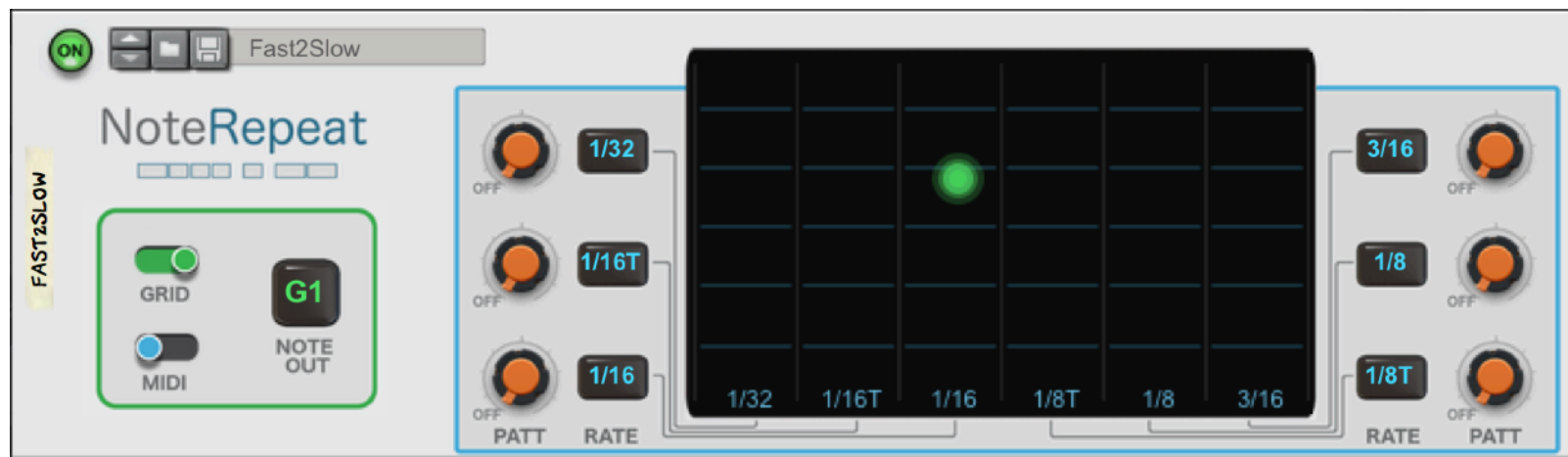


NoteRepeat Player

XY touchpad with multi-rate repeats and patterns

Rack Extension for Propellerhead Reason



USER MANUAL
version 1.1.8

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Introduction

NoteRepeat is a virtual touchpad which outputs note repeats at different rates and velocities as the cursor position moves along the X and Y axes. The X axis selects the repetition rate and the Y axis selects the velocity. The touch surface is divided into six distinct lanes, each with an assignable repeat rate which can be chosen from a total of fourteen different types. To provide some rhythmic variation from the straight repetitions, there are eight stock patterns which can be set independently for each lane. Furthermore, it is possible to use external patterns from other instruments like the Matrix sequencer via the CV inputs in the back of the player. The note repetitions can be quantized to the grid or be unquantized.

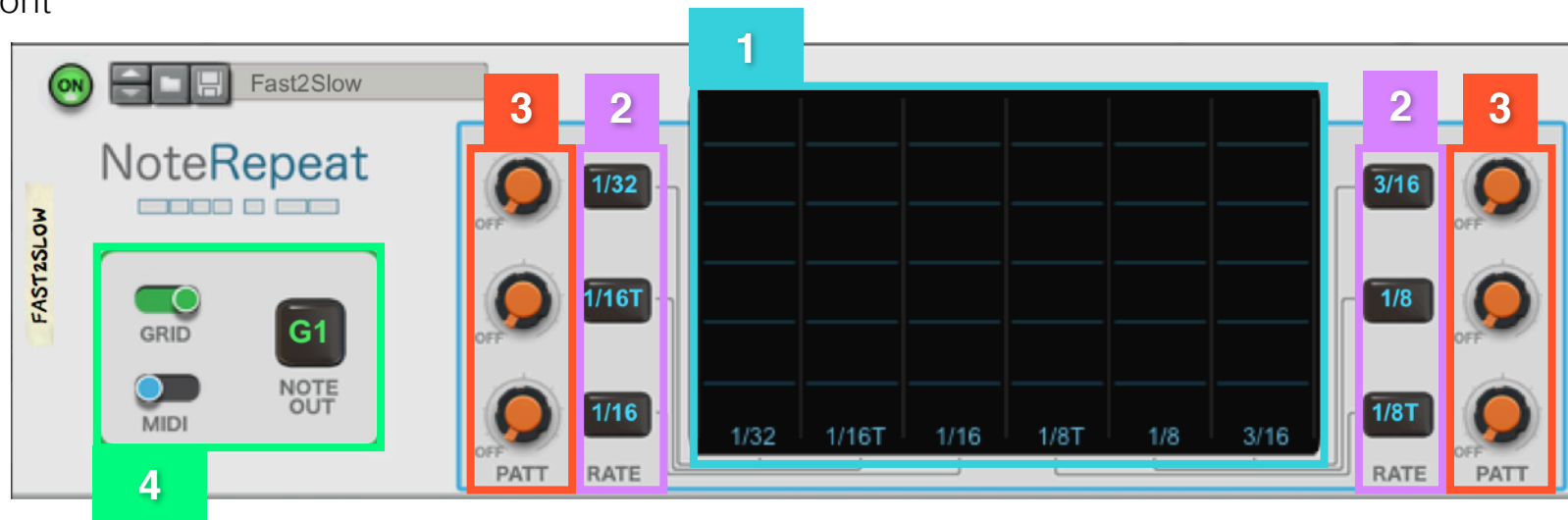
If the MIDI switch is turned “on”, the repeat rates can be triggered by incoming MIDI notes. Lanes 1 through 6 are triggered by notes C1 to F1 respectively. The velocity of the triggering note determines the velocity of the note repeats. For more expressive results, the device is capable of receiving and recording “aftertouch” MIDI CC which overrides the original MIDI note velocity.

