



Click less, play more!

ReChord Operating Manual

rechord-vst.com/manual/

v2 / 2022-02-15

Installation

Download on your machine the zip package for your operating system and unpack it. Please note that the ReChord plugins are **VST3** plugins. The location where the VST3 plugins are expected is DAW specific, and may differ from that where VST2 plugins are located.

For **Windows** users, copy the files **ReChord_Scanner_v1.vst3**, **ReChord_Transposer_v1.vst3** and **rechord.v1.dll** to the folder where your DAW expects and looks for the **VST3** plugins.

Ableton Live: <https://help.ableton.com/hc/en-us/articles/209071729-Using-VST-plugin-ins-on-Windows>

Cubase: <https://helpcenter.steinberg.de/hc/en-us/articles/115000177084-VST-plugin-in-locations-on-Windows>

Reaper: the paths where the plugins are located is configurable under Preferences / Plugins / VST / VST plug-in paths.

For **macOS** users, copy the files **ReChord_Scanner_v1.vst3** and **ReChord_Transposer_v1.vst3** to the folder where your DAW expects and looks for the **VST3** plugins.

Ableton Live: <https://help.ableton.com/hc/en-us/articles/209068929-Using-AU-and-VST-plugin-ins-on-Mac>

Cubase: <https://helpcenter.steinberg.de/hc/en-us/articles/115000171310>

Reaper: the paths where the plugins are located is configurable under Preferences / Plugins / VST / VST plug-in paths.

Getting Started

ReChord is a two-plugin-system that emulates the functionality of a hardware arranger in a DAW environment. Its components are the ReChord Scanner, which essentially functions as a keyboard splitter and a chord detector, and the ReChord Transposer, which acts as a melody/chord transposer.

The Scanner splits incoming notes from the external keyboard into **melody notes** and **chord notes**, detects the **chord** that is being played and automatically transmits this data to all the Transposer units in a project.

Then each Transposer unit transposes the notes on its track to the chord it receives by the Scanner. The transposed notes are then routed to a virtual instrument to be played.

To integrate ReChord in your DAW project, you should organize your MIDI tracks in three categories, **the keyboard track, the pattern tracks** and **the output tracks**:

The keyboard track:

You would set up one track to function as a **keyboard track**. This track receives MIDI input from your external keyboard, and on this track you load the **ReChord Scanner** plugin.

The Scanner separates **melody notes** from **chord notes**, according to the keyboard split mode you choose, recognizes chords and automatically sends all the data to all the ReChord Transposers loaded in the project.

The keyboard track should be in “Monitor” state if you use the external keyboard. Otherwise, you can also use it without a keyboard and manually writing chords and melody, as you would play them on the keyboard. To use chords, just write the chord changes where they occur.

The keyboard track has no MIDI output.

The pattern tracks:

The **pattern tracks** are those tracks which you want to be transposed. On each such track you would typically write a pattern over one chord, corresponding to an instrument part in your arrangement.

On each pattern track you load a **ReChord Transposer** plugin. While in Play mode, the ReChord Transposer will transpose in real time the notes on this track, to match the chord currently being played on the keyboard track and passed over by the ReChord Scanner. If you choose to, the Scanner will also play the melody notes and/or the chord notes received from the Scanner. Each ReChord

The pattern tracks need no MIDI input, as the Transposers automatically receives data from the Scanner. Each Transposer unit has its own MIDI output, that should be routed to its correspondent output track.

The output tracks:

