



# SEQUENCES

POLYPHONIC PATTERN  
PLAYER DEVICE

## User Guide

Version 1.4

# CONTENTS

<b>Quickstart .....</b>	<b>3</b>
<b>Introduction .....</b>	<b>4</b>
<b>The Front Panel.....</b>	<b>5</b>
Global Settings .....	5
Pattern Settings and Controls .....	8
Recording Controls .....	9
Lane Settings .....	9
Edit Buttons .....	10
Note Grid Controls .....	10
Tools Menu .....	10
<b>The Back Panel.....</b>	<b>12</b>
CV Inputs.....	12
CV Outputs .....	12
<b>Step and Real-time Recording .....</b>	<b>13</b>
Step .....	13
Real-time .....	13
Switching Between Step and Real-time.....	13
Recording Modes.....	14
<b>Editing Notes and Lanes.....</b>	<b>15</b>
Using the Timing Handles.....	15
Select and Delete.....	15
Draw Notes .....	15
Move and Resize Notes .....	15
Copy and Paste .....	16
Stacked Notes.....	16
Edit Lanes.....	16
Automate Pattern Changes .....	20
Bounce Notes To Track .....	20
<b>Keyboard Modifiers.....</b>	<b>20</b>



## QUICKSTART

- Create an Instrument device
- Create Sequences above the Instrument
- While Reason is stopped, click REC on Sequences front panel
- Play your melody or chords, without thinking about the timing
- Click REC again to exit Recording and save the pattern
- Use the Timing Edit Handles below the Note Grid to get the timing you want
- Done!

# INTRODUCTION

Thanks for buying or trying out Sequences!

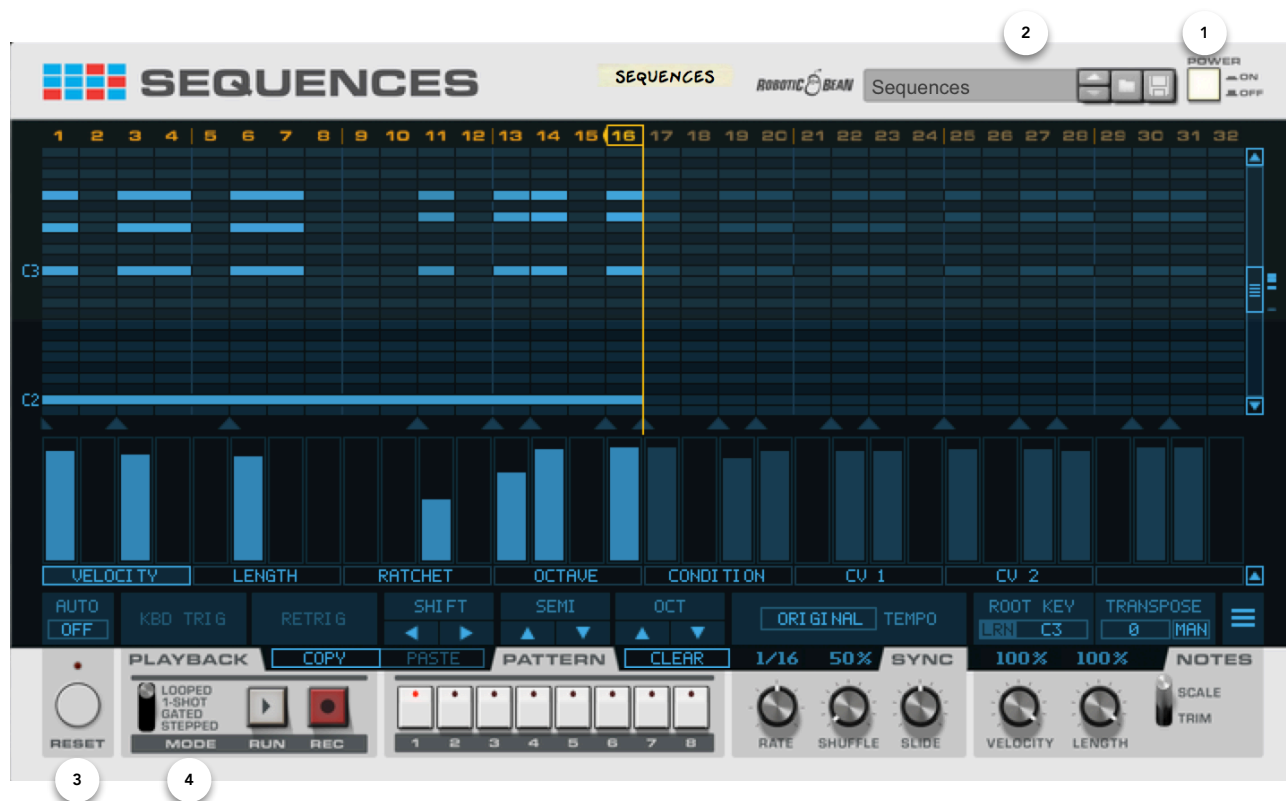
At Robotic Bean, we love step sequencers. Going back to classic mono synths, the step sequencer can spark new ideas, and frees your hands for tweaking the sound while the beat goes on. One of our most popular Rack Extensions is Step, which is a monophonic step sequencer which uses CV for playing the instrument device.

Sequences on the other hand is a Player device, which means it can be polyphonic. When we designed Sequences we wanted it to be a bit different from Step. Sequences focuses on playability and getting inspiration for your musical ideas. The possibility to combine Sequences with other players opens up for a lot of experimentation and happy accidents.

We hope you will like Sequences and get much use out of it!

*The Robotic Bean team, May 2019*

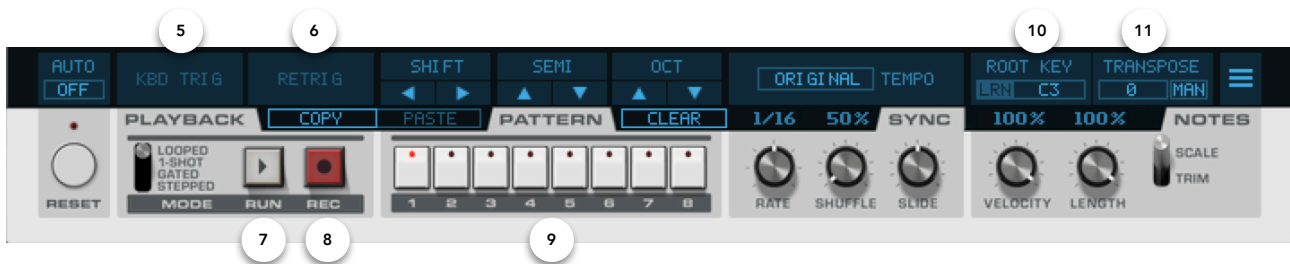
# THE FRONT PANEL



## GLOBAL SETTINGS

Some settings are global and affect the whole device.

