octave
2nd Inv	plays the chord in 2nd inversion, where the top 2 notes in the chord are shifted down by 1 octave
3rd Inv	plays the chord in 3rd inversion, where the top 3 notes in the chord are shifted down by 1 octave
Alt 1	plays the 2nd note in the chord shifted up by 1 octave
Alt 2	plays the 3rd note in the chord shifted up by 1 octave
Rootless	plays the chord by omitting the root note
Alt 3	plays the 2nd and 3rd notes in the chord shifted up by 1 octave
Alt 4	plays the 2nd note up an octave and the 3rd note down an octave
Alt 5	plays the 2nd note down an octave and the 3rd note up an octave
Rootless2	plays the chord by omitting the root note, and the 2nd and 3rd notes shifted down by an octave

Clicking on the Voicing label opens the "Voicing Edit" menu which allows to affect all the voicing parameters for the steps included between the Start and End locators.



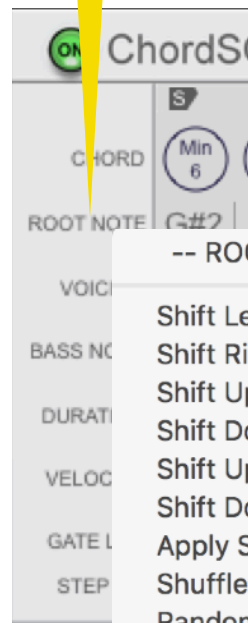
3.2.8 Root Note

The root note value, as the name implies, determines the root note on which the chord is built. The range of available note choices goes from C0 to B7. To select a root note, simply click on the root label for the given step and select a value from the selection menu. Alternatively, you can press **Shift** and drag the mouse up or down to change the note. If a scale and key are selected, the note name is displayed in dark grey when it fits the chosen scale and key.



Clicking on the Root Note labels opens the "Root Note Edit" menu with several options for editing the root notes between the Start and End locators.

Click on the Root Note label
to open the edit menu



-- ROOT NOTE EDIT --

Shift Left

Shift Right

Shift Up Semitone

Shift Down Semitone

Shift Up Octave

Shift Down Octave

Apply Selected Key & Scale

Shuffle

Randomize

Reset

Shifts Left or Right the root notes

Shifts Up or Down the root notes by either
semitones or octaves

Quantizes the root notes to fit the selected scale and
key. A note in scale & key is shown in darker grey

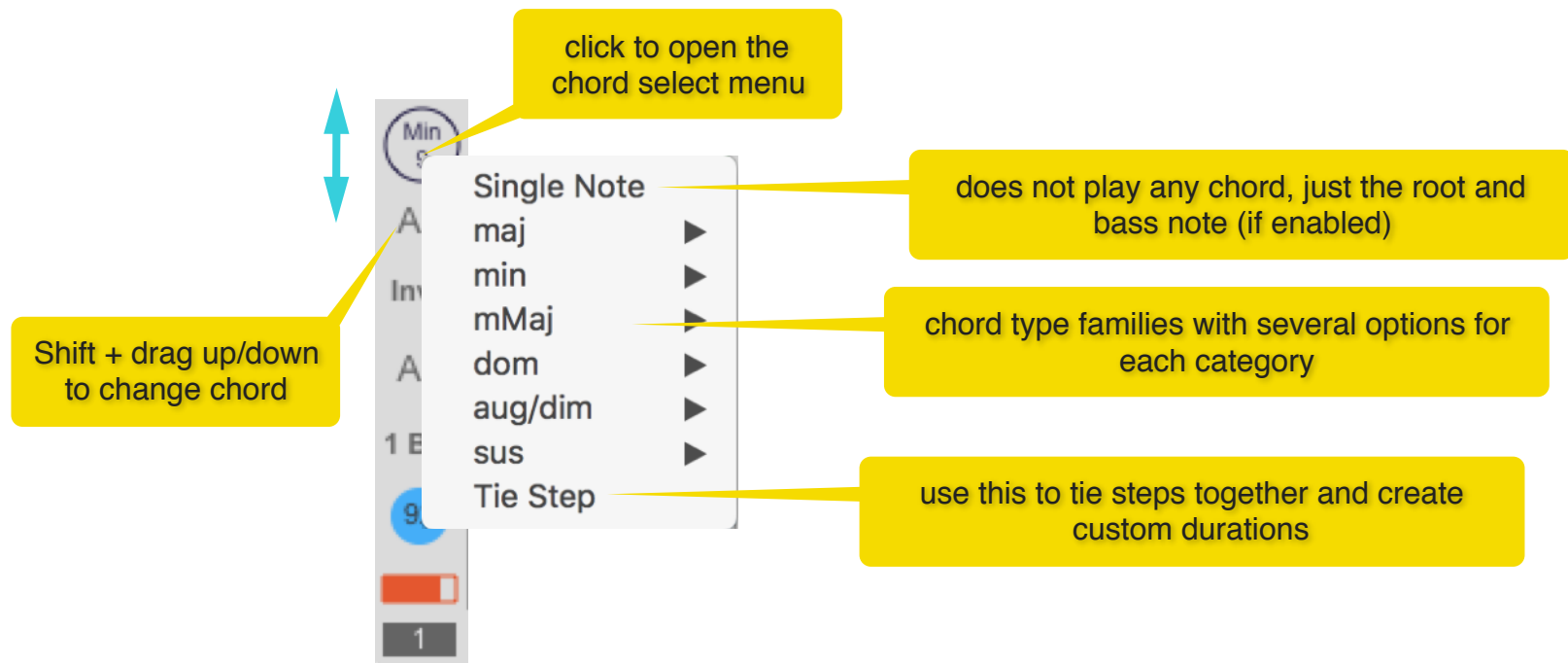
Shuffle the root notes among the selected steps

Randomizes the root notes based on the selected
octave range

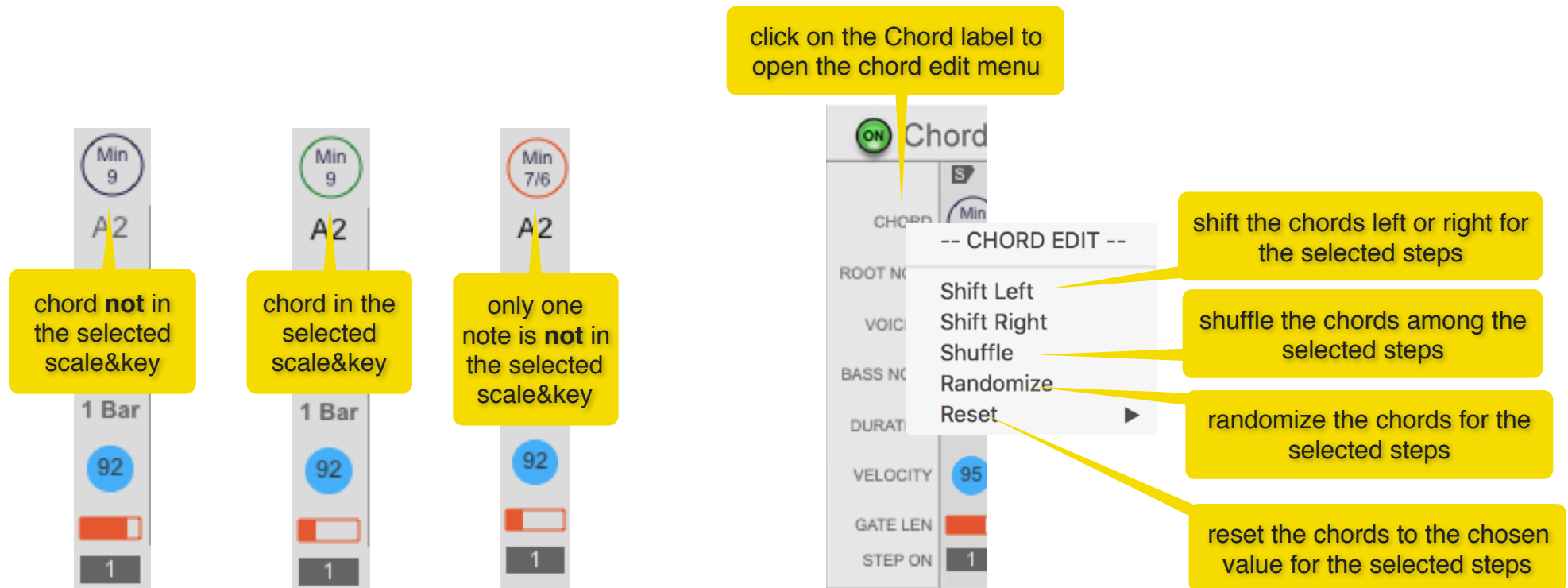
Resets the root note to the specified value

3.2.9 Chord Type

Once you set a root note, the chord type parameters determines what chord is built on the root. To select a chord type is very easy: just click in the circle corresponding to the chord type and select a chord from the menu. Chord types are grouped according to the chord quality, like major, minor, etc. The topmost and bottom entries in the selection menu work differently. The topmost is called "Single Note" and as the name implies, it won't create any chord at all buy but just play the root and the base note (if enabled). On the other hand, the bottom entry called "Tie Step" allows you to tie steps together to create custom note durations.