NoteRepeat Player makes it easy and fun to create those intricate drum and percussion patterns which are essential to many contemporary electronic music styles. When used inside the modular Reason environment, the potential uses expand exponentially, especially when paired with other players. Try it with melodic instruments, vocal samples, sound effects, etc. The results might surprise you!

Overview

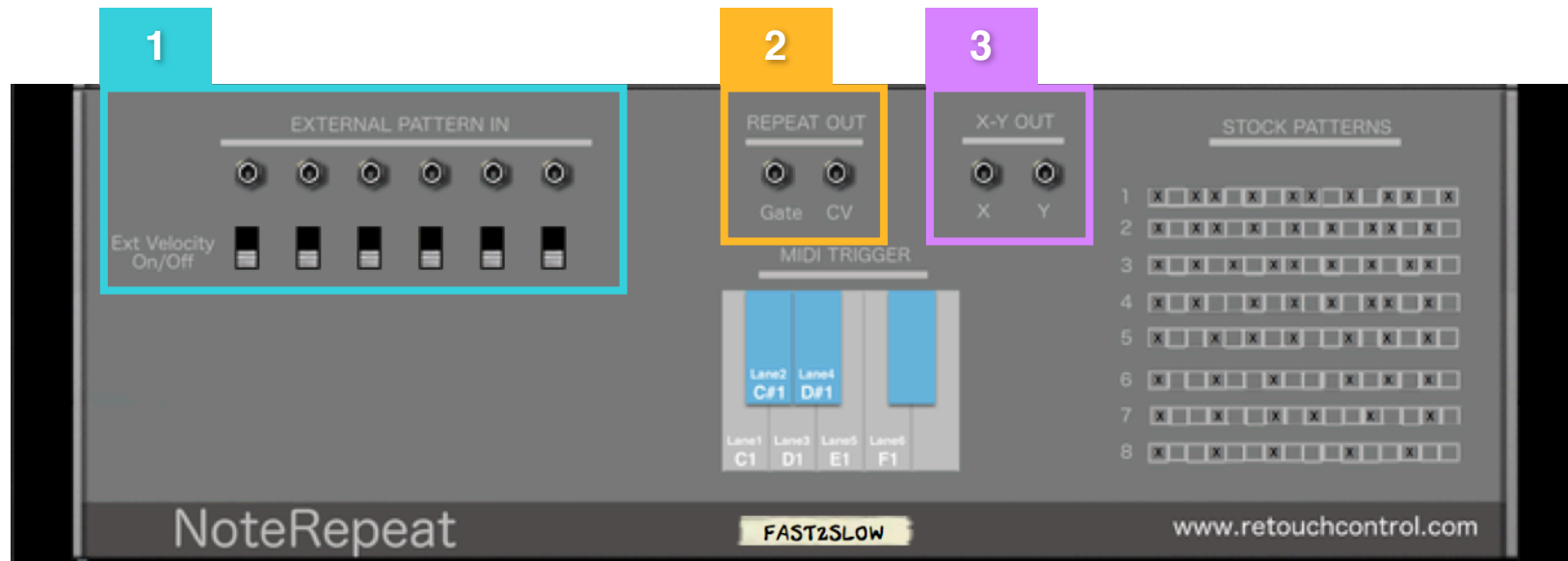
The main interface elements on the front and back panels are illustrated below.