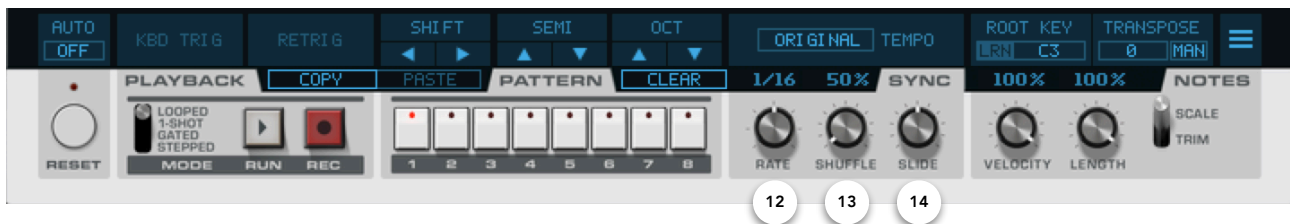
1. **ON/OFF** - Decides whether Sequences is active or not. When set to OFF, all MIDI just passes through the device.
2. **PATCH BROWSER** - Where you can load and save the state of the entire device.
3. **RESET** - When this is triggered, the Pattern is restarted from Step 1. Reset can be triggered from clicking the button on the front panel, by connecting a CV source on the back panel, or by using the Auto Reset feature (see below).
4. **PLAYBACK MODE** - Sequences can play back a sequence in four different ways:
  - **LOOPED** - Sequences starts playing when you click RUN, when you start Reason's sequencer, or when you click the RUN DEVICES button on a Combinator that contains the instance of Sequences. When the playhead reaches the Pattern Length Marker, it jumps back to Step 1. This is how most pattern devices like Redrum work.
  - **1-SHOT** - The Pattern is triggered once, and is not looped. If Keyboard Trig Mode is active (it is by default), you can trigger the Pattern by playing a note on your MIDI keyboard. If Retrigger Mode is active (it is by default), the Pattern is re-triggered from Step 1 on each trigger, otherwise it plays from the current Step.
  - **GATED** - The Pattern is played for as long as the trigger is active. The trigger can be either a MIDI note from your keyboard, or a CV signal.
  - **STEPPED** - On each trigger (keyboard or CV), one Step is played, and then Sequences waits for the next trigger. In this mode, Retrigger is disabled.



5. **KEYBOARD TRIG** - When this is ON, Sequences is triggered by playing a key on your MIDI keyboard. MIDI keys in that mode only serve as triggers and aren't passed on to the instrument. In LOOPED Playback Mode, Keyboard Trig is not possible, since playback is controlled by Reason.
6. **RETRIG** - When this is ON, the Pattern restarts from Step 1 on each new trig from the MIDI keyboard or CV Trig input. RETRIG only applies to the 1-SHOT and GATED playback modes.
7. **RUN** - Starts and stops playback. This is automatically switched on and off when Reason's sequencer (or Combinator) starts and stops.
8. **RECORD** - Click this to start recording your Pattern. If Reason is stopped, Sequences will start recording in Step Recording Mode. If Reason is running, Sequences will record in Real-time (unless playback mode is STEPPED).

 Read more about recording in *STEP AND REAL-TIME RECORDING* below!

9. **PATTERN 1-8** - Selects which pattern is playing and shown in the display.
10. **ROOT KEY** - Sets the Root Key, to make Transpose easier to use if you did not record with C3 (the default setting) as the root of your song. Click and hold Learn (LRN) to set the Root Key from your MIDI keyboard. You can also double-click the LRN button to latch it, then click it again when you have set the root key.
11. **TRANPOSE** - Moves the recorded Pattern up or down in pitch in semitone steps during playback. There are three Transpose Modes:
  - **MANUAL** - The transpose amount is set manually in the number box. Cmd/Ctrl-click on it to reset the transpose amount to 0.
  - **KEYBOARD** - The transpose amount is set by playing keys on your MIDI keyboard, relative the configured Root Key. If C3 is the root key (which is the default), playing D4 will give a +14 transpose amount. The MIDI from your keyboard will not be passed on to the instrument.
  - **CV** - Same as KEYBOARD, but the transpose amount is collected from a CV signal. MIDI notes from your keyboard will be passed on to your instrument (unless Keyboard Trig Mode is active).



## Sync Settings

12. **RATE** - Determines the speed of Sequences in relation to the song clock. Possible values are 1/4, 1/8, 1/8T, 1/16, 1/16T, 1/32, and 1/64.

💡 Whenever the Rate changes, Sequences will recalculate its position in relation to the song. This means that you can temporarily “glitch out” your pattern by dramatically increasing the rate, and when you turn it back to the original resolution, the timing of the original pattern will be maintained.

13. **SHUFFLE** - The Shuffle parameter will move every even 16th in the pattern forwards in time, giving the pattern a swing feel. The range of the knob is 50% to 75%. At 50%, no shuffle is applied, as the 16th is precisely half way between its surrounding 16ths.

💡 Sequences’ Shuffle parameter corresponds exactly to the Shuffle parameters (individual and global) found in Reason’s ReGroove mixer. For example, if you set Sequences’ Shuffle value to the same value as Global Shuffle in the ReGroove mixer, Sequences will shuffle perfectly together with Redrum, Matrix and RPG-8.

14. **SLIDE** - Allows you to smoothly slide the entire pattern forwards or backwards in time. The range is +/-120 ticks, which equals +/- one 32nd note. Negative slide will give the pattern a more hurried feel in relation to the song, while positive slide will give the pattern a more relaxed feel. When slide is 0, the pattern will be exactly on the beats of the song.