If a scale and key are selected, the chord type selection circle changes color based on whether the chord is in the selected scale and key or not. This is quite useful when building a progression to see which chords are fully diatonic. Clicking on the "Chord Type" label opens up a menu with various options to affect the chord types for all steps within the Start and End locators.



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.

Click on the Seq Edit label to open the menu

CHORD	Min 6	Min 7	Maj 9	Maj 7	Min 6	Min 7	Maj 9	9sus4	Single	Single	Single	Single	Single	Single	Single	Single
ROOT NOTE	G#2	G2	F#2	F2	G#2	G2	F#2	F2	C3	C3	C3	C3	C3	C3	C3	C3
VOICING	Inv1	Inv1	Inv1	Inv1	Inv1	Inv1	Inv1	Inv2								
BASS NOTE	G#1	G1	F#1	F1	G#1	G1	F#1	F1	C2	C2	C2	C2	C2	C2	C2	C2
DURATION	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	2 Bar	2 Bar	2 Bar	2 Bar	2 Bar	2 Bar	2 Bar	2 Bar
VELOCITY	95	91	93	95	95	91	93	94	100	100	100	100	100	100	100	100
GATE LEN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
STEP ON	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

SEQ EDIT ▾

- SEQUENCE EDIT --
- Copy
- Paste
- Reset
- Shift Left
- Shift Right
- Shift Semitone Up
- Shift Semitone Down
- Shift Octave Up
- Shift Octave Down
- Shuffle
- Randomize
- Optimize Voicings
- GLOBALS --
- Retrigger
- Quantize
- Swing
- Quantize Notes to Scale and Key
- Humanize Velocity
- Always show sequence length

3.3.1 Copy and Paste

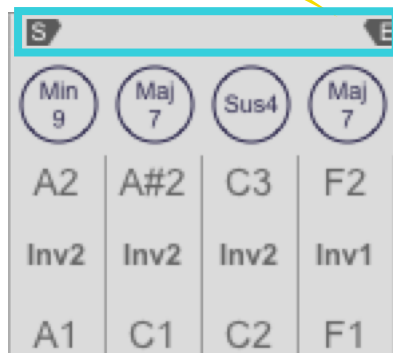
Let's say you are programming a sequence and you stumble on a combination of steps which sound quite good and you would like to repeat those same steps somewhere later in the sequence. One obvious option is to copy and paste each step one by one. But there is a faster way and it involves using the Start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

The screenshot shows the ChordSQ interface with a sequence of 16 steps. Each step is represented by a row of parameters: a mode (in a circle), a pitch (e.g., A2, A#2, C3), an inversion (e.g., Inv2, Inv1), a chord (e.g., A1, C1, C2, F1, C2, A#1, C2), a duration (e.g., 1 Bar, 1/2, 1/4), a volume (in a blue circle), and a bar (in a red bar). The steps are numbered 1 to 16 at the bottom. A green bracket highlights steps 1 through 4. A yellow callout box with the text "Goal is to copy these 4 steps to another part of the sequence" has a grey arrow pointing to step 8, which is also highlighted with a green bracket.

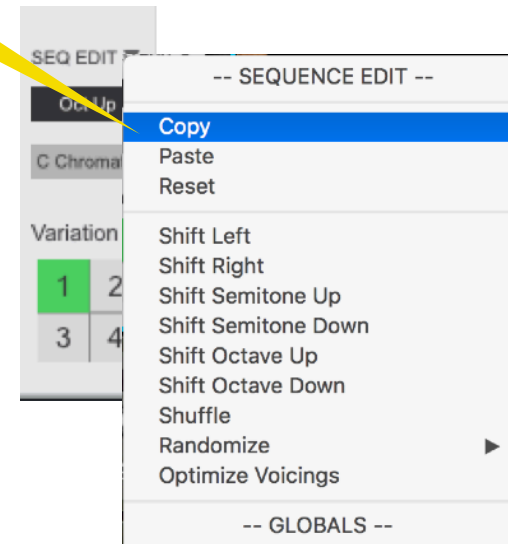
Step	Mode	Pitch	Inversion	Chord	Duration	Volume	Bar
1	Min 9	A2	Inv2	A1	1 Bar	92	1
2	Maj 7	A#2	Inv2	C1	1/2	92	2
3	Sus4	C3	Inv2	C2	1/4	98	3
4	Maj 7	F2	Inv1	F1	1/2	97	4
5	Single	C3		C2	1/4	96	5
6	Maj 9	A#2	Inv1	A#1	1 Bar	95	6
7	Tie	C3		C2	1/2	100	7
8	Single	C3		C2	2 Bar	100	8
9	Single	C3		C2	2 Bar	100	9
10	Single	C3		C2	2 Bar	100	10
11	Single	C3		C2	2 Bar	100	11
12	Single	C3		C2	2 Bar	100	12
13	Single	C3		C2	2 Bar	100	13
14	Single	C3		C2	2 Bar	100	14
15	Single	C3		C2	2 Bar	100	15
16	Single	C3		C2	2 Bar	100	16

Goal is to copy these 4 steps to another part of the sequence

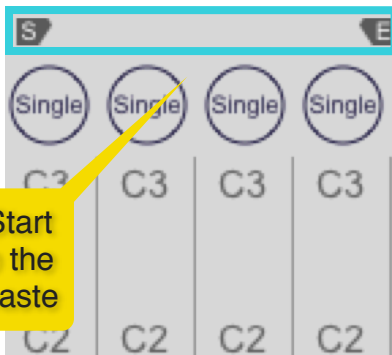
Step 1: move the Start and End locators to the steps you want to copy



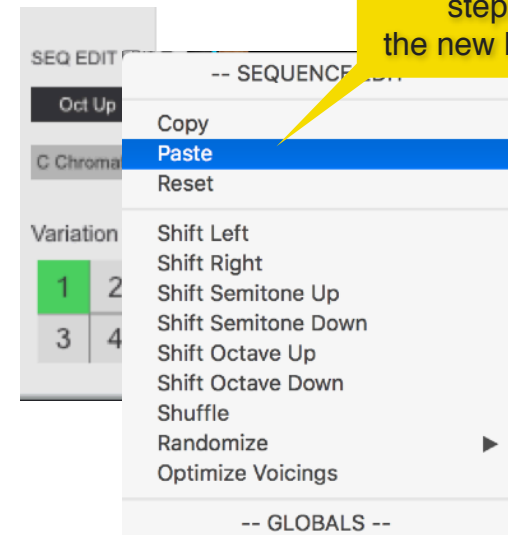
Step 2: click on Copy from the Seq Edit Menu



