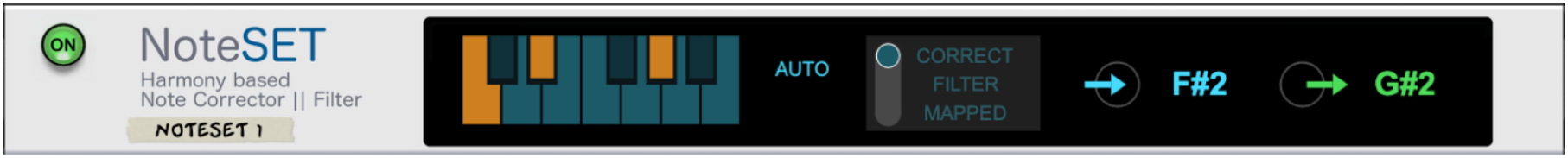
NoteSet Player

Harmony based Note Corrector II Filter

Rack Extension for Propellerhead Reason



USER MANUAL

version 1.2.0

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1.0 Introduction

NoteSet is a player device for Reason which works in conjunction with the ChordSet and ChordSQ Rack Extensions, but it can also be used with the RPG-8 arpeggiator (see section 3.5). In “Automatic “ mode, the player corrects or filters incoming notes to the closest note in the chord received at the CV inputs. In “Linked” mode, the player corrects or filters incoming notes based on a custom set of notes which can be set by the user independently for each chord.
The player can correct or filter notes played live from a MIDI keyboard or from MIDI clips in the sequencer. It can also correct notes from devices like Matrix when hosted inside a combinator (see section 3.6).

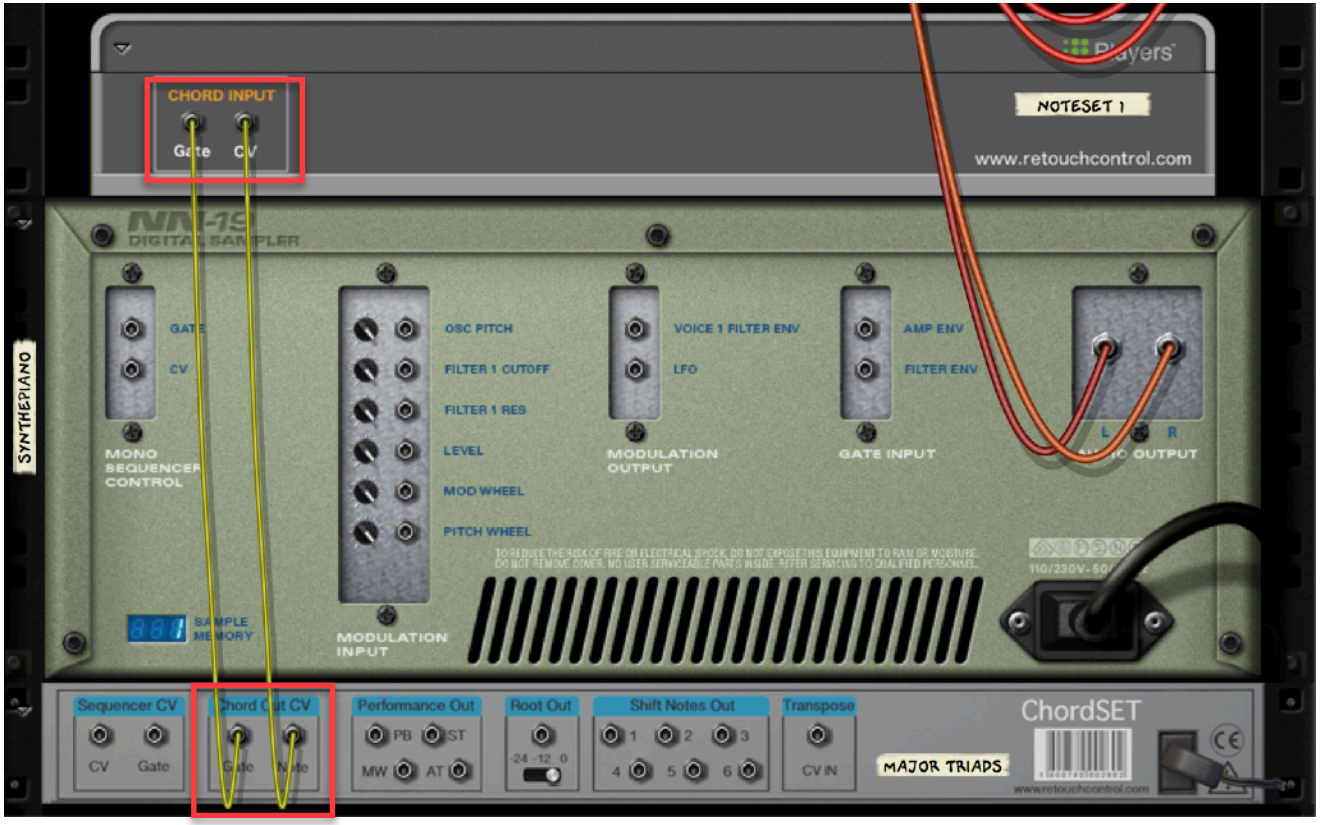
In contrast to the Scale & Chords player, NoteSet does not use a predefined static musical scale, it’s always adapting to the chords being played. So the same incoming notes are corrected or filtered to different notes with each new chord, and this can create more interesting melodic and bass parts. In some cases, for example with parallel or more Jazzy progressions, there is often no defined underlying musical scale, so note correction or filtering based on the chord notes is likely to produce better results.

