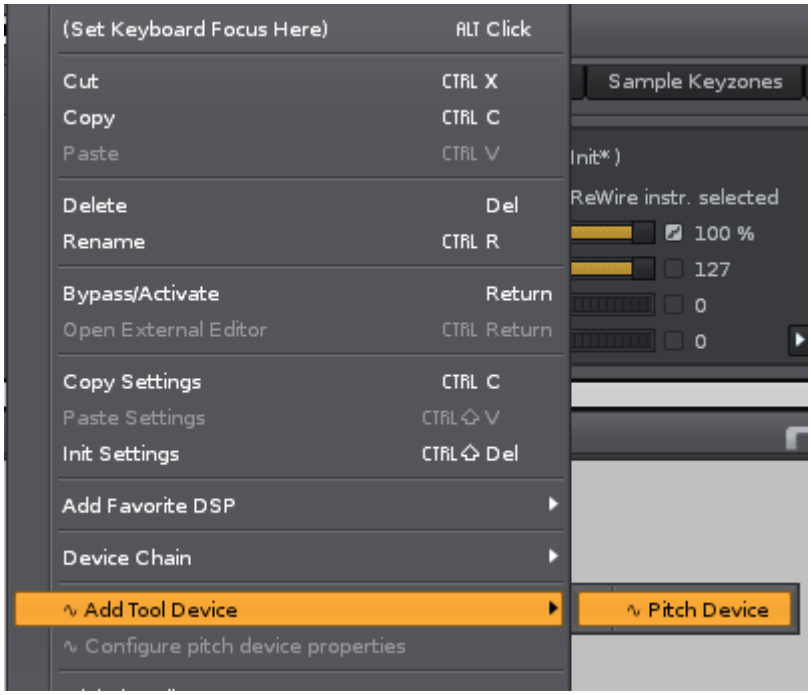
Automatable Pitch Device instructions
V1.05

Adding a device

To add a device, either right-click somwhere in the DSP area on the bottom strip or in the mixer panel. Then unfold the “Add Tool Device” sub-section and select “Pitch Device”.

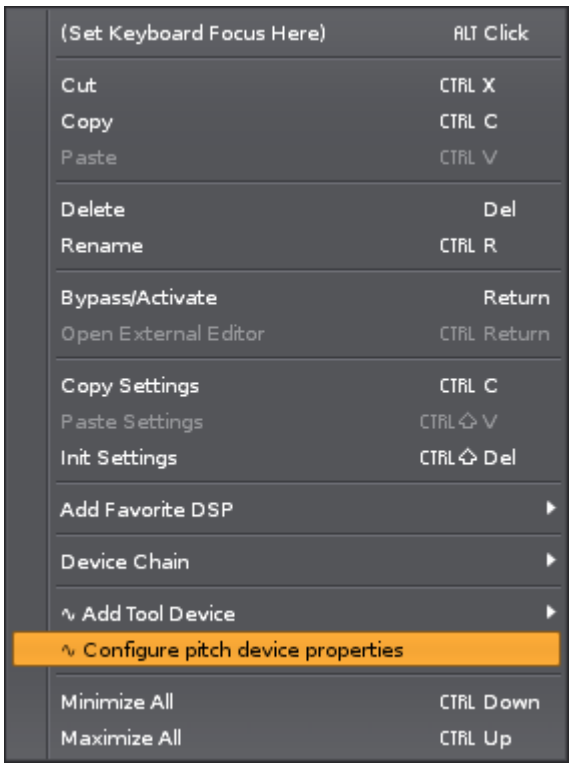


An Instrument Midi control device appears on the DSP list with an alternate title:

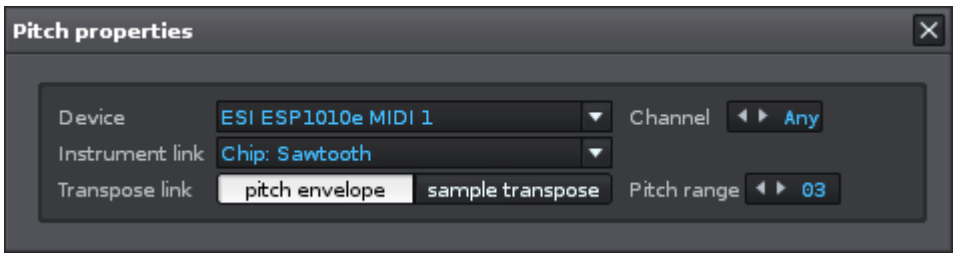
The figures behind the title have the following meaning according to their position:
[1] = Linked Instrument
[2] = Sample transpose mode
[3] = Pitch range
[4] = Linked midi device
[5] = Linked midi channel

You ofcourse don't have to alter these values manually...

Rightclick on the device and then select “Configure Pitch Device properties” from the context menu:



A dialog opens and allows you to change the specific requirements for the device to have:



-The (Midi) Device selection is for enabling listening to the pitch wheel controller on your midi device. If you don't have one, leave these values to their defaults.
-The instrument link is the instrument that you connect to the device.
-The transpose link give you two options:Pitch envelope and sample transpose. Both have their cons and pro's, i will explain these later.
-The pitch range limits the range of semitones you want to pitch up or down.

How the Transpose feature works

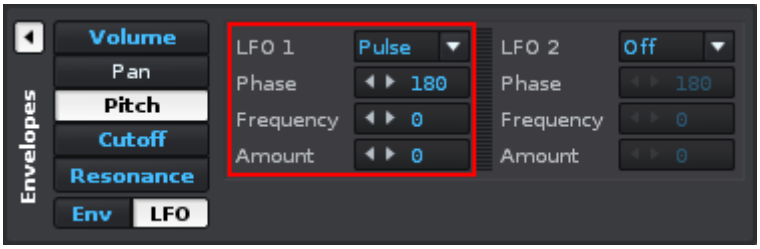
Pitch envelope transpose

If you pick the pitch envelope option, the first pitch envelope point of the instrument is altered, also a sustain node is placed on that position so that you have an ensured slide effect as long as the note is held. Whatever you do behind that point is yours to decide.

Sample transpose

If you pick the sample transpose, the transpose slider is alternating semitones.

Alternatively, the Pitch LFO1 is changed to alternate the fine-pitch between two semitones.



Cons and pros Pitch envelope vs Sample transpose

The pitch envelope has the advantage of real sliding from one semitone to another. If you are using the pitch envelope for specific effects, the pitch bend device may influence the configuration to limit or even disable your effect. You can also choose to add points behind the first one to extend your effect, but it won't kick in until a note-off or new note is triggered.

The sample transpose can be used in case the pitch envelope is highly needed. If you are using both pitch LFO's for your instrument effect, you have to decide to either give up your LFO1 or to make it affect the first pitch point in the envelope. If you are using the first LFO for a specific effect and want to maintain it, you can move the values to the second LFO. The transitions using the LFO does not always go as smooth as with the pitch envelope point.

Known tool limitations

-As a lot of notification events are fired to let the tool know what to do, if you add too many devices, the tool becomes sluggish and responses may turn inaccurate. That is not a problem of the tool, but this is simply the limitation of the processing speed of the Lua interpreter.

-In very rare occasions, the link between the pitch bend controller and the device gets lost, this can be restored by either switching to another instrument and back or simply select another device and then the pitch device. This is hard to fix because this requires preventing conflict between response to changes initiated from Renoise vs changes caused by the tool.

-Looking at the first mentioned limitation, when recording automation using the pitch bend controller, you will notice sluggish behavior when alternating positions very rapidly and the tool starts running behind the facts, which could also lead into inaccurate recordings. If you simply map a CC controller to the slider, the inaccuracy is no issue at all since it is handled internally, nevertheless, the mentioned device quantity limitation can still affect accuracy during playback of the automation!