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

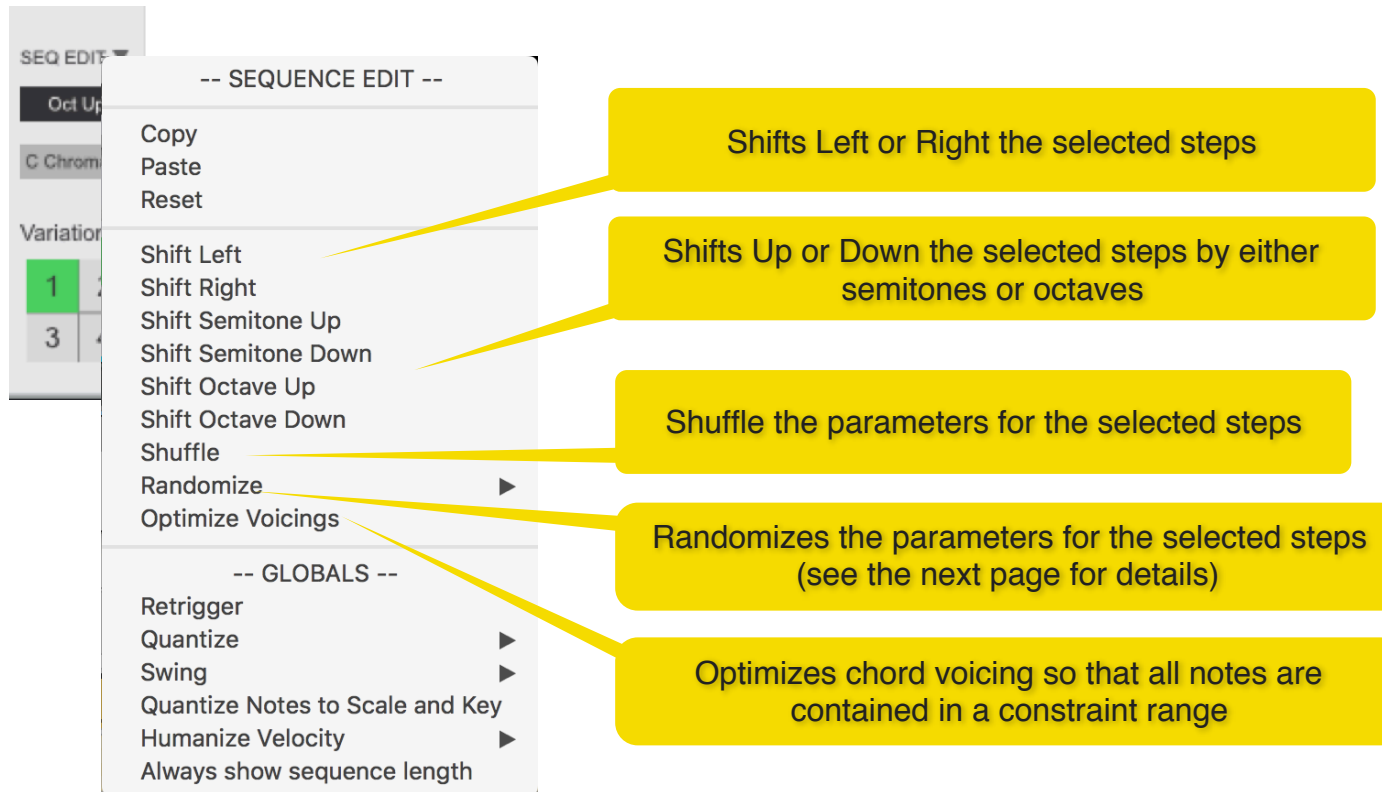


Step 4: paste the steps to the new location!

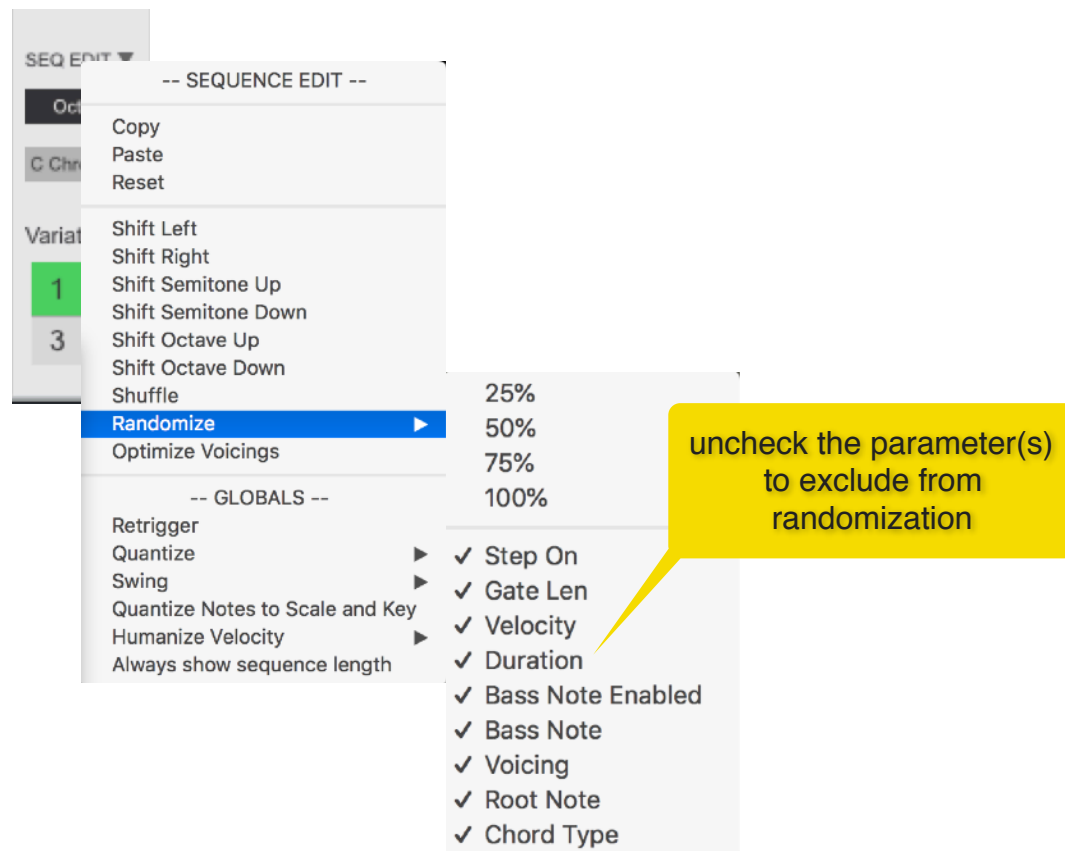


3.3.2 More Sequence Editing Functions

From the "Seq Edit" menu, you can access even more functions to quickly alter the sequence included between the Start and End locators. These functions are described below.

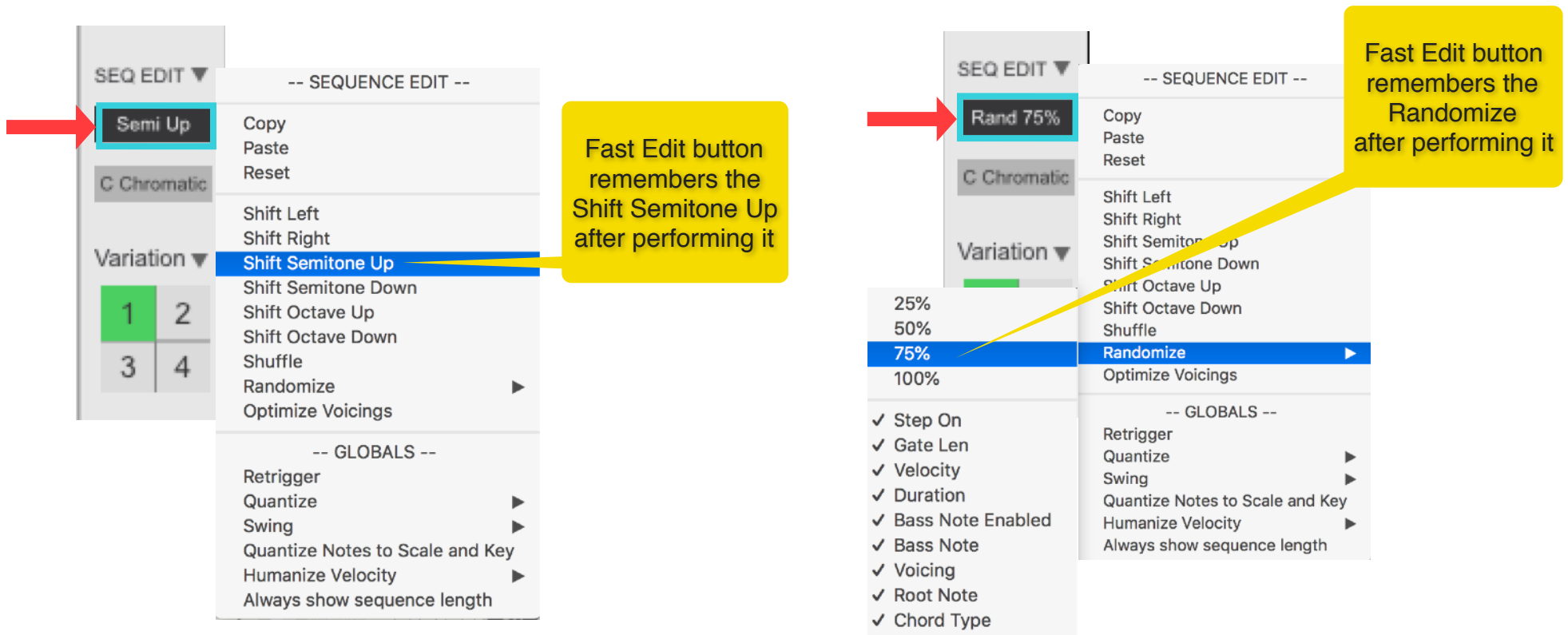


Randomization can be a great way to come up with interesting sequences with little effort. You have the option to control the "strength" of the randomization by choosing how many parameters you want to alter. There are 4 options, 25%, 50%, 75% and 100%. At 25% only few parameters will be altered, at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