The main features of the device are:
- 4 modes of operation, including “Automatic”, “Linked”, “Static” and “Chord Thru”
  - in “Automatic” mode, correction or filtering of incoming notes is based on the notes of the chords received via CV
  - in “Linked” mode, correction or filtering of incoming notes is based on a set of user defined notes specific for each chord
  - in “Static” mode, correction or filtering of incoming notes is based on a fixed set of notes, independent of the chords played
  - in “Chord Thru” mode, the player passes the chords received from ChordSet to a connected device and can be used to write the chords to midi notes in the sequencer by using the “Direct Record” or “Send To Track” features
- works in conjunction with the ChordSet device or similar*
- the left side of the display shows the chord notes received at the CV inputs
- the right side of the display shows the incoming note and the outgoing note (corrected or filtered)
- it is possible to change the range of notes which are being received and send out by setting a Min and Max range
- when the player is turned Off, it forwards incoming notes down the line to connected devices without correction or filtering

* NoteSet does not implement Blamsoft PolyCV protocol

2.0 Set Up

In order to use the NoteSet player, it has to be connected to the ChordSet device or similar* to receive the chord input notes. This is done via the CV and Gate inputs in the back of the device as shown below.



Connect the Chord CV outs from ChordSet to the Gate and CV inputs on NoteSet

3.0 Usage

Before the NoteSet player can do any note correction or filtering, it needs to receive a chord at the CV inputs or it needs to have a set of linked or static notes set up by the user. This depends on the mode of operation currently active. In this chapter, we will discuss first the two main functions of the device, that is note correction or note filtering. Then we will review the various modes of operations and how they differ from each other.

3.1 Note Correction (default)

By default, the device is set up to do note correction. Any incoming note is corrected to the closest note in the chord in memory or to the closest note in the set of linked or static notes set up by the user. The incoming and the outgoing corrected notes are shown on the right side of the display.

If a second incoming note is corrected to the same outgoing note as a first incoming note while the first note is still being held down, the outgoing note is not re-triggered but it continues playing until both the first and second incoming notes are released. This avoids incoming notes cutting each other off when they are corrected to the same outgoing note.

Incoming “F#2” note corrected to a “G#2” outgoing note

3.2 Note Filtering

In order to activate note filtering, move the switch at the center of the display from left to right. Once enabled, the display shows the “Filter Notes” letters in more evidence. Please note, note filtering and note correction are mutually exclusive.

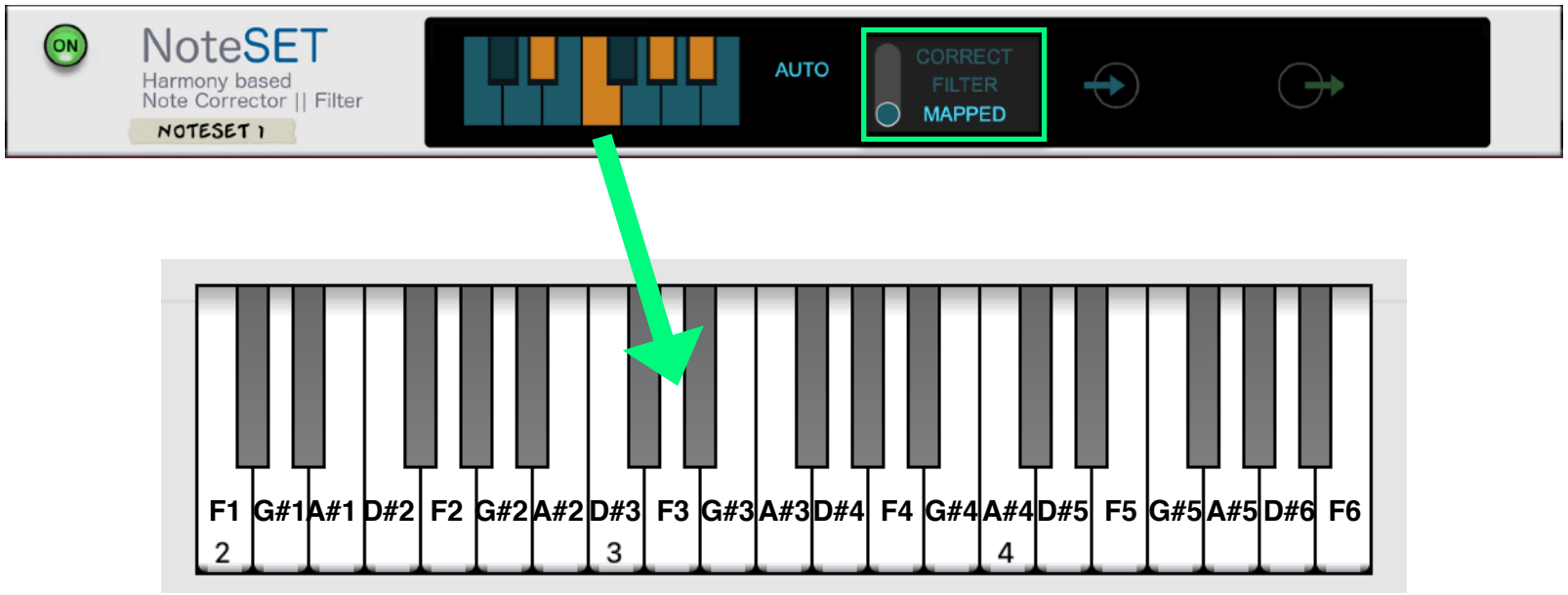
Note filtering does precisely that. It filters incoming notes so that only the ones which match those in memory are passed thru, all others are blocked. When a note is blocked, it is shown with and orange “X” in the right side of the display.