💡 This parameter corresponds exactly to the Slide parameter found in Reason’s own ReGroove mixer.

💡 Slide also comes in handy when you’re controlling external MIDI instruments live, since you can use small negative slide values for latency compensation.



## Notes Settings

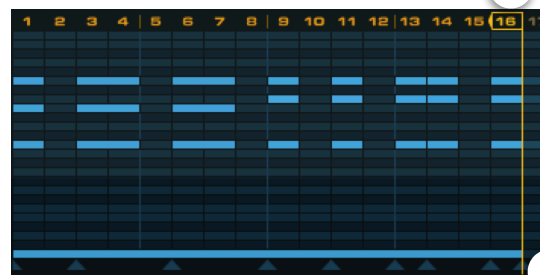
15. **VELOCITY** - Sets the overall velocity of the notes, in percent of their recorded velocities. The stronger a note is, the brighter its colour is in the display. 0% velocity scaling will output a MIDI velocity of 1, the minimum playable velocity value. If you control Velocity with CV, the display will show the sum of the Velocity knob setting, and the CV signal.

 *Patch Tip: Modulate Velocity with a curve pattern from Matrix with a different pattern length to get accents that evolve over time.*

16. **LENGTH** - Sets the duration of the notes, in percent of the step length. At 0%, very short notes are generated. If you control Length with CV, the display will show the sum of the Length knob setting, and the CV signal.
17. **LENGTH MODE** - This setting decides how the Length setting is applied to the notes:
- **SCALE** - The whole note length is scaled by the Length setting. So a note that is 4 Steps long which is scaled by 50% Length will be played as 2 Steps.
  - **TRIM** - The Length factor is applied to the last step of the note. For notes that are 1 Step long, this yields the same result as Scale Mode. But a note which is 4 Steps long that is trimmed with 50% will play back as 3,5 Steps.

## PATTERN SETTINGS AND CONTROLS

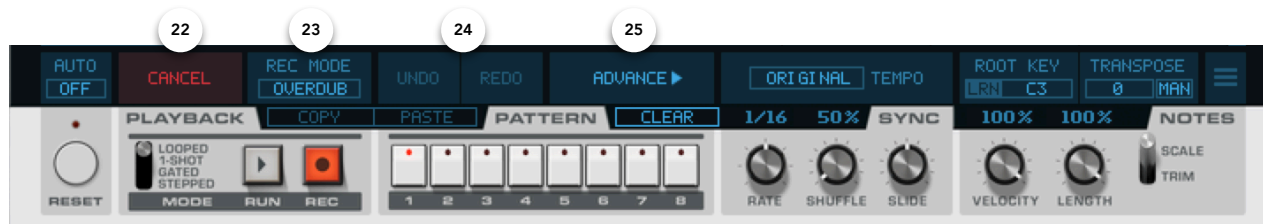
18. **PATTERN LENGTH** - Each pattern can be 0-32 steps. You set the length by clicking in the Step Number List at the top of the display.
19. **AUTO RESET** - This restarts the Pattern from Step 1 after a certain number (between 1-128) of Steps have passed. This makes it easy to create evolving Patterns by setting Pattern Length to something uneven like 15 Steps, and still make it restart every 64 or 128 Steps. Auto Reset will always follow Reason's song clock, so you can also use it to restart the sequence at regular intervals while you're running it in Stepped Playback Mode. The list of numbers snaps to musically viable numbers like 12, 16, 24, and so on.



20. **RELATIVE TEMPO** - This setting can make each Pattern play back at half, original or double tempo compared to the Rate setting.
21. **TIMING HANDLES** - If a Step contains notes, it gets a handle below the Note Grid. You can then move all notes in that Step by dragging the handle. By default you can nudge Steps that are in your way, but if you hold Shift while dragging, the relative timing of the Steps to the right of the dragged Step is maintained. Read more about this in the [USING THE TIMING HANDLES](#) section.



## RECORDING CONTROLS



There are some controls that are only visible when recording:

22. **CANCEL** - Exits the recording mode without overwriting the selected Pattern.

23. **RECORDING MODE** - Here you can select how Sequences records new notes:

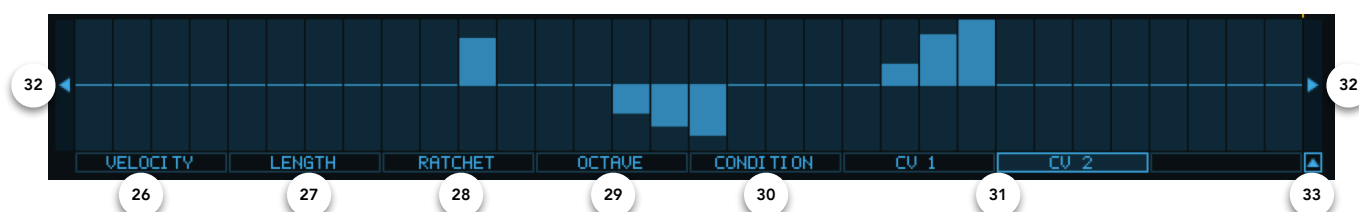
- **OVERDUB** - New notes are added to existing notes in the pattern.
- **REPLACE** - New notes replace any existing notes in the current Step. Any previous notes that extend into or past the current step will be cut off.
- **INSERT** - If the current Step is empty, the new notes are just added. But if the current Step already had notes, the new notes are inserted at the current step, while the existing notes in the current and all following Steps are moved one step later (rightwards).

24. **UNDO / REDO** - Undos and redos the latest action (recorded notes, Erase or Clear) during record.

25. **ADVANCE / ERASE NOTES** - This button works differently in Step and Real-time recording:

- **STEP: ADVANCE** - This moves the recording playhead one Step forward. How it affects existing notes in the pattern depends on the selected Recording mode.
- **REAL-TIME: ERASE NOTES** - While pressed, the notes hitting the record playhead are erased.

## LANE SETTINGS



For more info on working with the individual Lanes, please see the [EDIT LANES](#) section.

26. **VELOCITY** - Shows the recorded and scaled velocities for the Notes.

27. **LENGTH** - In this lane you can control individual NOTE LENGTH, TIE and MUTE.