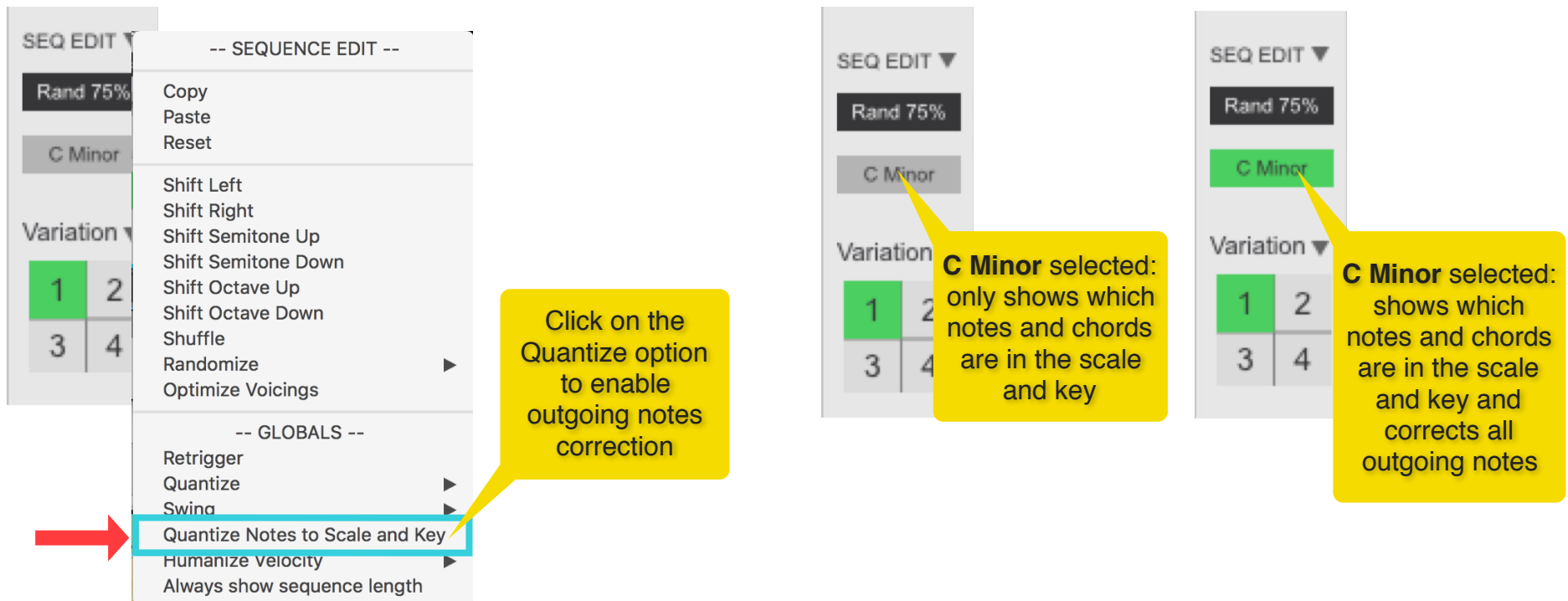
When you are executing editing functions like "Shift Left", "Shift Right", "Shuffle" and "Randomize", instead of using the edit menu multiple times to repeat the same action, you can use the "Fast Edit" button. Located just below the "Seq Edit" label, it remembers the last operation you performed from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



3.3.4 Scale and Key Correction

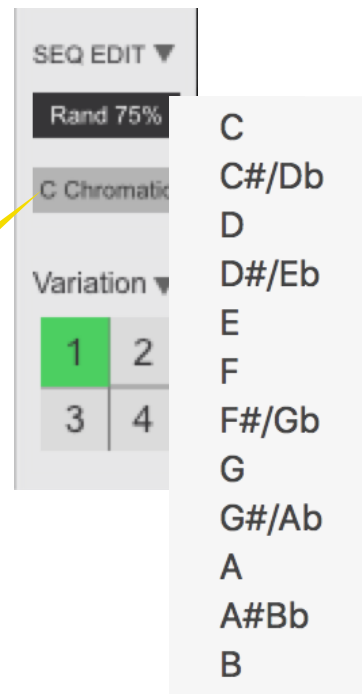
There are two ways to use the Scale and Key feature. In the first mode, selecting a Scale and Key does not have any effect on the outgoing notes, but it serves to show which notes and chords are in the selected scale and key. For example, when the root note is in the selected scale and key it is shown in a dark tone. Similarly the chord name is shown with a green circle around it.

The second mode, which is activated by enabling the "**Quantize Notes to Scale and Key**" from the "Seq Edit" menu, in addition to showing which notes and chords are in key, also corrects any outgoing notes to the selected scale and key. Very convenient to have enabled when you want to "tame" the results of randomizations! When this mode is active, the button goes from grey to green as shown below.

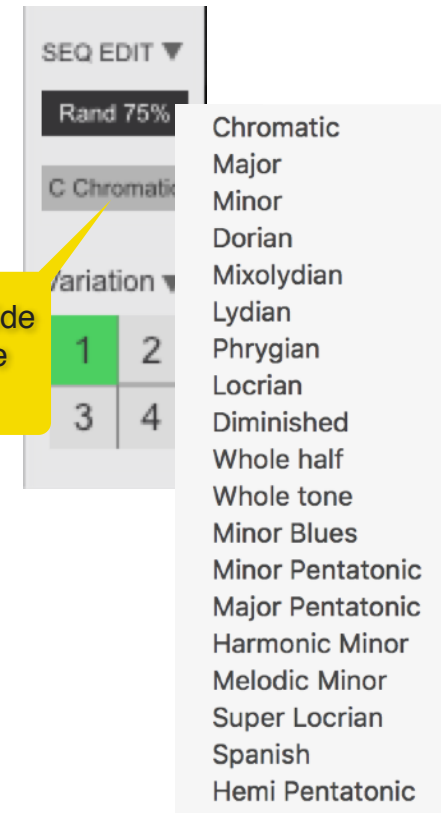


To select a scale and key, click on the Scale and Key button as shown below.

Click on the left side
to open the Key
selection menu



Click on the right side
to open the Scale
selection menu



When a scale other than "Chromatic" is selected, the interface will show which notes and chords are in the selected scale and key with different colors. For example, notes in the scale are shown in dark grey while chords are shown with a green circle around them. Chords which have only one note not in the scale are shown with an orange circle.

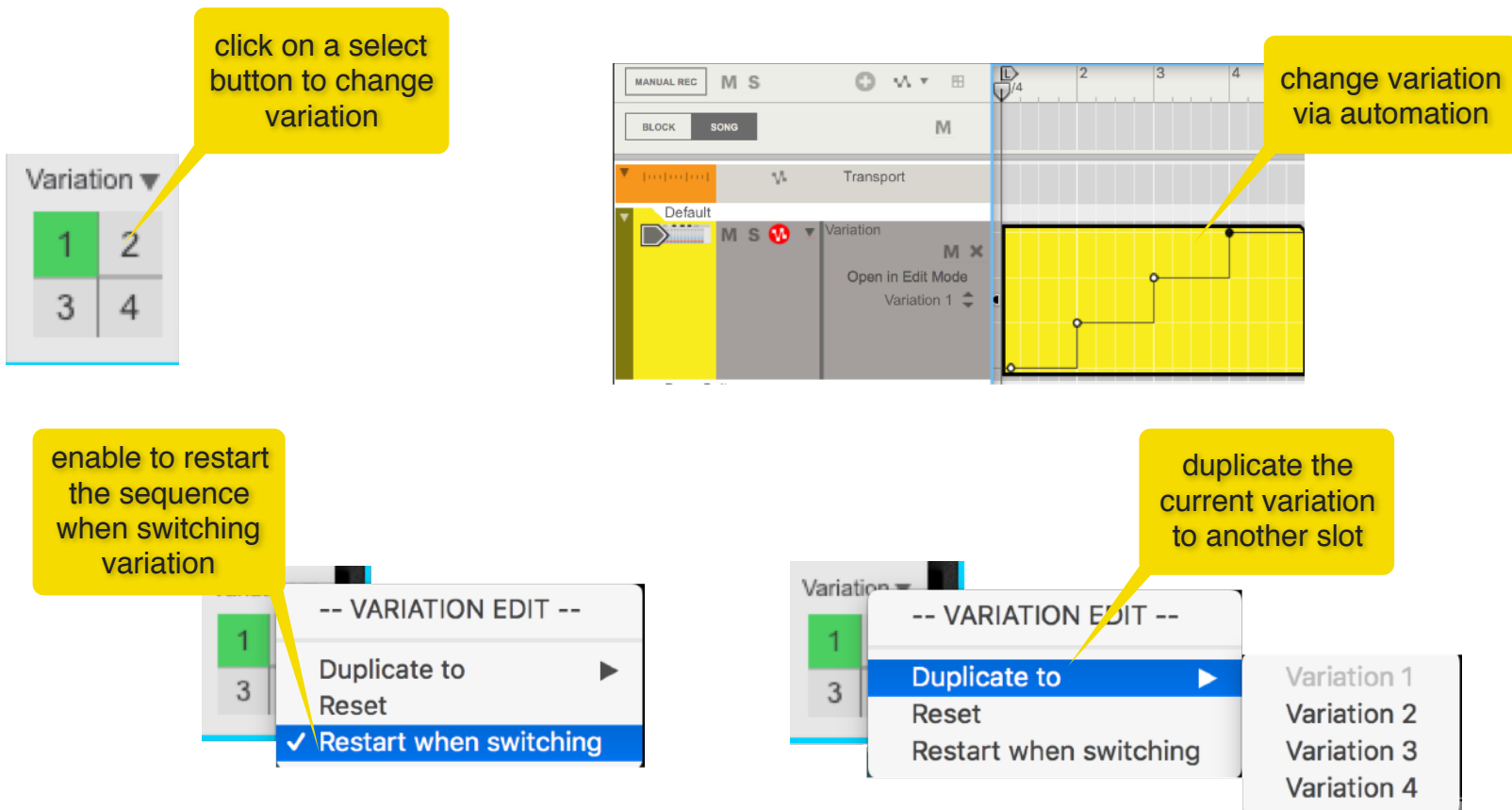
The screenshot shows the ChordSQ interface with the JZPatch3 patch selected. The interface displays a sequence of 16 steps. The first five steps contain chords: D3 (Min 7/6), F#2 (dom9), A#1 (Maj 7), A2 (Min 7/6), and F#2 (dom9). The remaining steps contain single notes: C2, C3, C3, C3, C3, C3, C3, C3, C3, C3, C3, C3, C3, C3, and C3. The interface also shows velocity, gate length, and step on for each step.