Incoming “F#2” note is blocked because it is not contained in the chord in memory

3.3 Note Mapped

Instead of correcting or filtering incoming notes based on the chord, "Mapped" distributes the chord notes over the white keys. This is particularly useful when playing with a midi keyboard as you can jam on the white keys and the notes will all sound "right" because they are part of the chord currently being played. The chord notes are distributed on the white keys in consecutive octaves as illustrated below. The notes NOT in the chord are mapped to the black keys instead.

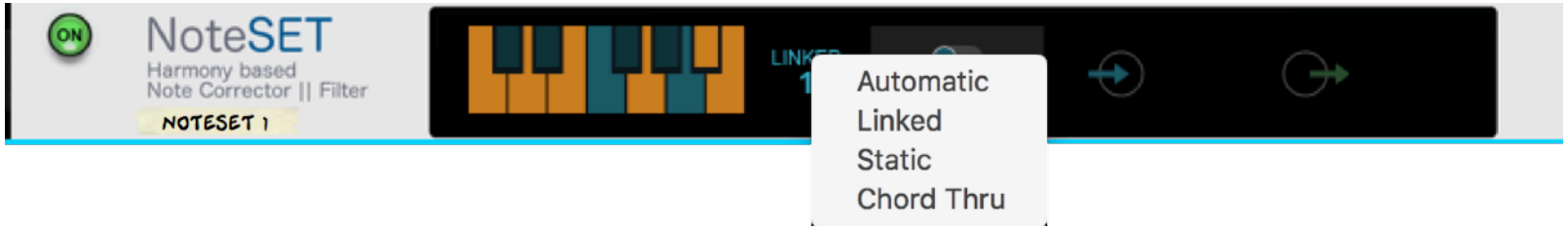
Note Mapped works in Auto, Linked and Static modes.



When note mapping is selected, the chord notes are mapped to the white keys on the keyboard

3.4 Modes of Operations

The device has 4 modes of operation and these are described below. To select a mode of operation, click in the appropriate part of the display and from the menu, chose your desired mode.



3.4.1 Automatic Mode (default)

In the case of "**Automatic**" mode, once a chord is received, the left display will show the notes contained in the chord. The chord notes are all wrapped within an octave for illustration purposes and are shown in orange. This is depicted below where the chord received at the CV inputs is a Cmin9 chord.

A chord will stay in memory until another chord is received and replaces the previous one. This is true for the duration of the current session. If you close the song file and then reopen it, the chord memory is reset.
If you need to reset the chord memory during a session, click with the mouse anywhere on the keyboard where the chord notes are shown.