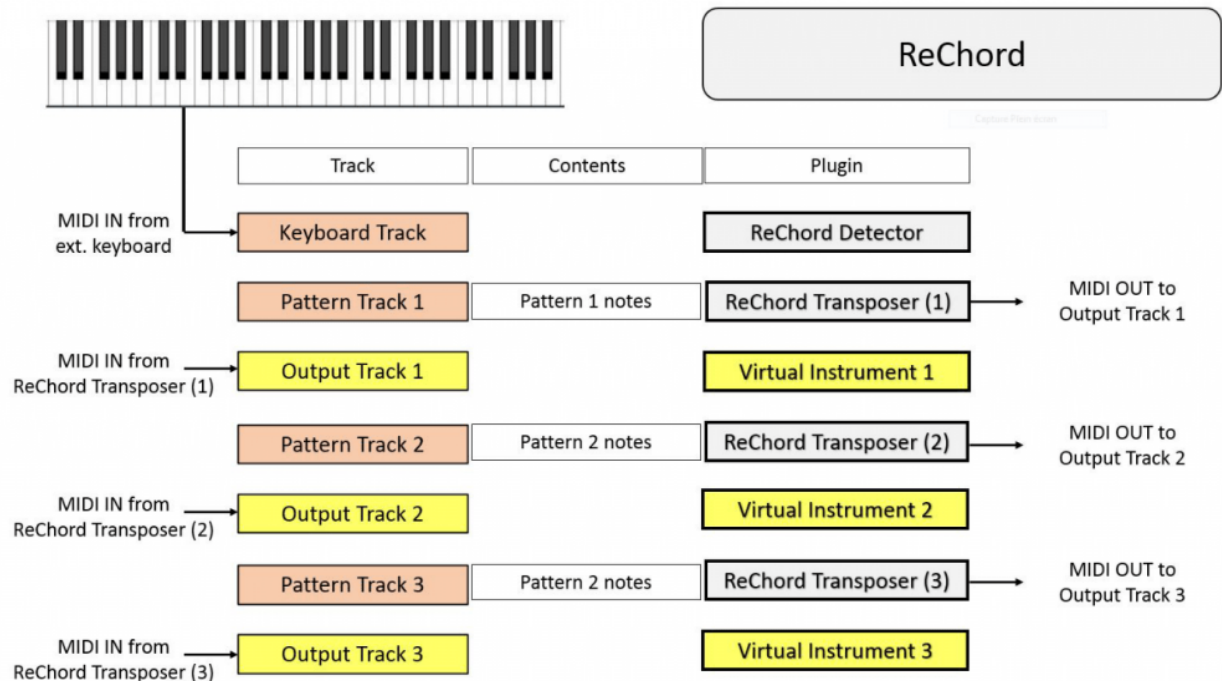
Each pattern track should be associated with an **output track**. This track receives, plays and eventually records the transposed notes from its corresponding pattern track.

On the output track you would load the **virtual instrument** you wish to play that part. Also, on the output tracks you would record your song with all the chord changes.

To link each pattern track to its correspondent output track, you need to route, in your DAW, the MIDI output of the ReChord Transposer on the pattern track to its associated output track. Depending on the DAW routing options, you may either set the pattern track to send MIDI to the output track, or set the output track to receive MIDI from the ReChord Transposer on the pattern track.

In order to receive MIDI, the output tracks have to be either in “Monitor” mode or armed for recording.

This layout is summarized in the following diagram:



Once you have a Scanner and a Transposer unit loaded in your project, the Transposer status turns to “On”, meaning that the Scanner and the Transposer are communicating. If you just load a Transposer but no Scanner, the Transposer status is “Idle”.

Then write or record a pattern on the pattern track, then set in the Transposer the **original key** in which the pattern is. It is best if you write your pattern over just one chord. As an example, if you write your pattern over an F major chord, you should select F major as the original key. You can of course use several chords in a pattern if you wish so, but then you would have less control over manually changing chords when you play, since the chord changes in the pattern will always play.

If you record your pattern from the external keyboard, you should disable the “Monitor” state in the keyboard track (where the Scanner is) and activate the “Monitor” state on the pattern track you wish to record, so that it can receive notes from the keyboard. When done, switch back the “Monitor” state on the Scanner track and disable it from the pattern track.

Once your pattern is ready, press Play in your DAW and play along on your keyboard. Each time you play a chord, the pattern is transposed to that chord. If you also want to hear the melody notes (or the chord notes as you play them), enable “Play Melody Notes” (resp. Chord Notes) in the Transposer.

The complete description of all the functions of the Scanner and the Transposer is available in the next sections.

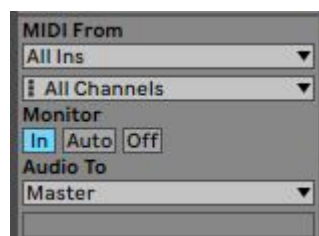
Ableton Live Setup

A) Setting up the ReChord Scanner track:

Create a midi track and drag a ReChord Scanner plugin.

To use an external keyboard, select on this track your midi keyboard in “Midi from”, or simply set “Midi from” to “All ins”.

Make sure that “Monitor” is “In”. Alternatively, you can set “Monitor” to Auto, and arm this track for recording.



The ReChord scanner receives midi data from your keyboard, detects chords and automatically sends all the information to all ReChord Transposer units in your project.