28. **RATCHET** - Here you can create and edit Note repeats.

29. **OCTAVE** - Transposes Notes +/- 3 octaves.

30. **CONDITION** - Set Conditions for notes if they should trigger or not.

31. **CV 1 & CV 2** - Two separate CV curves for controlling parameters in the instrument, eg Filter Cutoff.

32. **SHIFT BUTTONS** - For the CV lanes there are two Shift buttons for moving the Lane sideways.

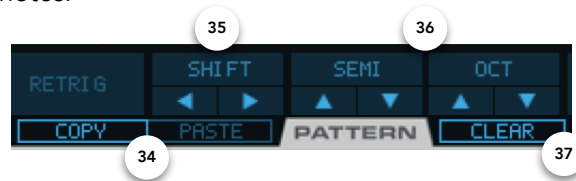
33. **FOLD** - You can open and close the lanes display by clicking the name labels, or use the fold arrow.

## EDIT BUTTONS

There are a few buttons for editing the Pattern and selected notes:

34. **COPY / PASTE** - For copying and pasting Patterns and Notes both between and within Patterns.

While you click and hold COPY, the PASTE button is replaced by a display showing what objects are being copied, for example "3 NOTES". You can then drag the whole Pattern or the selected notes to another pattern.



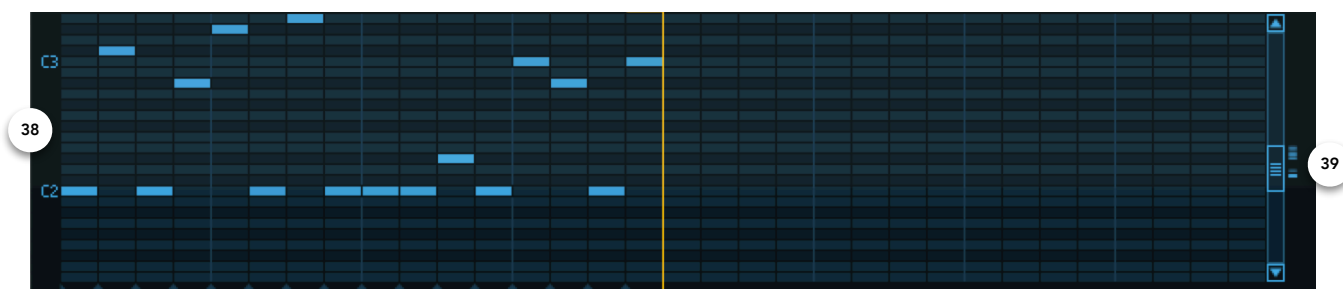
35. **SHIFT / MOVE** - When no Notes are selected these arrow buttons SHIFT the whole pattern left and right one Step at the time. If Notes are selected, the arrow buttons MOVE the selected notes one Step. You can also click and drag sideways to SHIFT / MOVE multiple Notes in a single gesture.



36. **SEMI / OCT** - Transposes the Pattern or selected Notes in octaves or semitones.

37. **CLEAR / DELETE** - When no notes are selected, this button is called CLEAR and deletes the whole Pattern, otherwise it deletes selected notes. It can also be used to clear the buffer while recording.

## NOTE GRID CONTROLS



There are two controls to navigate in the Note Grid:

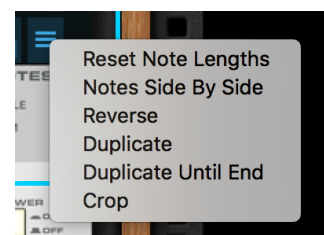
38. **SCROLL AREA** - To the left of the Note grid is an area that shows what octave the view is in (C3, C4 etc). You can click and drag in this area upwards or downwards to fine-tune the scroll position.

39. **SCROLL BAR** - To the right of the Note Grid is a standard scrollbar, that also shows an overview of where there are notes recorded. Just click the notes to jump to that octave.

## TOOLS MENU

The functions in the Tools Menu operate on the selected Notes, or, if no Notes are selected, the whole Pattern.

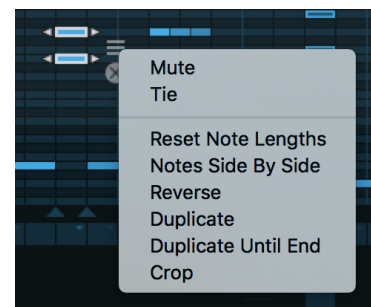
- **RESET NOTE LENGTHS** - Sets Notes length to 1 Step.
- **NOTES SIDE BY SIDE** - Extends the Notes length up until the next non-empty Step. Please note that this is not the same as tie, where the Notes must overlap a bit.
- **REVERSE** - Flips the note order from start to end of the selection or pattern.



- **DUPLICATE** - Pastes a copy of the pattern or the selected notes right after the pattern/selection end.
  - **PATTERN** - If no Notes are selected, the Pattern up until the Pattern Length Marker is duplicated and overwrites any existing notes.
  - **SELECTION** - If Notes are selected, these are duplicated right after the last note in the selection, and merged with any existing Notes.
- **DUPLICATE UNTIL END** - Like DUPLICATE, but fills the pattern by repeated pasting.
- **CROP** - Deletes all Steps after the Pattern Length Marker or outside the current selection. This can be useful after recording in INSERT MODE, when lots of redundant Notes are often created.