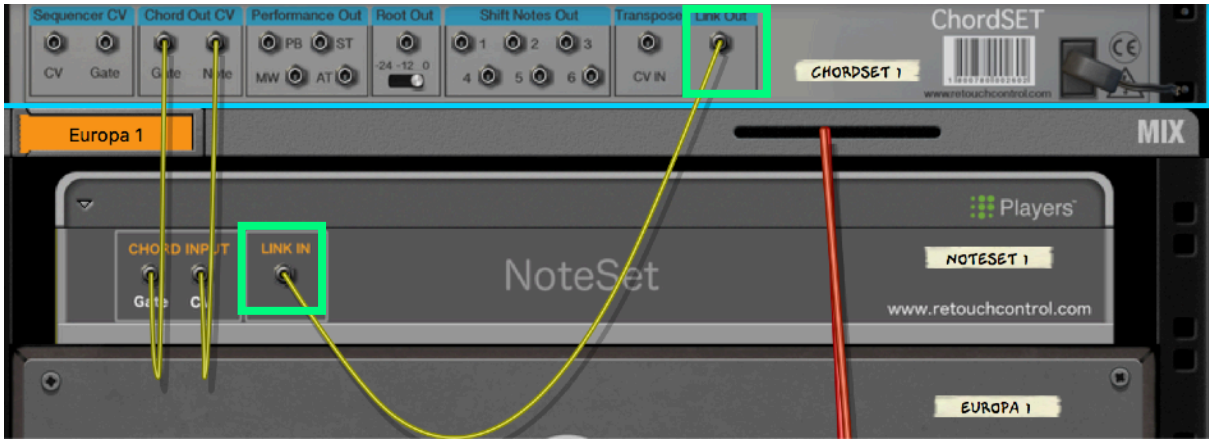
Cmin9 chord received at the CV inputs and stored in chord memory

3.4.2 Linked Mode (*requires connection to ChordSet*)

In linked mode, you can customize the notes which are associated with each chord coming from ChordSet. Instead of correcting or filtering based on just the notes in the chord, you can add or remove notes to your liking for total flexibility. Each of the 12 chord slots in ChordSet can have its own dedicated set of linked notes. You can create this way more sophisticated setups where each chord can have its own scale, a technique which is employed to great effect by musicians, especially jazz, during solos.

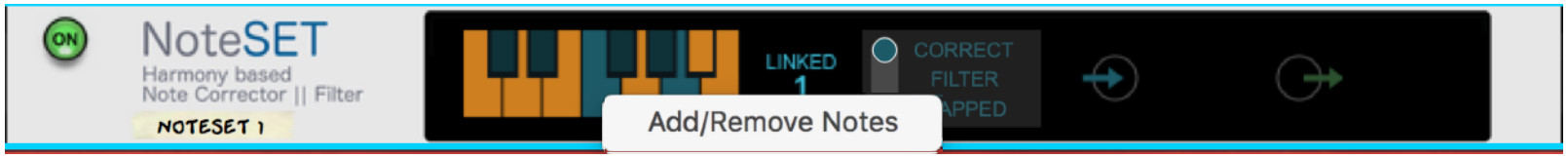
Linked mode active

Please note: Linked mode can only be activated if there is a valid Link CV connection between NoteSet and ChordSet



CV connection for Linked mode

Alt+click in the keyboard area to edit the linked notes for the current chord. By default, Linked mode works as Automatic mode if no notes have been manually assigned. That is, it will use the notes in the corresponding chord as a starting point. Then you can decide if to add or remove notes. This means that you don't need to edit the linked notes for every single chord if you don't wish to so.



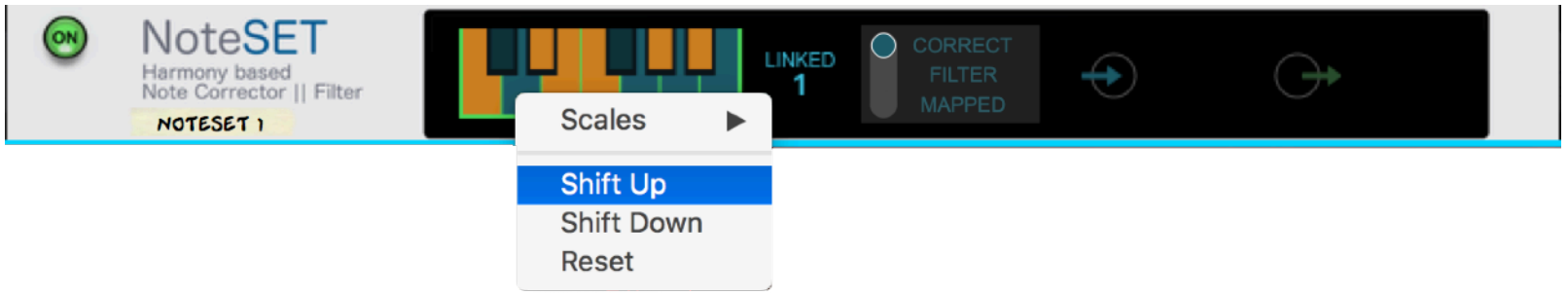
Alt+click to add/remove notes

When edit mode is enabled, the keyboard is highlighted with a green border. You can now click on any note to add or remove it. Once you are done editing, Alt+click in the display again to exit edit mode