Front



1. XY Touchpad with six distinct lanes, each with an assignable repeat rate and pattern. Click on the touchpad to activate the repeats. A green cursor appears and can be moved around. Moving the cursor in the x direction (left <-> right) changes the repeat rates, according to the values assigned to each lane. Moving the cursor in the y direction (down <-> up) changes the velocity of the notes, with increasing velocity as the cursor moves upwards. *Alt+clicking* on a lane opens a menu for selecting the rate for that lane.
2. Displays for showing and changing the rates assigned to the six lanes. Drag the mouse over the display to change the repeat value.
3. Pattern select knobs for assigning a pattern to each lane. There are 8 available patterns and they can be set independently for each lane. The default position is for straight repetitions, i.e. pattern OFF.
4. With “**Grid**” engaged, the repeats are quantized to the grid according to their repetition value. With “**MIDI**” engaged, the repeat rates are triggered by incoming MIDI notes. The “**Note Out**” display allows to change the note sent out by the device.

Back



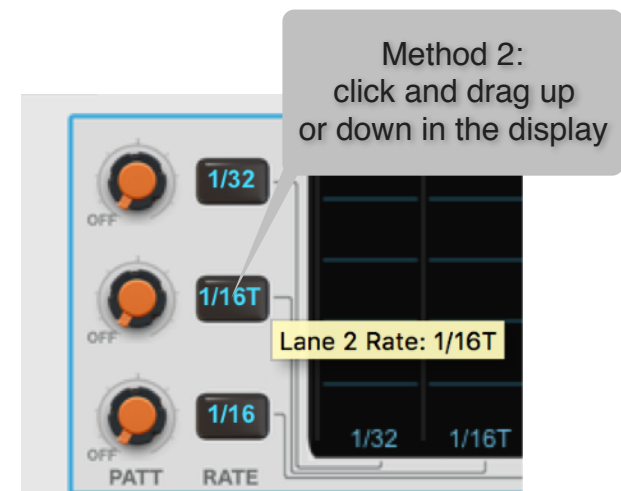
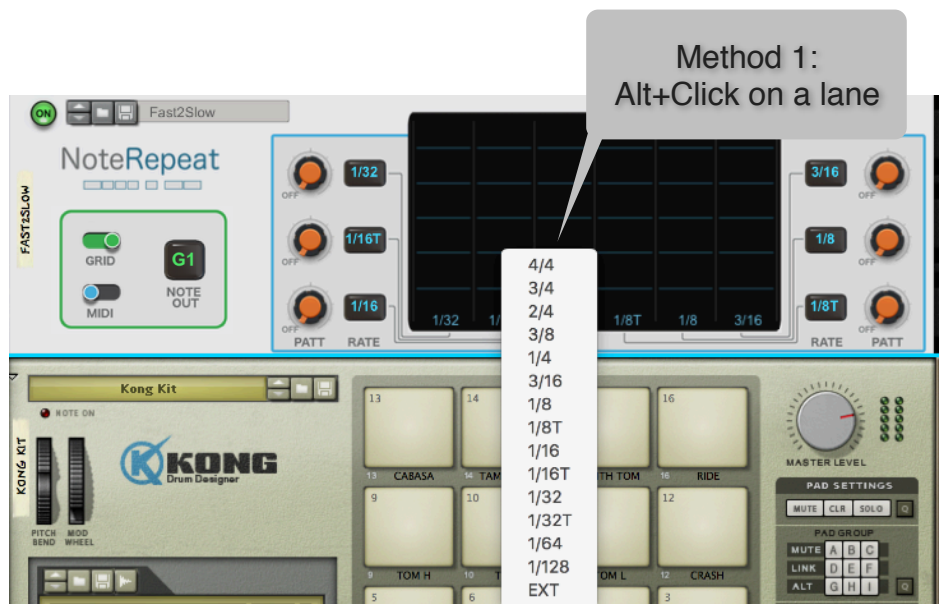
1. CV inputs to receive gate signals from external pattern sources from devices like the Matrix step sequencer, the Dr.Octorex Loop Player and similar. The 6 inputs correspond to the six lanes in the touchpad area. The 6 switches are used to determine whether to use the velocity from the gate signals or the velocity from the Y cursor position. The default is to use the velocity from the Y position.
2. CV outputs for sending out the note repeats as gate and CV signals to other devices not directly connected to the player.
3. CV outputs for sending out the X and Y position as CV signals to control parameters on other devices

Usage

Like any other player, NoteRepeat is placed on top of the device which is going to be triggered. Some interesting results can be obtained when placing NoteRepeat upstream of other player devices like Note Echo or Dual Arp from Propellerhead.