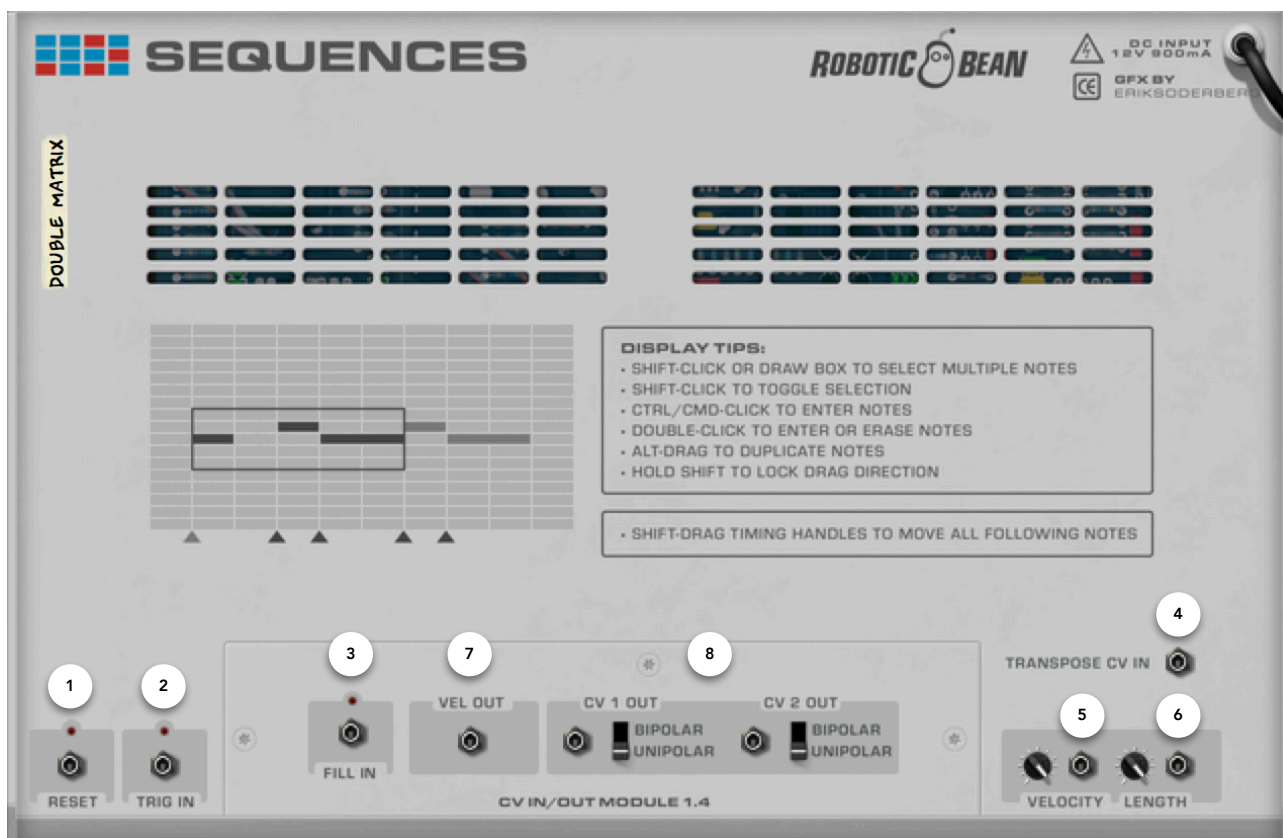
The Tools Menu can also be accessed when notes are selected, and then contains two extra items:

- **MUTE** - Mutes/Unmutes the selected notes
- **TIE** - Ties/Unties the selected notes



# THE BACK PANEL

On the Back Panel there is a small guide for using Keyboard Modifiers in the Note Grid, and also some CV-connections.



## CV INPUTS

1. **RESET** - For triggering the Reset function via CV.
2. **TRIG IN** - For triggering the next step in Stepped Playback Mode, triggering the sequence in 1-Shot Mode, or for gating the sequence in Gated Mode.
3. **FILL IN** - For controlling the FILL Condition.
4. **TRANPOSE CV IN** - For transposing all notes coming from or through Sequences.
5. **VELOCITY** - Will scale the Velocity of the recorded notes between 0 -100%.
6. **NOTE LENGTH** - For controlling the length of the recorded notes. Depending on whether the Note Length Mode is set to Scale or Trim, this will create different results.

## CV OUTPUTS

7. **VELOCITY** - Outputs the latest Step Velocity value. Empty Steps will not change the value.
8. **CV 1 & CV 2** - Outputs the individual Step CV values encoded into the two CV Lanes. Each output can be switched between Bipolar and Unipolar output.

# STEP AND REAL-TIME RECORDING

To start with, Sequences can record in both Step and Real-time, basically depending on whether Reason's sequencer is running or not.

## STEP

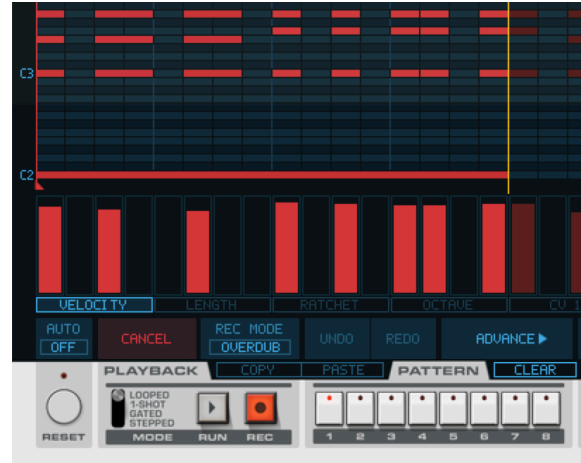
Step recording has been a feature in many classic monosynths like Roland SH-101, and is a quick way of recording without worrying about playing tight.

When Reason is stopped or the Playback Mode is set to Stepped, you will record in Step time. Each keypress is recorded into the current Step, after which the play position jumps one step forward and awaits a new keypress. You can record both single notes and chords, and combinations of the two. Sequences uses a short timing window (100ms) to determine if two notes are part of a chord or not.

If you record a note, and then keep holding it when you press the next note, the existing note will be extended through the next step so that the notes overlap.

When you enter Step recording, some new buttons will appear. Click ADVANCE to jump one Step forward without entering any notes. This is like inserting a rest. If you're holding one or more notes when clicking ADVANCE, the note lengths will be extended. If there are any notes directly after the recording head they will be treated differently depending on the current Recording Mode, see the [RECORDING MODES](#) section for details.

Click CANCEL to end Step recording, restoring the Pattern to what it was before recording. Finally, click REC to end Step recording and saving your new Pattern. You can actually select any of the 8 Patterns to save to. Just select the Pattern before clicking REC.



## REAL-TIME

When Reason is running and you click REC, you will record in Real-time (unless Playback Mode is set to Stepped). This is very similar to recording in Reason's sequencer, but the notes are automatically quantised to the Steps. When you click and hold ERASE NOTES, Steps that the playhead passes will be deleted.