Edit mode is active

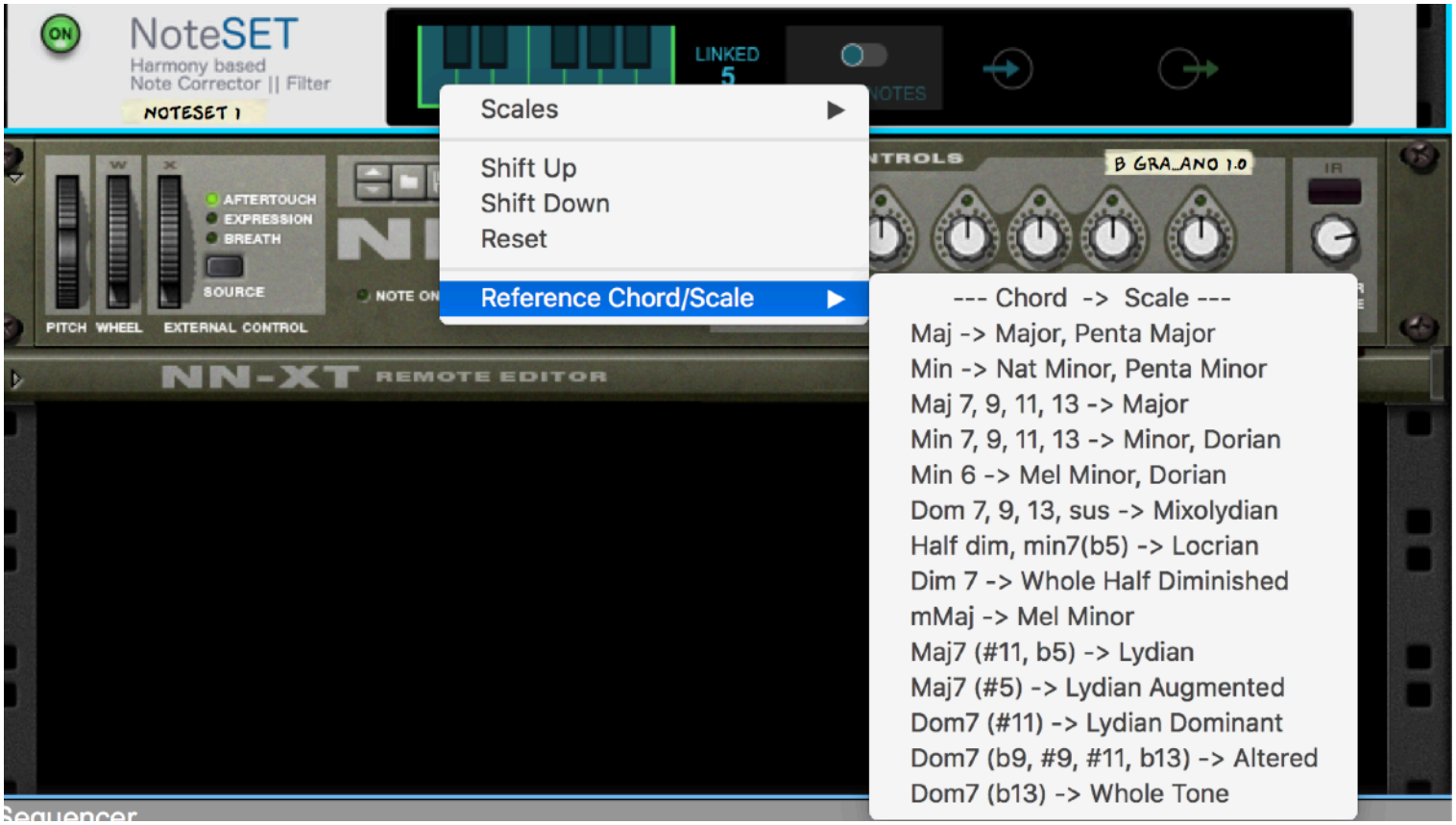
If you Shift+click on any of the notes of the keyboard when edit mode is enabled, the following menu offers the option to add notes based on one of the available scales, shift the notes up or down, or reset them. When you reset, the notes revert to those contained in the linked chord, undoing any previous manual assignments.

Please note, when you select a scale, the root note corresponds to the note where you first Shift+clicked to open the menu. So if you want to assign a C major scale, make sure you Shift+click on the “C” note and then select “Major” from the Scales list.