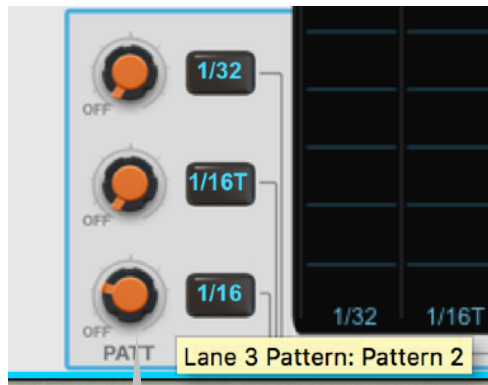
Selecting Repeat Rates

To select a repeat rate for a lane, there are two methods:



Selecting a Pattern (Internal)

To create variations on the steady repetitions, it is possible to assign patterns to each lane independently. There are 8 patterns based on 16 steps, and thus best used with 4/4 time signatures. The nature of these patterns is described below. When the pattern knob is set to the OFF position, no patterns are used and the repetitions are straight. It is also possible to use custom patterns by selecting EXT as the repeat rate. This is explained in more details in the next section.



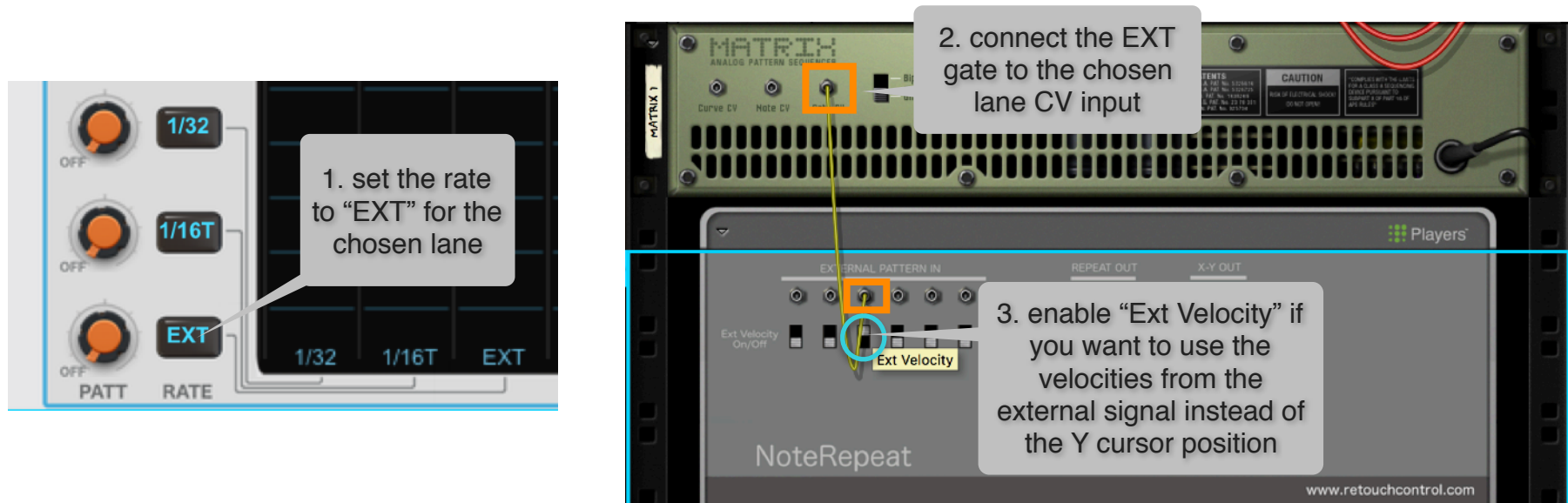
Adjust the knob to select a pattern for the given lane