## SWITCHING BETWEEN STEP AND REAL-TIME

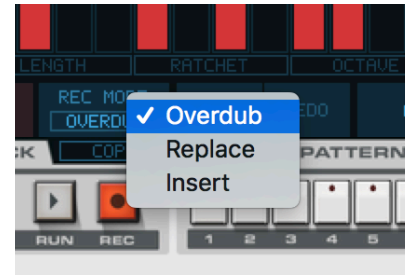
As long as you haven't recorded any notes, Sequences will switch between Step and Real-time just by starting or stopping Reason. Once a note has been recorded in either mode, Sequences will stay in that mode for the rest of the recording.

💡 One exception to this rule is when you start recording during Precount in Reason's sequencer. During Precount, transport isn't actually running so Sequences will start recording in Step time. However, as soon as transport kicks in, Sequences will switch to Real-time and any held notes will be extended as long as you press the keys.

## RECORDING MODES

In both Step and Real-time recording, there are three different modes for how new Notes are added to the Pattern:

- **OVERDUB** - New Notes are added on top of the existing Pattern. No existing Notes are deleted or moved. For example, this is useful for recording multiple passes of drums in Real-time.
- **REPLACE** - New Notes replace any existing Notes in the current Step. This is useful when trying out different voicings of a chord in Real-time, or recording different takes of a monophonic bassline in Step time.
- **INSERT** - If the current Step is empty, the new Notes are just added to the Step. But if the current Step already had notes, the new Notes are inserted at the current Step, while the Notes in the current and all following Steps are moved one step later (rightwards). This alters the timing of all Steps after the current, which can create some unpredictable results and happy accidents. This can be useful when recording arpeggios or percussion, or even experimenting with melodies.



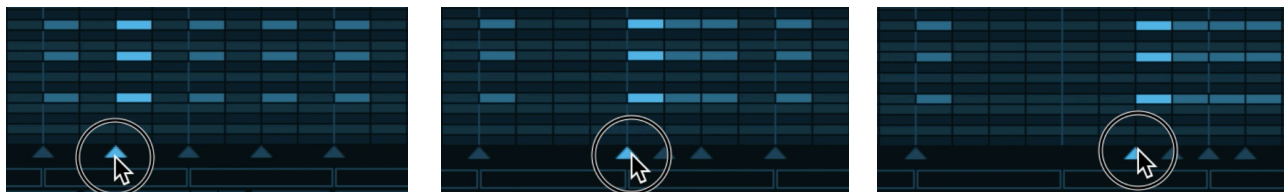
# EDITING NOTES AND LANES

After recording, you'll probably want to edit the notes in some way, and there are lots of ways to do it!

## USING THE TIMING HANDLES

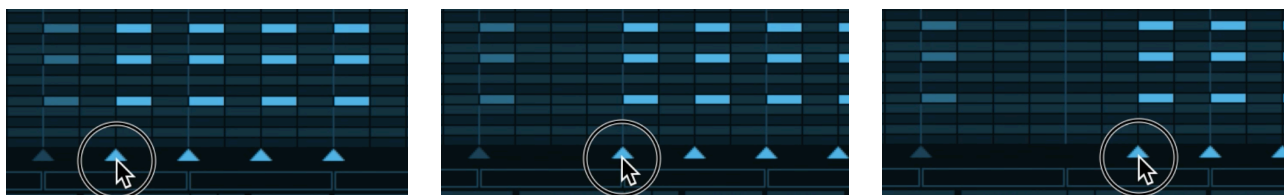
After recording, each non-empty Step will get a Timing Handle below the Note Grid. You can drag these sideways to move all Notes in a Step, without worrying about accidentally changing any Note value.

In basic operation, you can drag one Timing Handle and nudge other Timing Handles until there are no empty Steps left. Like this:



*Basic Timing Edit*

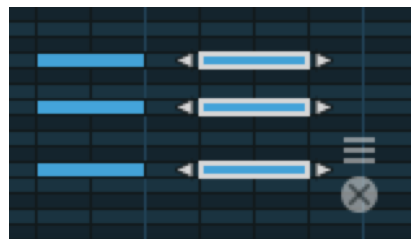
If you hold Shift while dragging, all Steps (even empty ones) to the right of the dragged Timing Handle are moved, and you can't drag past a non-empty Step to the left. This effectively maintains the individual timing of the Steps:



*Holding Shift and maintaining individual timing*

## SELECT AND DELETE

First of all you can select notes with the mouse, just like in a Reason Note Clip. To select multiple notes, Shift-click individual notes or draw a selection box. To delete notes, just click the DELETE button or double-click the note. You can delete a selection of notes by double-clicking any of them.



## DRAW NOTES

You can draw new Notes by either double-clicking or Cmd/Ctrl-clicking in the Note Grid. If you keep holding down the mouse button you can drag to the right to extend the length of the new note.

## MOVE AND RESIZE NOTES

When no notes are selected, you can use the SHIFT arrow buttons to move and wrap the Pattern left or right. Notes after the Pattern Length Marker will not be affected.

To move selected notes, drag them with the mouse or use the MOVE NOTES, SEMI and OCTAVE buttons. Press Shift before dragging to lock the drag direction to either timing (x-axis) or note value (y-axis).

You can also click the SHIFT/MOVE arrow buttons and drag sideways to Shift/Move multiple Steps in a single gesture.

Change the length of one or many notes by dragging the arrows at the start and end of each note.

## COPY AND PASTE

Use the COPY and PASTE buttons to create copies of selected Notes or whole Patterns. While you click and hold COPY, the PASTE button is replaced by a display showing what objects are being copied, for example "3 NOTES" or "PATTERN 4".

- SHORTCUT #1: Press Alt/Option before you drag notes to create a copy of them.
- SHORTCUT #2: When copying to another Pattern, click COPY and then drag to a PATTERN button to directly paste it into that Pattern. The small display will read "X NOTES TO PTRN Y".

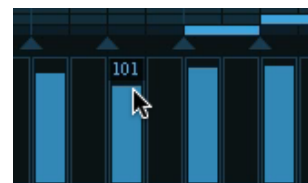
## STACKED NOTES

In contrast to Reason's sequencer, you can actually stack identical Notes on top of each other. This can be useful when working with Conditions, where you might want to have alternating velocities or similar. A number on top of the stack shows how many notes there are on the same position.