Yellow callouts provide the following information:

- Chord is in the key of A Minor (pointing to D3)
- note is in the key of A Minor (pointing to C1)
- only one note is **not** in the key of A Minor (pointing to A2)
- chord is **not** in the key of A Minor (pointing to F#2)
- note is **not** in the key of A Minor (pointing to C2)

3.4 Variations

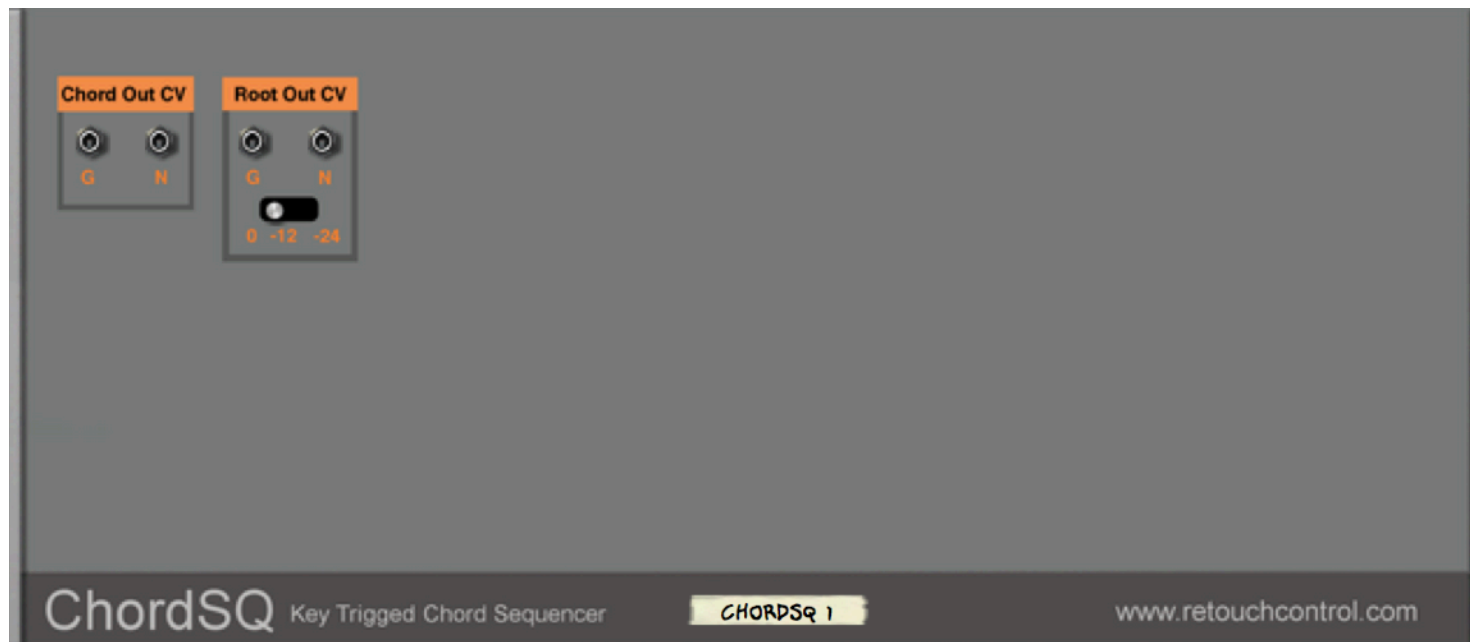
ChordSQ can have 4 different sequence variations per patch. You can change variation live during play, either by clicking on the 4 variation select buttons or by automating the variation parameter in the sequencer. Clicking on the "Variation" label opens the edit menu with various options like duplicating 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.



3.5 CV and Gate Outputs

The player can send the chords and root note via dedicated Gate and Note CV outlets. These can be used if you want to have the same instance of ChordSQ trigger multiple devices. The root note outlet is especially useful to create bass parts to accompany the progression.

Also the chord out CVs can be connected to a NoteSet player which can be used to correct notes on other devices so that they align with the notes of the chord currently playing.



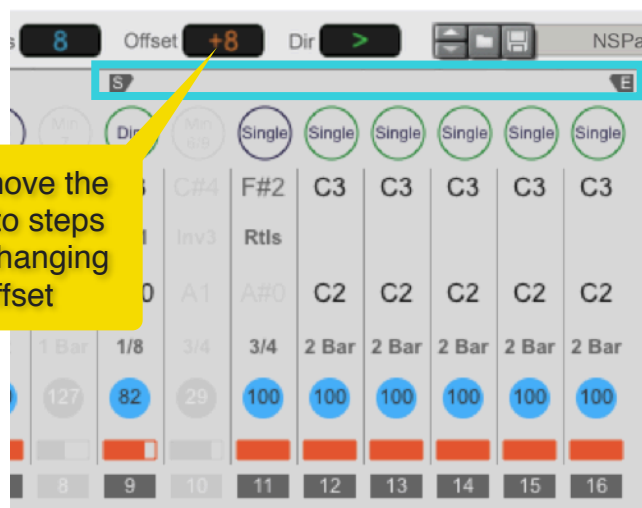
4. Tips and Tricks

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.





...and the velocity ramp up/down is done!

4.2 Inserting a step in the sequence

Suppose you need to insert a step between two other steps when you have a progression already sketched out, you could copy the part of the sequence that needs to be moved and the paste it over one step. This is a bit messy and luckily there is a better way to do it. Follow the steps below.

Goal: insert a step here in the sequence

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CHORD	hdim7	dom7	Min 7	hdim7	dom7	Min 7	hdim7	dom7	dom7	Min 9	Single	Single	Single	Single	Single	Single
ROOT NOTE	D3	C#3	C3	E3	D#3	D3	A2	G#2	G2	C2	C3	C3	C3	C3	C3	C3
VOICING	Inv1	RtIs2	RtIs2	Inv1	RtIs2	RtIs2	Inv1	RtIs2	RtIs2							
BASS NOTE	D2	C#2	C2	E2	D#2	D2	A1	G#1	G1	C1	C1	C1	C1	C1	C1	C1
DURATION	1 Bar	1/2	1 Bar	1 Bar	1/2	1 Bar	1 Bar	1/2	1/2	1 Bar	1 Bar	1 Bar	1 Bar	1 Bar	1 Bar	1 Bar
VELOCITY	91	92	87	91	92	87	91	92	87	87	100	100	100	100	100	100
GATE LEN																
STEP ON	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