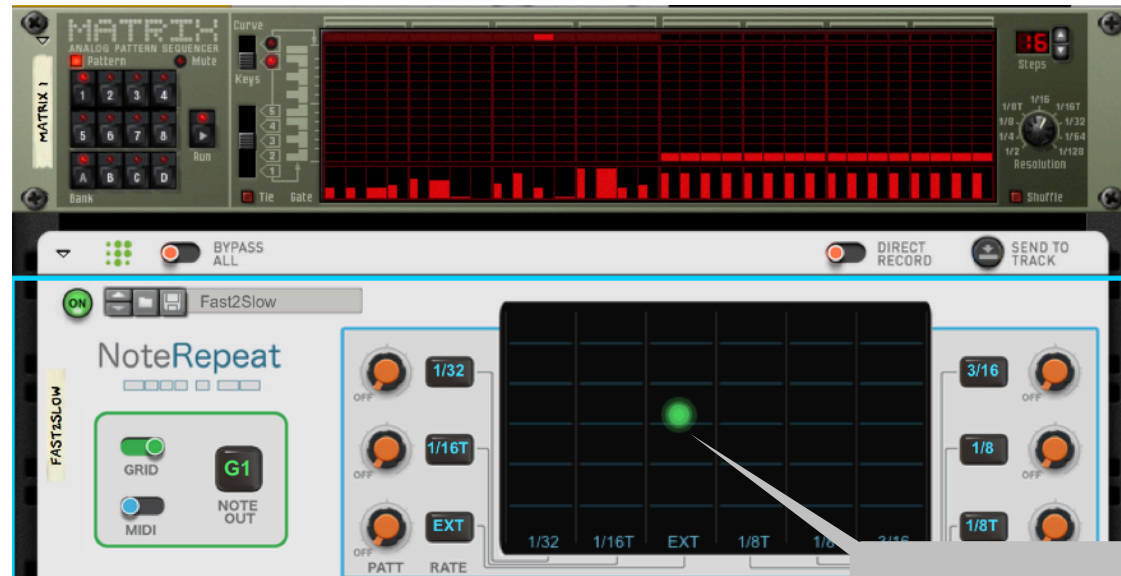
PATTERNS

1	X		X	X		X		X	X		X		X	X		X
2	X		X	X		X		X		X		X	X		X	
3	X		X		X		X	X		X		X		X	X	
4	X		X			X		X		X		X	X		X	
5	X			X		X		X			X		X		X	
6	X			X			X				X		X		X	
7	X			X			X		X			X			X	
8	X			X			X				X			X		

Using External Patterns

It is possible to use external patterns along with the ones which come with the device. The example below shows how to use an external pattern coming from the Matrix sequencer. A similar procedure can be used for all other devices capable of outputting gate signals via CV.



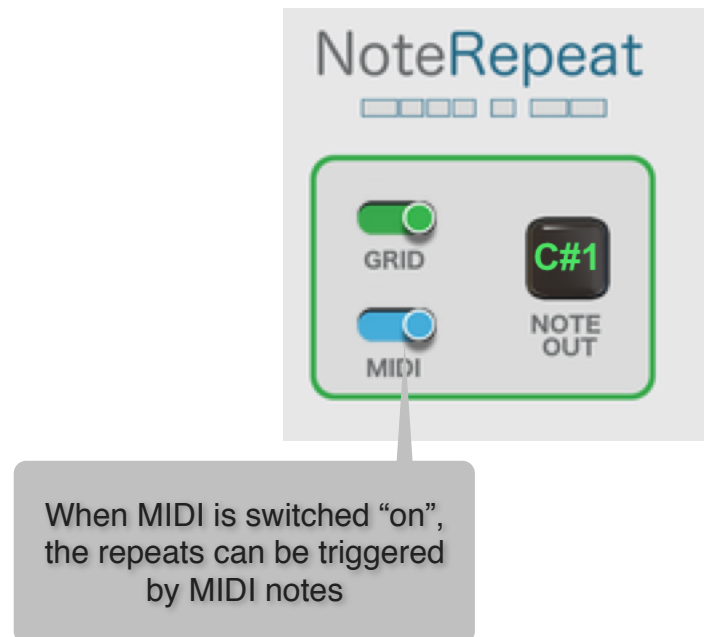


4. click in the lane with the EXT rate to trigger the repeats from the external pattern

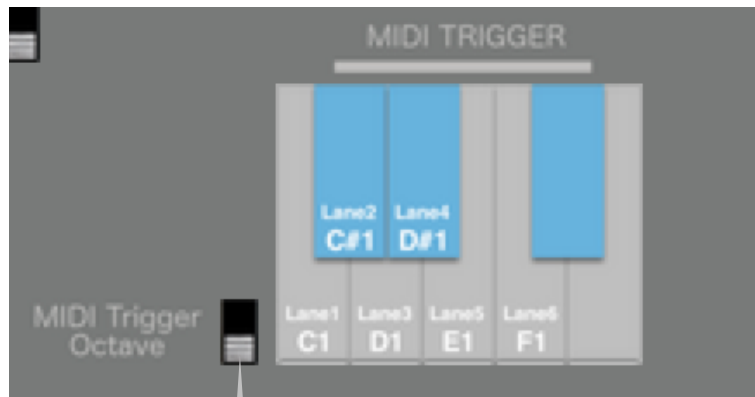
MIDI Triggering

If the MIDI switch is turned “on”, the repeat rates can be triggered by incoming MIDI notes. Each lane is triggered by a specific MIDI key as depicted below. The velocity of the triggering MIDI note determines the velocity of the note repeats. For more expressive results, the device is capable of receiving and recording “aftertouch” MIDI CC which overrides the original MIDI note velocity. Aftertouch has to be transmitted directly to the Player by creating its own track and giving it keyboard focus. If you have a keyboard capable of transmitting aftertouch, you can record it as automation. If you don’t have such a keyboard, you can draw in the aftertouch automation manually. The following page shows the procedure for using aftertouch.