## EDIT LANES

Below the Note Grid is a lane where you can edit different aspects of the Step or individual Note. In general, most settings (like Velocity, Repeats etc) are per Note, and you can edit individual notes by selecting them. If there are only multiple unselected Notes in the same Step, you edit all Notes in the Step at once.



The Lane can be minimised (to display more Notes) by clicking the Fold Arrow to the right, or by clicking the active Lane button.

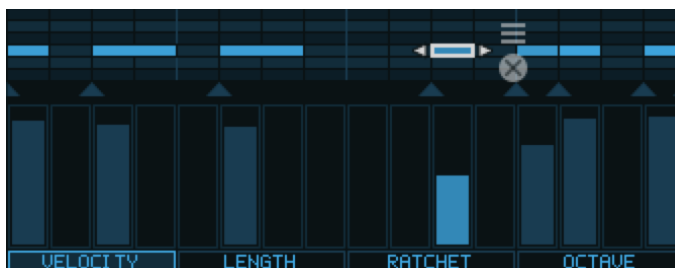
When using the keyboard modifiers Shift (for precise editing) or Ctrl/Cmd (for reset value), the values for the currently edited Step is shown.

### Velocity Lane

Here you can edit the Note Velocity (strength 1-127) of each Step or Note. When no Note is selected, the Velocity Lane shows the maximum value of the Notes in a Step. So if there are three notes with velocities 23, 57 and 101, the velocity bar will show 101 for that Step. If you then draw a new value, all three notes will be set to the new value.



If you want to edit an individual note's velocity, just select that note. The Velocity Lane will highlight the selected notes, and only those can be edited.

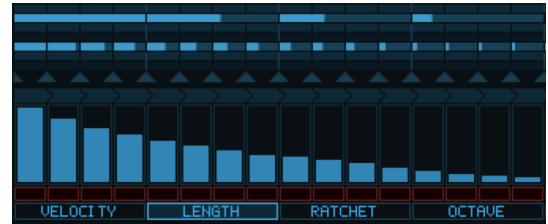




## Length Lane

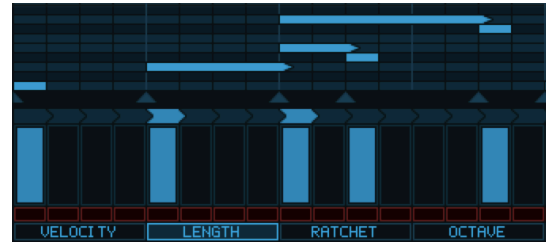
This Lane controls three aspects of the Note: Length, Tie and Mute.

1. **Note Length** controls the length. Depending on if Note Length Mode is set to Scale or Trim, this will affect the notes accordingly.

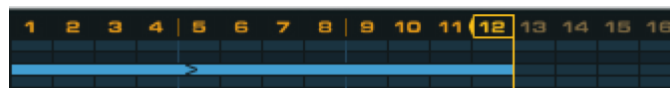


2. Enabling **Tie** for a Step extends the Note Length up until the first non-empty Step, and then overlaps a bit.

Ties are essential for creating monophonic Acid-style basslines where notes slide between pitches using Portamento in the instrument.

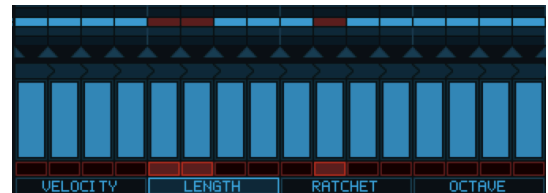


A tied Note is indicated in the display by an extension of the Note, and an arrow where the Note overlaps the next Note.



💡 The Tie algorithm wraps around the Pattern Length Marker, so a Note can actually be tied to itself, creating an "endless drone"!

3. At the bottom of the Length Lane are some red **Mute** buttons. Enable these to Mute a Step or selected Notes.

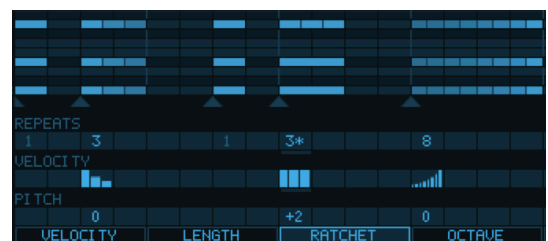


## Ratchet Lane

In this lane you can create Ratchets, or repeats. Each Note has the following settings:

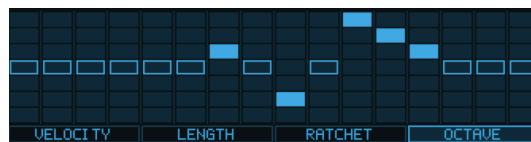
- **REPEATS**: 1 to 8
- **VELOCITY SCALING** for each Repeat: 20 to 500%
- **PITCH OFFSET** for each Repeat: +/-12 semi notes

If a Step has multiple Notes with different Ratchet settings (Repeats, Velocity or Pitch scaling), the Repeat number will show a "\*" suffix, like "3\*" in the picture.



## Octave Lane

In this lane you can quickly transpose notes in +/- 3 Octaves.



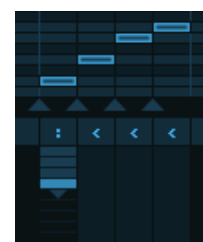
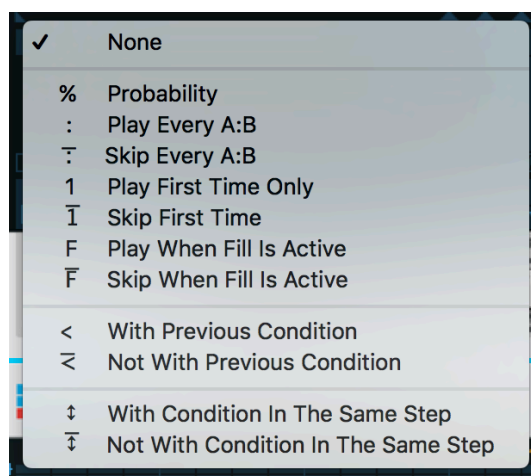
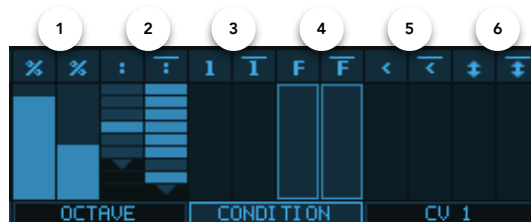
## Condition Lane

In this lane you can set a Condition for each note if it should trigger or not. There are six types of Conditions:

1. **PROBABILITY** - This sets a probability in percent (0-100%) if the note should trigger or not. If notes in the same Step have the same probability value, they will always trigger together like a chord. Otherwise, the probabilities are independent of each other.
2. **PLAY/SKIP EVERY A:B** - With this setting you can trigger or skip notes a certain cycle the pattern repeats. Let's say you want some extra notes at the end of each fourth cycle only. Select the notes and set the Condition to Play Every 4:4.