length: 8.00 bar

MODE ▾

SEQ EDIT ▾

Oct Down

C Minor

Variation ▾

1	2
3	4

Step1: move the **S** locator at the desired insertion point

Step2: move the **E** locator one step beyond the last chord

Step3: from the **Seq Edit** menu, use the **Shift Right** command

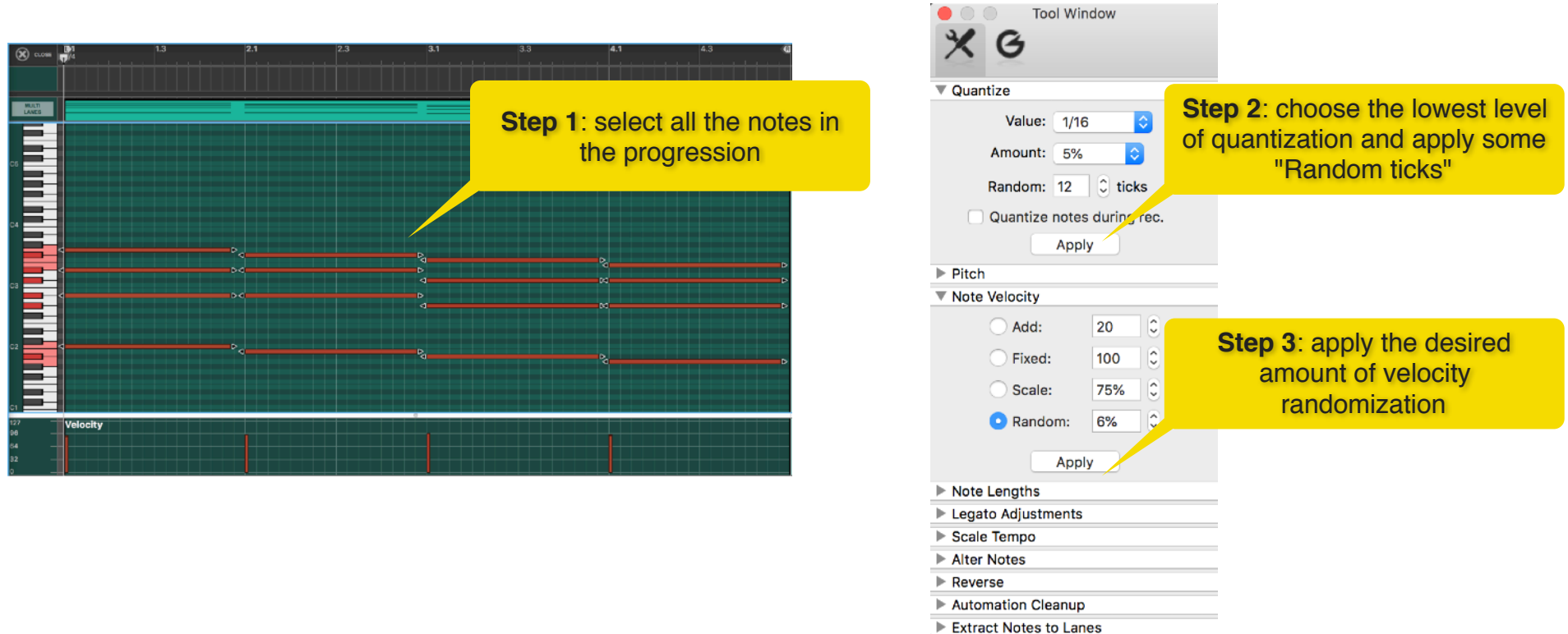
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CHORD	hdim7	dom7	Min 7	hdim7	dom7	Min 7	hdim7	dom7	dom7	Min 9	Single	Single				
ROOT NOTE	D3	C#3	C3	E3	D#3	D3	A2	G#2	G2	C2	C3	C3	C3	C3	C3	C3
VOICING	Inv1	RtIs2	RtIs2	Inv1	RtIs2	RtIs2	Inv1	RtIs2	RtIs2							
BASS NOTE	D2	C#2	C2	E2	D#2	D2	A1	G#1	G1	C1						
DURATION	1 Bar	1/2	1 Bar	1 Bar	1/2	1 Bar	1 Bar	1/2	1/2	1 Bar						
VELOCITY	91	92	87	91	92	87	91	92	87	87						
GATE LEN																
STEP ON	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Success: a step has been inserted at the right location!

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CHORD	hdim7	dom7	Min 7	hdim7	dom7	Single	Min 7	hdim7	dom7	dom7	Min 9	Single	Single	Single	Single	Single
ROOT NOTE	D3	C#3	C3	E3	D#3	D3	A2	G#2	G2	C2	C3	C3	C3	C3	C3	C3
VOICING	Inv1	RtIs2	RtIs2	Inv1	RtIs2	RtIs2	Inv1	RtIs2	RtIs2							
BASS NOTE	D2	C#2	C2	E2	D#2	D2	A1	G#1	G1	C1	C1	C1	C1	C1	C1	C1
DURATION	1 Bar	1/2	1 Bar	1 Bar	1/2	1 Bar	1 Bar	1 Bar	1/2	1/2	1 Bar	1 Bar	1 Bar	1 Bar	1 Bar	1 Bar
VELOCITY	91	92	87	91	92	100	87	91	92	87	87	100	100	100	100	100
GATE LEN																
STEP ON	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

4.3 Humanize the chords

You have the option under the "Seq Edit" menu to choose three different amount of velocity randomization. This should help with creating less "static" sounding progressions. For even better results, you should take advantage of the midi editing features of Reason (or your DAW if you use the Rack VST). In this example, we are going to show a method which involves recording the progression unto a MIDI track and then using the "Tools Window" (F8) to affect the notes. To record the progression unto MIDI, you can either use the "Send to track" or the "Direct Record" methods for players. If you decide to use the "Send to track" method, create first a midi clip with a long note which lasts the duration of the progression. This will correctly trigger the ChordSQ sequencer. Once you have recorded the chords to MIDI, follow these steps.



The image shows a screenshot of the Reason DAW interface. On the left, a MIDI piano roll displays a chord progression with notes on a green grid. A yellow callout box points to the notes, stating: "Step 1: select all the notes in the progression". On the right, the "Tool Window" is open, showing various settings. A yellow callout box points to the "Quantize" section, stating: "Step 2: choose the lowest level of quantization and apply some 'Random ticks'". Another yellow callout box points to the "Note Velocity" section, stating: "Step 3: apply the desired amount of velocity randomization".

Step 1: select all the notes in the progression

Step 2: choose the lowest level of quantization and apply some "Random ticks"

Step 3: apply the desired amount of velocity randomization

4.4 Emotional Chord Progressions

An easy trick to create emotional chord progressions is to go up and down a scale in thirds while playing alternating major and minor chords. This is very easy to do in ChordSQ. First select a key and scale in the "Seq Edit" section.

For the first step, pick any note in the scale as the root note and assign it a major or minor chord. For best results, if the scale has a major chord at that position, select that (if the chord is in the scale, the circle turns green). Then move to the next step. Adjust the root note so that it's a third above the root note of the first step. At this point, if you selected a major chord for the first step, select a minor chord for the second step. Carry on in a similar fashion until you have a satisfying progression. Make sure to select nice voicing so that there are not big jumps from chord to chord.

Step 1: select a key and scale

Step 2: select a note in the scale as root note

Step 3: assign a minor chord (or major)

Step 4: go up a third from the root note of the first step

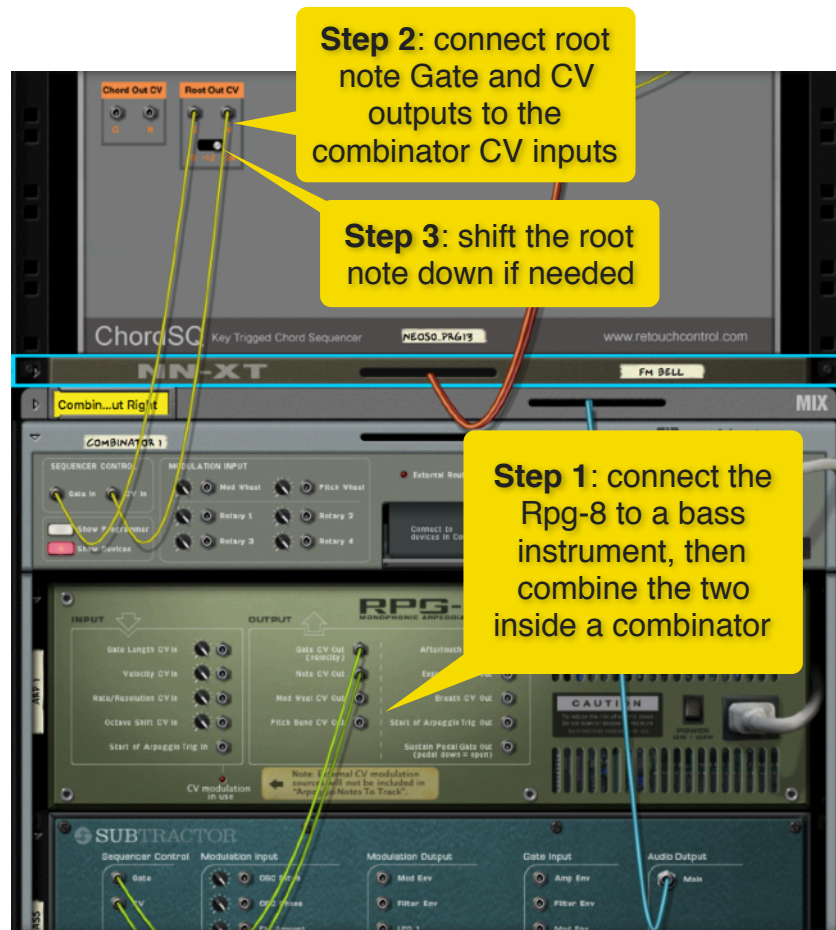
Step 5: assign a major chord (or minor)

Step 6: repeat for the successive steps

STEP ON	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
ROOT NOTE	C3	D#3	G3	D#2	C3	C3	C3	C3	C3	C3	C3	C3	C3	C3	C3
VOICING	Inv1	Inv2	Inv2	Alt1	Alt3										
SCALE	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95

4.5 Create bass lines using the Root Note CV outputs

The chord and root note CV outputs in the back of the device can come in handy in several scenarios. For example, you could split the chord CV outputs from ChordSQ and feed the same chord progression to other devices or players. If you own the NoteSet player, then you can use these outputs for doing note correction based on the chord notes. There are many opportunities for experimentation. In this example, we are going to show a way to use the root note cv outputs to create "automatic" bass lines using the RPG8 device.