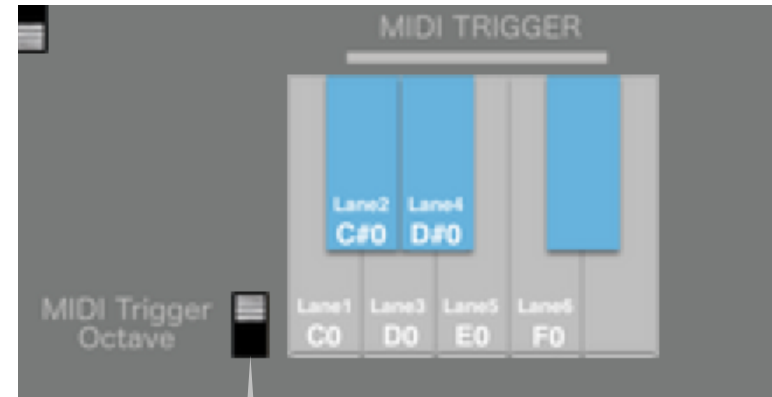
Please note, when MIDI is on, the display no longer responds to mouse input for the X and Y position. Furthermore, when MIDI is on, the device only responds to the notes which trigger the repeat lanes, all other notes are passing thru normally.



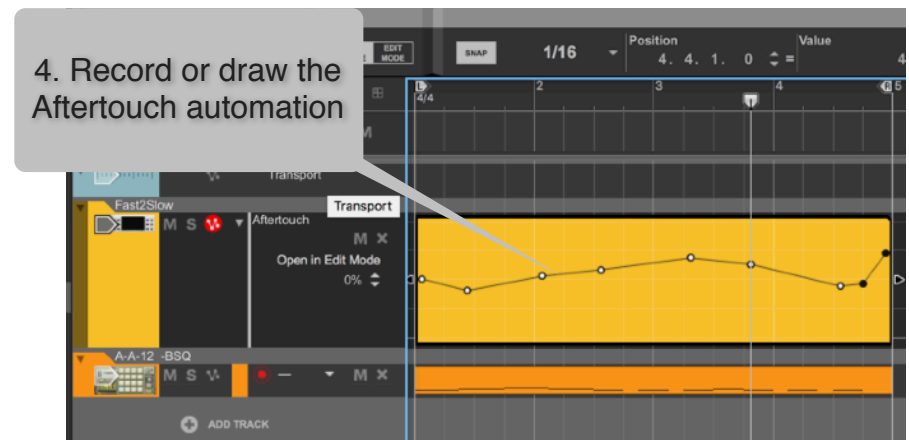
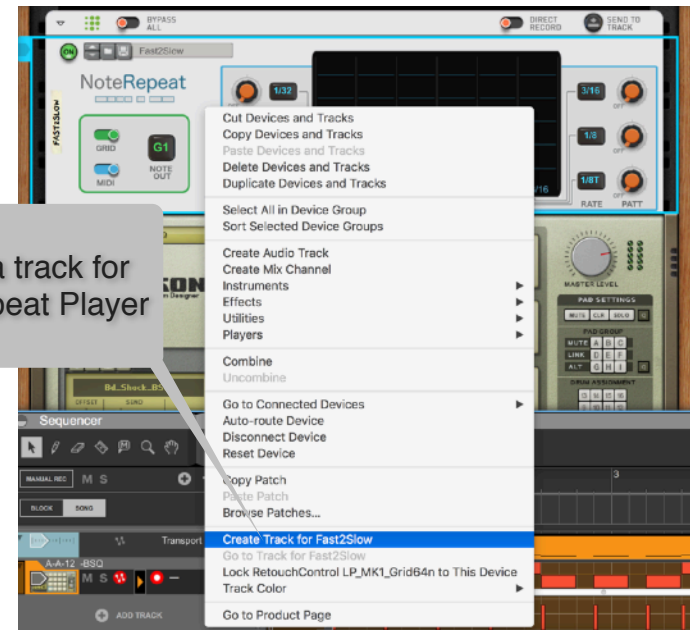
The notes which can be used for triggering the repeat lanes are selectable by a switch in the back of the device. By default, the notes C1 to F1 are used to trigger lanes 1 to 6 respectively. However, if you change the position of the switch, the notes C0 to F0 are used instead. This second option is ideal for example when triggering drums in Kong. You can still play the drums (either live for from a sequencer track) and then add the repeats on top with MIDI triggering. This is a great way to add hi hats or other percussive parts for example.