You adjust the number of cycles 1-8 by dragging the arrow at the bottom, and select the active cycle by clicking it directly, or by click + drag.

3. **PLAY/SKIP FIRST TIME** - This triggers or mutes a note the first cycle a pattern is played, regardless of how long the pattern is. This can for example be useful for adding a crash cymbal at the first Step of a pattern.
4. **PLAY/SKIP WHEN FILL IS ACTIVE** - With this Condition you can momentarily control if notes are played or not. A Fill can be triggered in three ways:
  1. By clicking in any of the Fill "buttons" in the Lane below the Condition selector.
  2. By automating the Fill parameter in Reason's sequencer.
  3. By using the Fill CV Input on the back panel.
5. **WITH/NOT WITH PREVIOUS CONDITION** - This Condition depends on the outcome of the Conditions in the latest preceding Step that contains Conditions, and applies the same or opposite to the current Note. If any of the previous Step's Conditions (there can be many) turned out true, the Condition is considered to be true. This can for example be used to group together a series of Notes into phrases, that are either played together, or not at all.
6. **WITH/NOT WITH CONDITION IN THE SAME STEP** - This looks at other Conditions in the same (current) Step. If any of them turns out to be true, the Same Condition is also true. This can be used to group together Notes in the same Step to alternative chords. So either one chord plays, or the other.

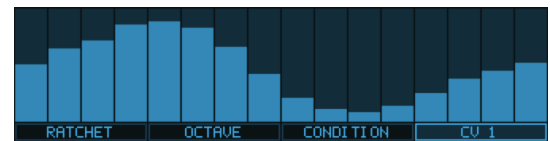


If a Step contains Notes with different Conditions, the Condition selector only displays “\*”. An exception to this rule is that if a Step just contains Notes with different Probabilities, all the individual Probabilities are shown but with a “\*” in the Lane (the third chord in the image). Please note that you can only edit individual Note Probabilities by first selecting the Notes you want to edit. If you click and draw in the Lane for a Step with multiple Probabilities (the third chord in the image), all Notes will get the same Probability.

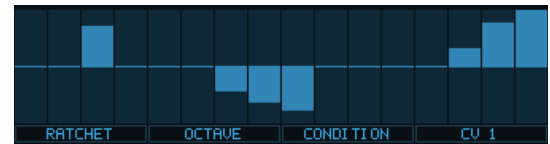


## CV 1 & CV 2 Lanes

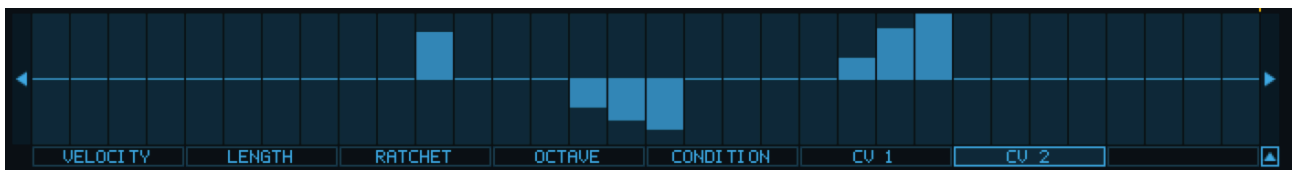
In these lanes you can draw curves that will be sent to the corresponding CV outputs on the back panel. This way you can control parameters in the instrument from your Pattern, for example Filter Cutoff.



If the CV output is set to Bipolar, the Lane will be drawn with 0 in the middle of the lane.



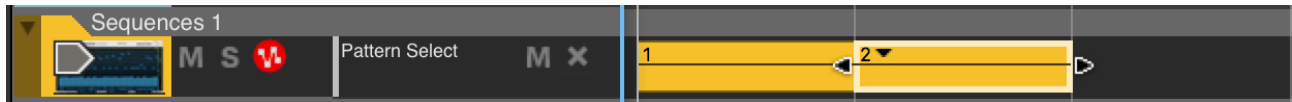
The CV lanes can be shifted independently of the Notes in the Pattern by clicking special arrow buttons at the left and right edges of the CV lanes.



## AUTOMATE PATTERN CHANGES

When you have created a number of patterns for your song, you might want to arrange them in the main sequencer. To do this you must first create a Pattern Lane for the Sequences track. The fastest way to do this is to Alt/Option-click on one of the Pattern Select buttons.

Once the Pattern Lane is selected, you can draw pattern clips in the lane using Reason's Pencil Tool. For more details we refer you to Reason's Operation Manual.



## BOUNCE NOTES TO TRACK

You can also bounce notes from Sequences to a note clip in Reason's main sequencer. Simply set up the [L] and [R] loop markers around the area you want to bounce, and then click the "Send To Track" button above Sequences in the rack.



For more details about Send To Track, Direct Record and other Player functions in Reason, please see Reason's Operation Manual.

## KEYBOARD MODIFIERS

This list of handy keyboard shortcuts is also printed on the back panel of the device.

- Shift + click to select multiple Notes
- Shift + click Notes to toggle selection on and off
- Ctrl/Cmd + click to draw a Note
- Alt/Option + drag to duplicate Notes
- Hold Shift to lock drag direction
- Shift + drag Timing Handles to move all following Notes
- Shift + click in Lanes for precise editing
- Ctrl/Cmd + click in Lanes for resetting values