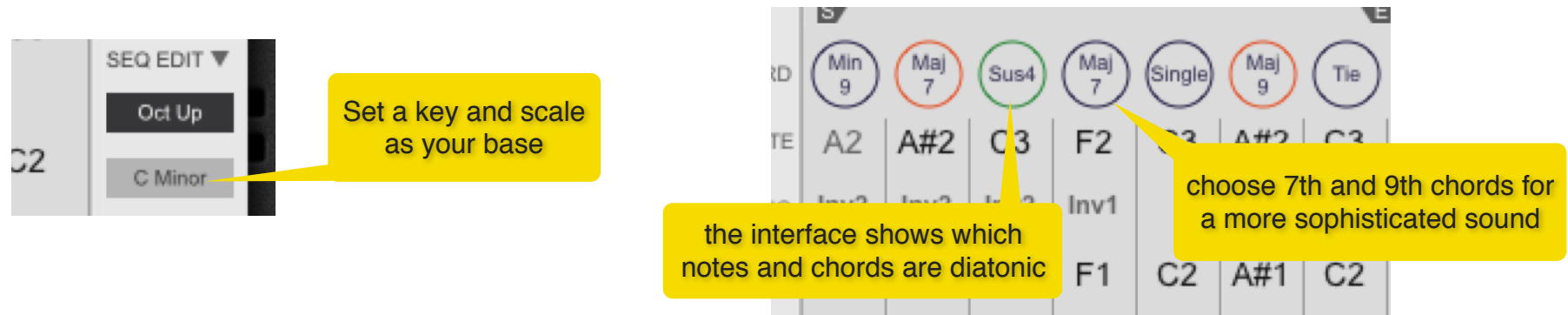


4.6 Beyond basic progressions

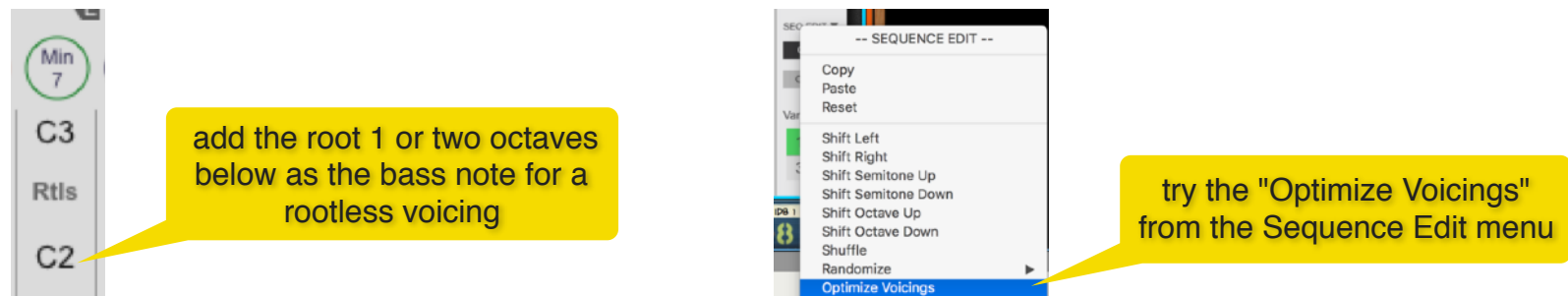
Chord progressions can be simple but can get quite complex as well! If you would like to go beyond the basics, here are some tips which might help to add a bit more sophistication to your chords.

Tip 1: choose a key and a scale as the basic foundation on which to build any progression. This is your home from which you can depart (as we'll show next) but to which you almost always want to return. Selecting a key and scale in ChordSQ has the advantage of showing the notes and the chords which belong to it.

For a more sophisticated sound, choose 7th and 9th chords when building your progression.

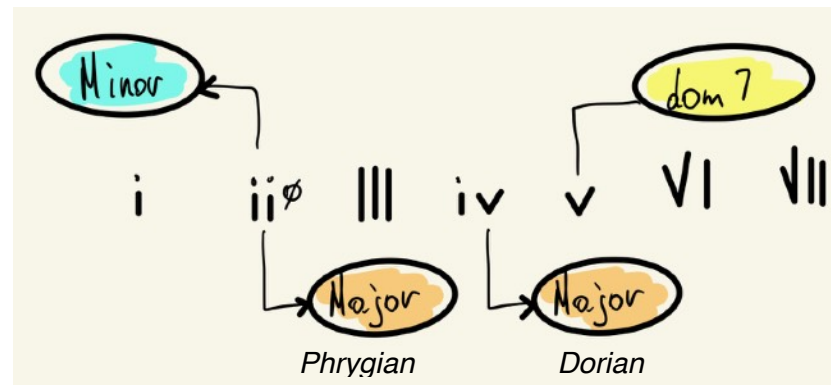


Tip 2: carefully voice your chords as it makes a difference. With 11 voicing types, it's easy to experiment in ChordSQ and find the one which works the best. For a more "closed in" sound, try *Inv1*, *Inv2* and *Inv3*. For a more "open and spread" sound, try *Alt1* to *Alt5*. *Rootless* voicing can also be very effective, especially when the root is played one or two octaves below, as shown below. For a less "jumpy" progression with smaller interval changes from chord to chord, you can use "Optimize Voicing" in the "Seq Edit" menu.



Tip 3: get temporarily out of the key. This adds instant sophistication when done properly. There are many techniques to go out of key, here are just some examples:

Chord Substitutions: here are some example of chord substitutions for a minor scale. Changing the chord type momentarily takes the music to a different key, often to a different mode of the same key as shown below (also called *modal interchange*).



Chords of a Minor scale with substitutions

Side Slipping: this technique consists in playing the same chord type with the same voicing usually one or two semitones up/down from the chord in the scale. For example, in the progression below in C Minor, we go out of key for 3/4 of a bar by playing a Dmaj7 chord right after the D#maj7 chord scale, and then return to the D#maj7 to finish the progression.

CHORD	Min 7	Maj 7	Min 7	Min 7	Maj 7	Maj 7	Maj 7	Maj 7
ROOT NOTE	C2	D#2	F2	C2	D#2	D2	D#2	D#2
VOICING	RtIs	RtIs	RtIs	RtIs	RtIs	RtIs	RtIs	Alt4
BASS NOTE	C1	D#1	F1	C1	D#1	D1	D#1	D#1
DURATION	3/4	1/4	3/4	3/4	1/4	3/4	1/4	1/4
VELOCITY	94	92	94	93	91	95	95	92
GATE LEN								
STEP ON	1	2	3	4	5	6	7	8

an example of side slipping

Tritone Substitution: this technique is often used by jazz musicians in a 2-5-1 progression, however it is useful in other contexts as well. For example, the C minor progression below starts on C (the tonic), moves to the III (D#maj7), then goes to the VI (A#2maj), and before landing on the iv (Fmin7), passes by F#7 which is a dominant 7th chord not in the scale of C minor. Using a dominant 7th chord one semitone above the target scale chord can often be used to great effect to spice up an otherwise predictable sequence. As an alternative, an augmented chord can be used instead of the dominant chord.

CHORD	Min 7	Maj 7	Maj 6	dom7	Min 7
ROOT NOTE	C2	D#2	A#2	F#2	F2
VOICING	Alt2	Alt3	Alt2	Alt3	Alt2
BASS NOTE	C1	D#1	A#1	F#1	F1
DURATION	1 Bar	1/2	1/2	1 Bar	1 Bar
VELOCITY	90	93	88	92	89
GATE LEN					
STEP ON	1	2	3	4	5

use a dom7 chord
one semitone above
the target chord

CHORD	Min 7	Maj 7	Maj 6	Aug7	Min 7
ROOT NOTE	C2	D#2	A#2	F#2	F2
VOICING	Alt2	Alt3	Alt2	Alt2	Alt2
BASS NOTE	C1	D#1	A#1	F#1	F1
DURATION	1 Bar	1/2	1/2	1 Bar	1 Bar
VELOCITY	90	93	88	89	85
GATE LEN					
STEP ON	1	2	3	4	5

as an alternative to a
dom7, use an
augmented chord

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] = Voicing1_P1,
[29] = Voicing2_P1,
[30] = Voicing3_P1,
[31] = Voicing4_P1,
[33] = Voicing5_P1,
[34] = Voicing6_P1,
[35] = Voicing7_P1,
[36] = Voicing8_P1,
[37] = Voicing9_P1,