With the switch in this position, the notes C1 to F1 can be used to trigger the repeats



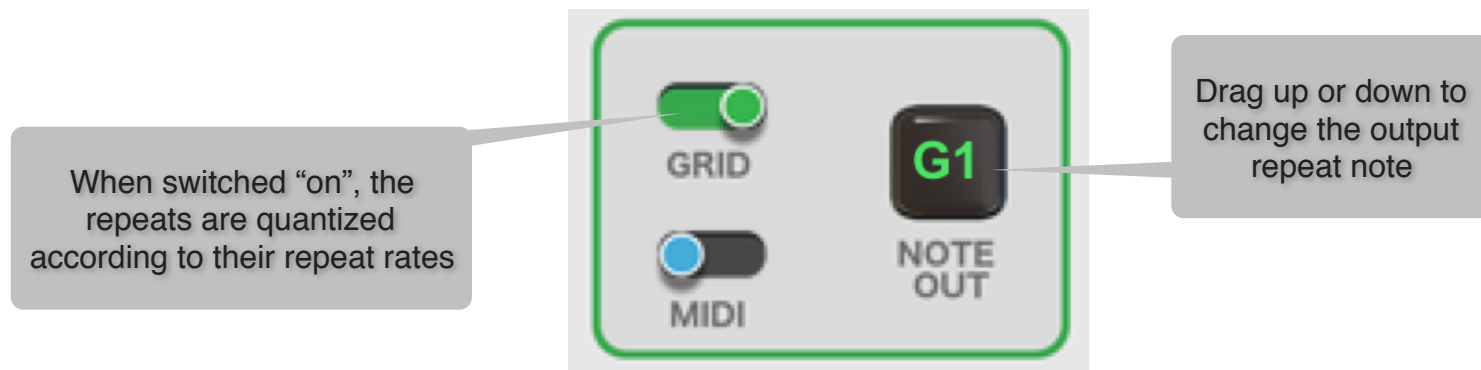
With the switch in this position, the notes C0 to F0 can be used to trigger the repeats

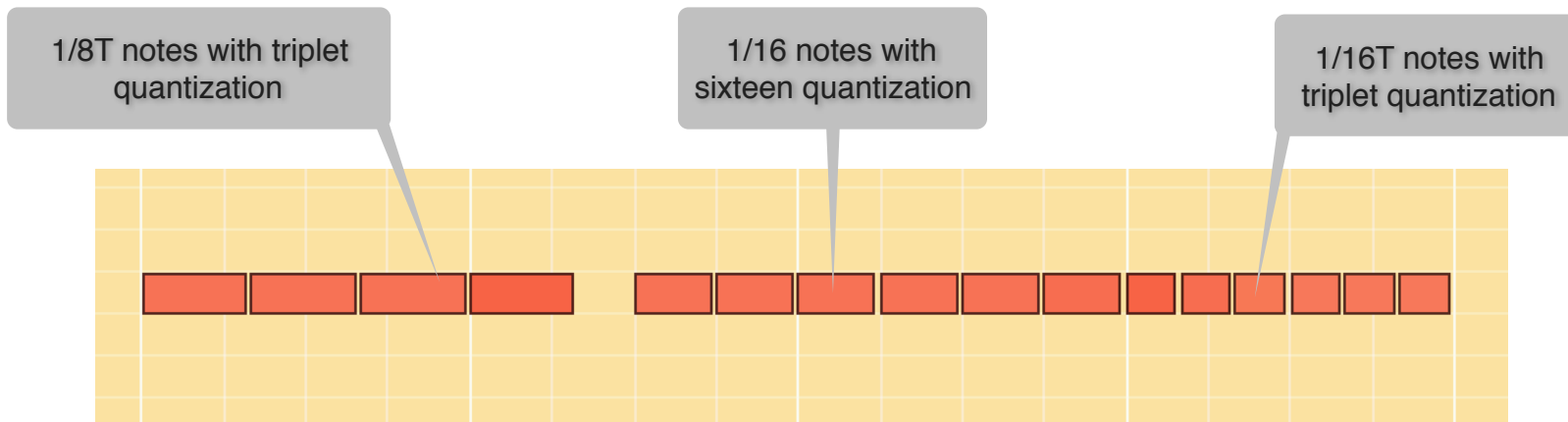


Sequencer Settings

When the “**Grid**” switch is enabled, the repeats are quantized according to their repeat rate. So 1/16 repeats are quantized to 1/16 divisions in the sequencer, likewise 1/16T repeats are quantized to 1/16T divisions. The quantization requires the sequencer to be running, of course. On the other hand, when “Grid” is off, the repeats are not quantized at all, and they are placed in the sequencer according to the time they were triggered by clicking in the XY touchpad.

The “**Note Output**” section allows to change the note which is outputted during the repeats. This can be automated in the sequencer to create some interesting results!