Shift + click to open the edit menu

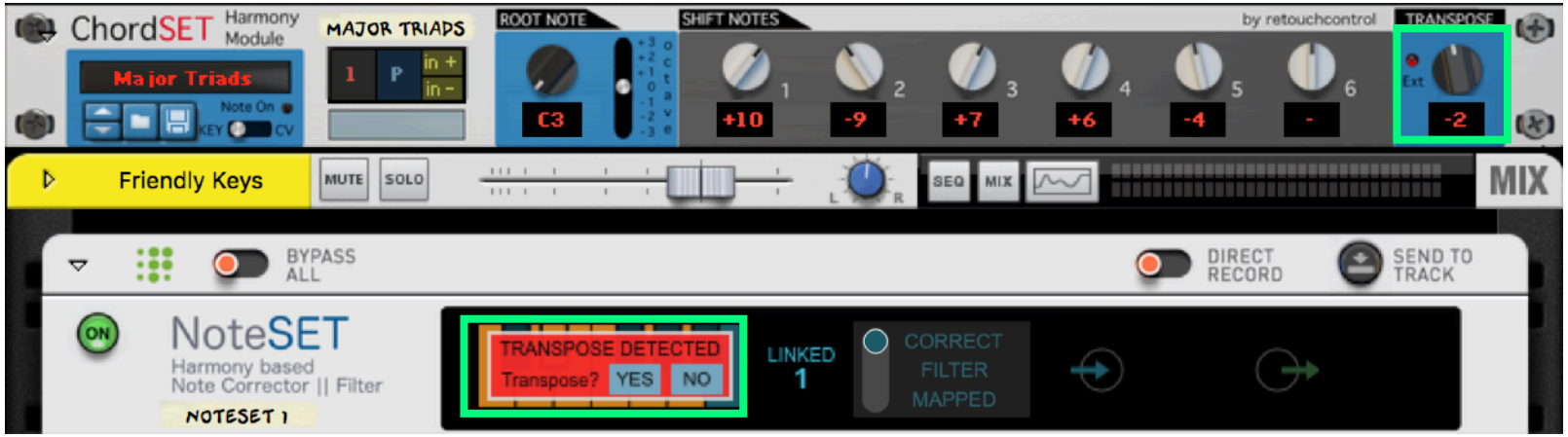
The edit menu also offers a built in quick reference with suggestions for what scale(s) to use for a given type of chord. But you are free to experiment in any way you like!



Chord/Scale reference built in

When you manually transpose the chords in ChordSet by using the Global Transpose knob, a message will appear in NoteSet if there are stored linked notes to any of the chords. The message warns you that the player has detected a transposition of the chords and asks you if you want to transpose the linked notes.

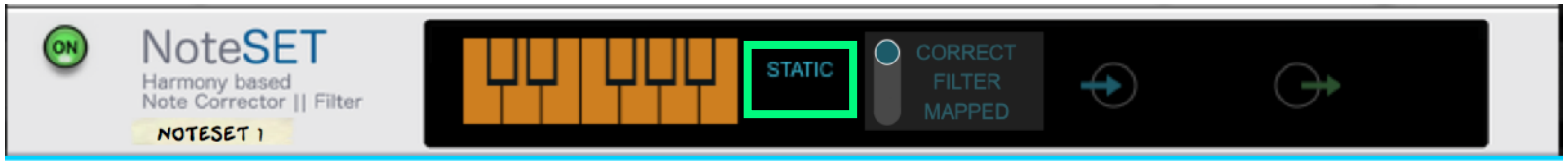
If you press Yes, any linked notes will be transposed according to the global transposition in ChordSet. This makes it possible to transpose a whole set of linked notes from the original key to another key with minimum effort.



Transpose menu for linked notes

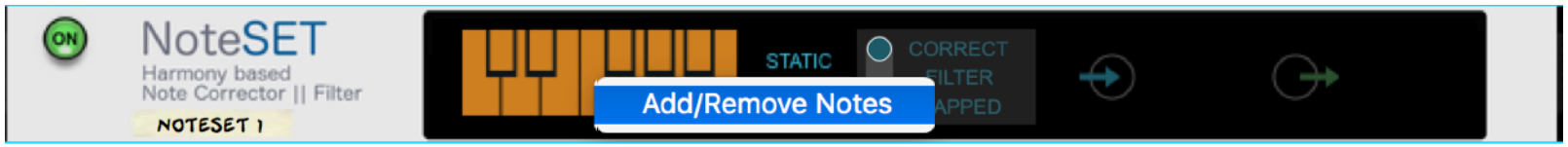
3.4.3 Static Mode

In static mode, the player corrects or filters any incoming notes based on the notes selected here, independently of the type of chord which is played. Thus, NoteSet can be used as a simple note correction or filtering device. By default, all notes are active so there is no correction or filtering going on.



Static Mode Active

Alt+click in the keyboard area to edit the notes assigned to static mode. The same editing functions of Linked mode are also available in Static mode