[39] = Voicing10_P1,
[40] = Voicing11_P1,
[41] = Voicing12_P1,
[42] = Voicing13_P1,
[43] = Voicing14_P1,
[44] = Voicing15_P1,
[45] = Voicing16_P1,
[46] = Voicing1_P2,
[47] = Voicing2_P2,
[48] = Voicing3_P2,
[49] = Voicing4_P2,
[50] = Voicing5_P2,
[51] = Voicing6_P2,
[52] = Voicing7_P2,
[53] = Voicing8_P2,
[54] = Voicing9_P2,
[55] = Voicing10_P2,
[56] = Voicing11_P2,
[57] = Voicing12_P2,
[58] = Voicing13_P2,
[59] = Voicing14_P2,
[60] = Voicing15_P2,
[61] = Voicing16_P2,
[62] = Voicing1_P3,
[63] = Voicing2_P3,
[65] = Voicing3_P3,
[66] = Voicing4_P3,
[67] = Voicing5_P3,
[68] = Voicing6_P3,
[69] = Voicing7_P3,
[70] = Voicing8_P3,
[71] = Voicing9_P3,
[72] = Voicing10_P3,
[73] = Voicing11_P3,
[74] = Voicing12_P3,
[75] = Voicing13_P3,

[76] = Voicing14_P3,
[77] = Voicing15_P3,
[78] = Voicing16_P3,
[79] = Voicing1_P4,
[80] = Voicing2_P4,
[81] = Voicing3_P4,
[82] = Voicing4_P4,
[83] = Voicing5_P4,
[84] = Voicing6_P4,
[85] = Voicing7_P4,
[86] = Voicing8_P4,
[87] = Voicing9_P4,
[88] = Voicing10_P4,
[89] = Voicing11_P4,
[90] = Voicing12_P4,
[91] = Voicing13_P4,
[92] = Voicing14_P4,
[93] = Voicing15_P4,
[94] = Voicing16_P4,
[95] = OnOff,
[102] = ChordType1_Pat1,
[103] = ChordType2_Pat1,
[104] = ChordType3_Pat1,
[105] = ChordType4_Pat1,
[106] = ChordType5_Pat1,
[107] = ChordType6_Pat1,
[108] = ChordType7_Pat1,
[109] = ChordType8_Pat1,
[110] = ChordType9_Pat1,
[111] = ChordType10_Pat1,
[112] = ChordType11_Pat1,
[113] = ChordType12_Pat1,
[114] = ChordType13_Pat1,
[115] = ChordType14_Pat1,
[116] = ChordType15_Pat1,
[117] = ChordType16_Pat1,

[118] = ChordType1_Pat2,
[119] = ChordType2_Pat2,
[128] = ChordType3_Pat2,
[129] = ChordType4_Pat2,
[130] = ChordType5_Pat2,
[131] = ChordType6_Pat2,
[132] = ChordType7_Pat2,
[133] = ChordType8_Pat2,
[134] = ChordType9_Pat2,
[135] = ChordType10_Pat2,
[136] = ChordType11_Pat2,
[137] = ChordType12_Pat2,
[138] = ChordType13_Pat2,
[139] = ChordType14_Pat2,
[140] = ChordType15_Pat2,
[141] = ChordType16_Pat2,
[142] = ChordType1_Pat3,
[143] = ChordType2_Pat3,
[144] = ChordType3_Pat3,
[145] = ChordType4_Pat3,
[146] = ChordType5_Pat3,
[147] = ChordType6_Pat3,
[148] = ChordType7_Pat3,
[149] = ChordType8_Pat3,
[150] = ChordType9_Pat3,
[151] = ChordType10_Pat3,
[152] = ChordType11_Pat3,
[153] = ChordType12_Pat3,
[154] = ChordType13_Pat3,
[155] = ChordType14_Pat3,
[156] = ChordType15_Pat3,
[157] = ChordType16_Pat3,
[158] = ChordType1_Pat4,
[159] = ChordType2_Pat4,
[160] = ChordType3_Pat4,
[161] = ChordType4_Pat4,

[162] = ChordType5_Pat4,
[163] = ChordType6_Pat4,
[164] = ChordType7_Pat4,
[165] = ChordType8_Pat4,
[166] = ChordType9_Pat4,
[167] = ChordType10_Pat4,
[168] = ChordType11_Pat4,
[169] = ChordType12_Pat4,
[170] = ChordType13_Pat4,
[171] = ChordType14_Pat4,
[172] = ChordType15_Pat4,
[173] = ChordType16_Pat4,
[174] = Root1_P1,
[175] = Root2_P1,
[176] = Root3_P1,
[177] = Root4_P1,
[178] = Root5_P1,
[179] = Root6_P1,
[180] = Root7_P1,
[181] = Root8_P1,
[182] = Root9_P1,
[183] = Root10_P1,
[184] = Root11_P1,
[185] = Root12_P1,
[186] = Root13_P1,
[187] = Root14_P1,
[188] = Root15_P1,
[189] = Root16_P1,
[190] = Root1_P2,
[191] = Root2_P2,
[192] = Root3_P2,
[193] = Root4_P2,
[194] = Root5_P2,
[195] = Root6_P2,
[196] = Root7_P2,
[197] = Root8_P2,

[198] = Root9_P2,
[199] = Root10_P2,
[200] = Root11_P2,
[201] = Root12_P2,
[202] = Root13_P2,
[203] = Root14_P2,
[204] = Root15_P2,
[205] = Root16_P2,
[206] = Root1_P3,
[207] = Root2_P3,
[208] = Root3_P3,
[209] = Root4_P3,
[210] = Root5_P3,
[211] = Root6_P3,
[212] = Root7_P3,
[213] = Root8_P3,
[214] = Root9_P3,
[215] = Root10_P3,
[216] = Root11_P3,
[217] = Root12_P3,
[218] = Root13_P3,
[219] = Root14_P3,
[220] = Root15_P3,
[221] = Root16_P3,
[222] = Root1_P4,
[223] = Root2_P4,
[224] = Root3_P4,
[225] = Root4_P4,
[226] = Root5_P4,
[227] = Root6_P4,
[228] = Root7_P4,
[229] = Root8_P4,
[230] = Root9_P4,
[231] = Root10_P4,
[232] = Root11_P4,
[233] = Root12_P4,

[234] = Root13_P4,
[235] = Root14_P4,
[236] = Root15_P4,
[237] = Root16_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 parameters for Variation 1.

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
ChordType1 Var1	0	43	Value	ValueOutput
ChordType2 Var1	0	43	Value	ValueOutput
ChordType3 Var1	0	43	Value	ValueOutput
ChordType4 Var1	0	43	Value	ValueOutput
ChordType5 Var1	0	43	Value	ValueOutput
ChordType6 Var1	0	43	Value	ValueOutput
ChordType7 Var1	0	43	Value	ValueOutput
ChordType8 Var1	0	43	Value	ValueOutput
ChordType9 Var1	0	43	Value	ValueOutput
ChordType10 Var1	0	43	Value	ValueOutput
ChordType11 Var1	0	43	Value	ValueOutput
ChordType12 Var1	0	43	Value	ValueOutput
ChordType13 Var1	0	43	Value	ValueOutput
ChordType14 Var1	0	43	Value	ValueOutput
ChordType15 Var1	0	43	Value	ValueOutput
ChordType16 Var1	0	43	Value	ValueOutput
Root1 Var1	0	95	Value	ValueOutput
Root2 Var1	0	95	Value	ValueOutput
Root3 Var1	0	95	Value	ValueOutput
Root4 Var1	0	95	Value	ValueOutput
Root5 Var1	0	95	Value	ValueOutput
Root6 Var1	0	95	Value	ValueOutput
Root7 Var1	0	95	Value	ValueOutput
Root8 Var1	0	95	Value	ValueOutput
Root9 Var1	0	95	Value	ValueOutput
Root10 Var1	0	95	Value	ValueOutput
Root11 Var1	0	95	Value	ValueOutput
Root12 Var1	0	95	Value	ValueOutput
Root13 Var1	0	95	Value	ValueOutput
Root14 Var1	0	95	Value	ValueOutput
Root15 Var1	0	95	Value	ValueOutput
Root16 Var1	0	95	Value	ValueOutput
Voicing1 Var1	0	10	Value	ValueOutput

Voicing2 Var1	0	10	Value	ValueOutput
Voicing3 Var1	0	10	Value	ValueOutput
Voicing4 Var1	0	10	Value	ValueOutput
Voicing5 Var1	0	10	Value	ValueOutput
Voicing6 Var1	0	10	Value	ValueOutput
Voicing7 Var1	0	10	Value	ValueOutput
Voicing8 Var1	0	10	Value	ValueOutput
Voicing9 Var1	0	10	Value	ValueOutput
Voicing10 Var1	0	10	Value	ValueOutput
Voicing11 Var1	0	10	Value	ValueOutput
Voicing12 Var1	0	10	Value	ValueOutput
Voicing13 Var1	0	10	Value	ValueOutput
Voicing14 Var1	0	10	Value	ValueOutput
Voicing15 Var1	0	10	Value	ValueOutput
Voicing16 Var1	0	10	Value	ValueOutput

7. Version History

Version 1.0.0: initial release