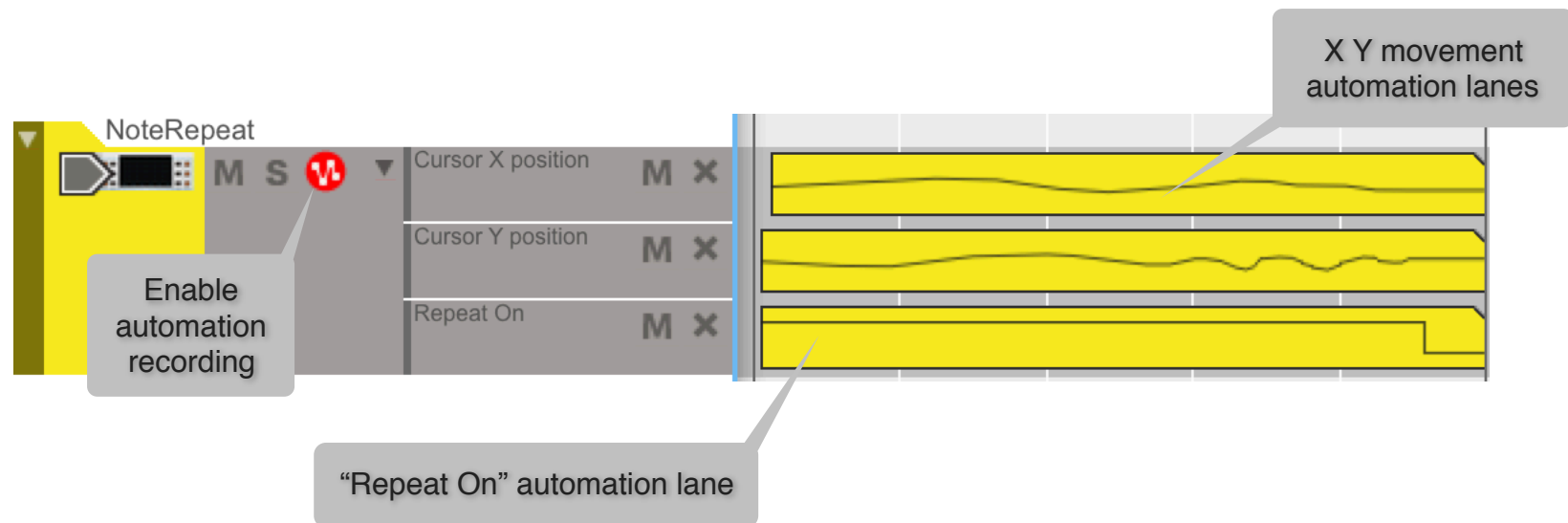


Repeat quantization with "Grid" on

Sequencer Automation

You can automate the XY touchpad movements in the sequencer. First, you need to create a track for the NoteRepeat device. After that, with automation record enabled, three automation lanes are created as you move the cursor on the XY pad. One corresponds to “Repeat On”, that is the action of clicking and triggering the repeats, while the other two are for the X and Y positions of the cursor as you move around.

In addition to automating the XY movements, it is possible to automate the patterns for each lane and it is also possible to automate the note output selection. This can create some interesting results when used with instruments or samples.



MIDI Implementation Chart

CC PARAMETER

[15] = "OnOff",
[45] = "Repeat_On",
[46] = "X position",
[47] = "Y position",
[48] = "Output Note Select",
[49] = "PatternSelect_Lane1",
[50] = "PatternSelect_Lane2",
[51] = "PatternSelect_Lane3",
[52] = "PatternSelect_Lane4",
[53] = "PatternSelect_Lane5",
[54] = "PatternSelect_Lane6",

Remotable Items

Scope

Manufacturer

Retouch Control

Model

com.retouchcontrol.NoteRepeat

Remotable	Min	Max	Input type	Output type
Lane 1 Pattern	0	8	Value	ValueOutput
Lane 2 Pattern	0	8	Value	ValueOutput
Lane 3 Pattern	0	8	Value	ValueOutput
Lane 4 Pattern	0	8	Value	ValueOutput
Lane 5 Pattern	0	8	Value	ValueOutput
Lane 6 Pattern	0	8	Value	ValueOutput
On/Off	0	1	Toggle	ValueOutput
Horizontal X position	0	4194304	Value	ValueOutput
Vertical Y position	0	4194304	Value	ValueOutput
Repeat On	0	1	Toggle	ValueOutput
Lane 1 Rate	0	14	Value	ValueOutput
Lane 2 Rate	0	14	Value	ValueOutput
Lane 3 Rate	0	14	Value	ValueOutput
Lane 4 Rate	0	14	Value	ValueOutput
Lane 5 Rate	0	14	Value	ValueOutput
Lane 6 Rate	0	14	Value	ValueOutput
Note Out	0	127	Value	ValueOutput
Device Name	0	0	-	TextOutput
Patch Name	0	0	-	TextOutput
Select Patch Delta	0	0	Delta	TextOutput
Select Previous Patch	0	0	Trig	TextOutput
Select Next Patch	0	0	Trig	TextOutput

Version History

Version 1.1.0 added triggering of repeat lanes by MIDI notes

Version 1.1.5 added switch to change the MIDI notes which trigger the repeat lanes for better compatibility with Reason's drum instruments

Version 1.1.6 optimizations for Reason 12 HD

Version 1.1.8 added On/Off automation and remote control, plus fixed a bug where the player would not forward some notes if MIDI on was enabled