Add/Remote notes in static mode

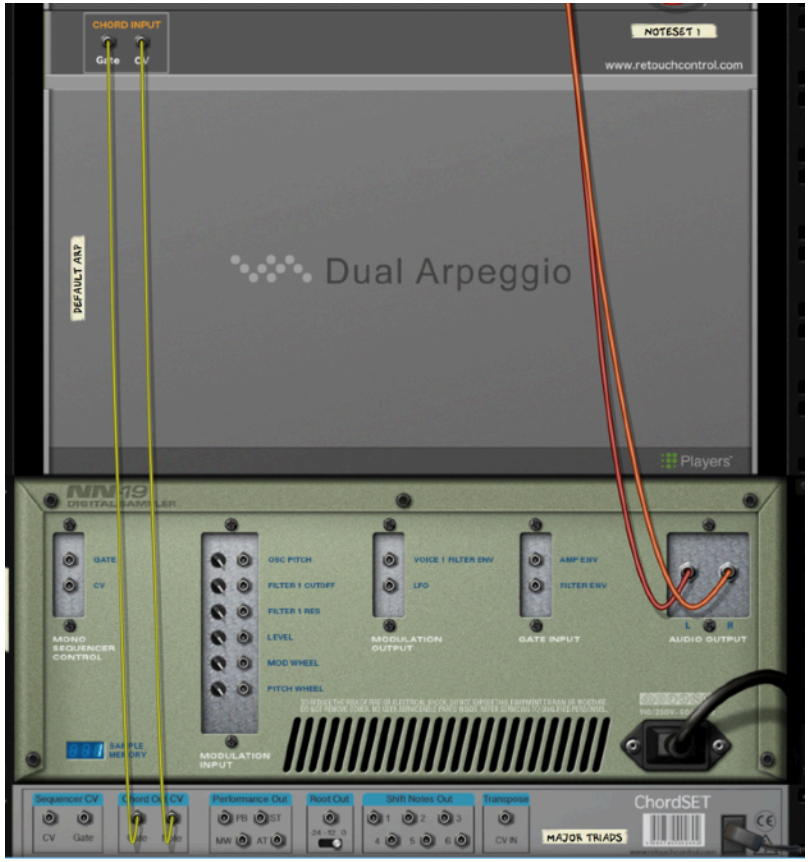
3.4.4 Chord Thru Mode

When Chord Thru mode is active, the device simply passes the incoming midi chord downstream to the connected instrument or other player device. This is useful in few scenarios:

1. you want to record the chords outputted by the ChordSet device as MIDI notes in the sequencer - to do this, you can use the “Send To Track” or the “Direct Record” feature of the players container
2. you want to send the chord outputted by the ChordSet device to another player, for example the Dual Arp stock player which does not have by itself the ability to receive chords from CV

When Chord Thru mode is on, it supersedes both Note Correction and Filtering.

Chord Thru mode ON



Chords from ChordSet being set directly to the Dual Arpeggio player when NoteSet is in “Chord Thru” mode

3.5 Setting a Min-Max Note Range

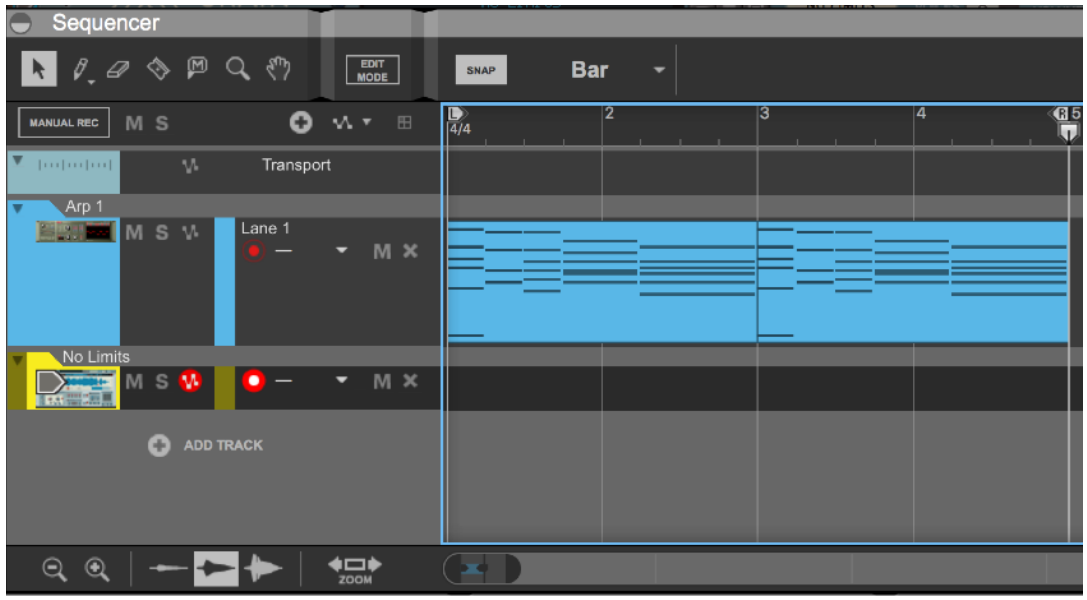
Alt + click in the right side of the display to access the Note Range settings. Here you can set the Min and Max notes which are accepted and corrected or filtered by the device. This setting naturally determines not just the range of the incoming notes but the outgoing notes as well.

This feature now allows, among other things, to create combinator keyboard splits where you dedicate one part of the keyboard to playing chords (C1-B1 for example) and the other (C2 and upward) to play melodies on the same instrument. See the factory patches in the “Combinator” folder for some examples of keyboard splits. But it might also be useful when you want to restrict the range of notes being passed thru and corrected or filtered, for example when you are creating a bass line, you want to focus on the lower register notes and discard the higher ones.

Alt+click on the right side of the display to set a Min - Max note range

3.6 Using NoteSet with the RPG-8

It is possible to use chords coming directly from a sequencer track as input in NoteSet. This is done by using the native RPG-8 arpeggiator device in Reason. The procedure is explained below.



1. Create an instance of the RPG-8 device. Its sequencer track contains the clips with the chords

2. Turn off the RPG-8

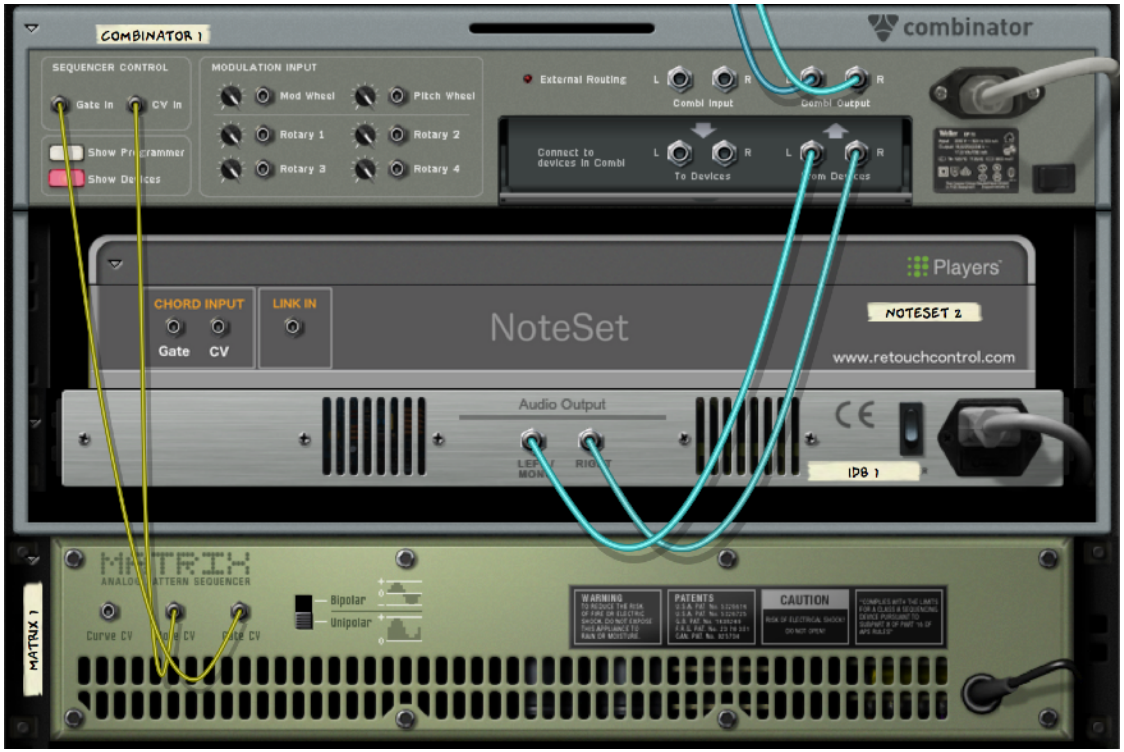
3. Connect the RPG-8 Gate and Note CV outputs to NoteSet's Chord inputs

4. Chords from the sequencer track are being sent to NoteSet via the RPG-8 CV connections

3.7 Correcting notes from the Matrix sequencer

Although NoteSet is not able to receive the CV inputs directly from a device like the Matrix, you can host it inside a Combinator and use the Combinator's CV inputs to receive the note and gate CVs from the Matrix as shown below.

Sending notes via the Matrix CV outputs into the Combinator CV inputs with the mode set to "Static" in NoteSet



Connect the CV and Gate outputs from Matrix into the CV and Gate inputs of the Combinator

MIDI Implementation Chart

CC Parameter
[12] = “filter notes”
[13] = “operation mode”
[14] = "OnOff",

Remotable Items

Manufacturer	Device ID
Retouch Control	com.retouchcontrol.noteset

Remotable Item	Min Value	Max Value	Input	Output
OnOff	0	1	Toggle	Value
Filter Notes On/Off	0	1	Toggle	Value
Operation Mode	0	3	Value	Value
Note Range Min	0	127	Value	Value
Note Range Max	0	127	Value	Value

Version History

Version 1.0.0: initial release

Version 1.1.0 Update: added Linked mode which allows to choose the notes for correction for each chord, added Static mode, added Min and Max range for incoming/outgoing notes

Version 1.1.1 Update: optimizations for Reason 12 HD

Version 1.1.2 Update: added On/Off automation, added the ability to receive chords from a sequencer track via the RPG-8 Gate and Note CV outputs (see manual for details)

Version 1.2.0 Update: added Note Mapping -> chord notes are mapped to the white keys, and non chord notes to the black keys