B) Setting up an accompaniment instrument:

For each accompaniment instrument you should create two midi tracks. For some piano accompaniment, for instance, create two midi tracks, labeled, say, “**Piano Pattern**” and “**Piano Output**”.

B1) On the first track “**Piano pattern**” drag a ReChord Transposer unit. If you already prepared the ReChord Scanner track, the ReChord Transposer unit should display “Status: ON” in the chord window.

Set this track’s midi source “Midi from” to “No input”.

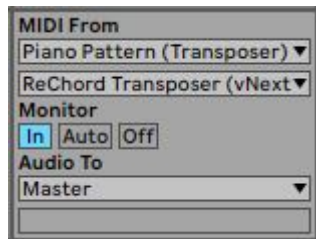


On this track you write your piano pattern.

B2) On the second track “**Piano output**” drag the piano virtual instrument you wish to use for the piano.

As a midi source, in the “Midi from” section of this track, select the track “Piano pattern” and below select “ReChord Transposer”.

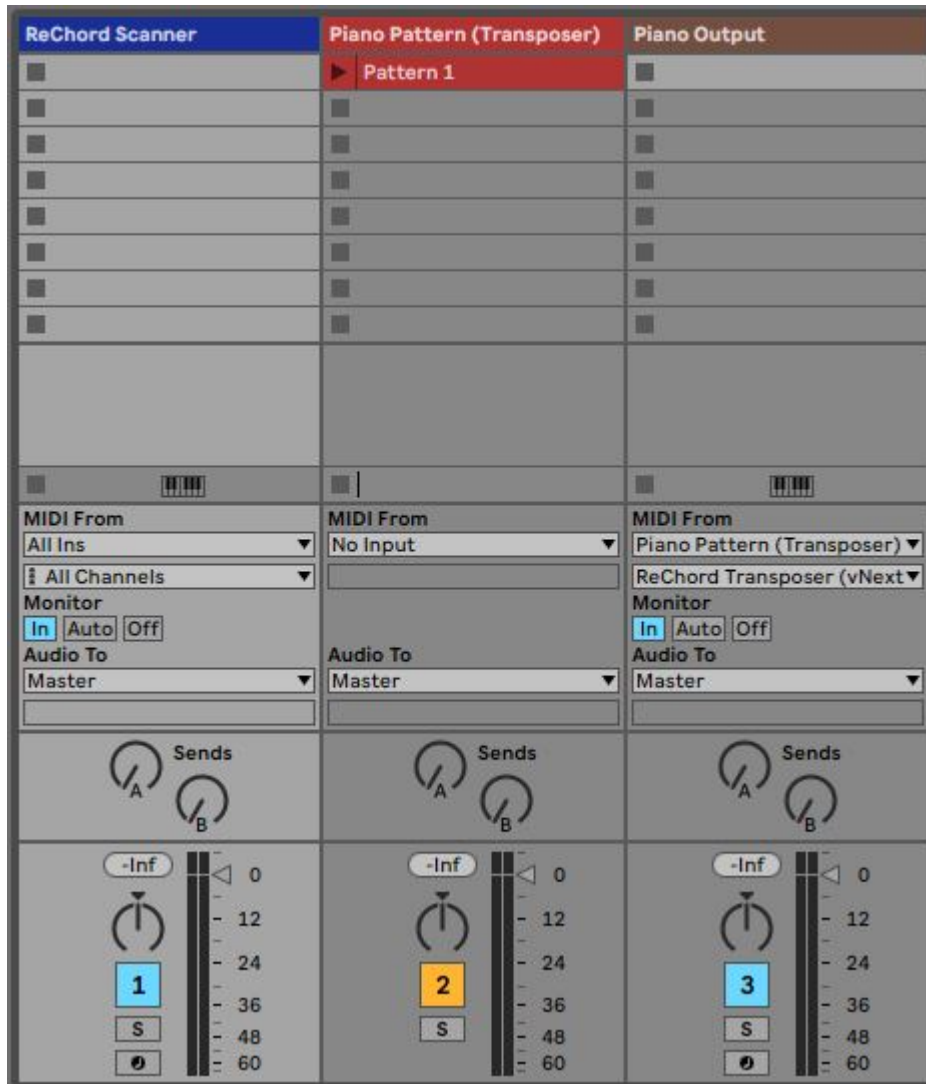
Also, set Monitor to “In”.



This routes the midi output from your ‘Piano pattern’ to the “Piano output” virtual instrument, passing through the ReChord Transposer.

You need no midi notes on this track.

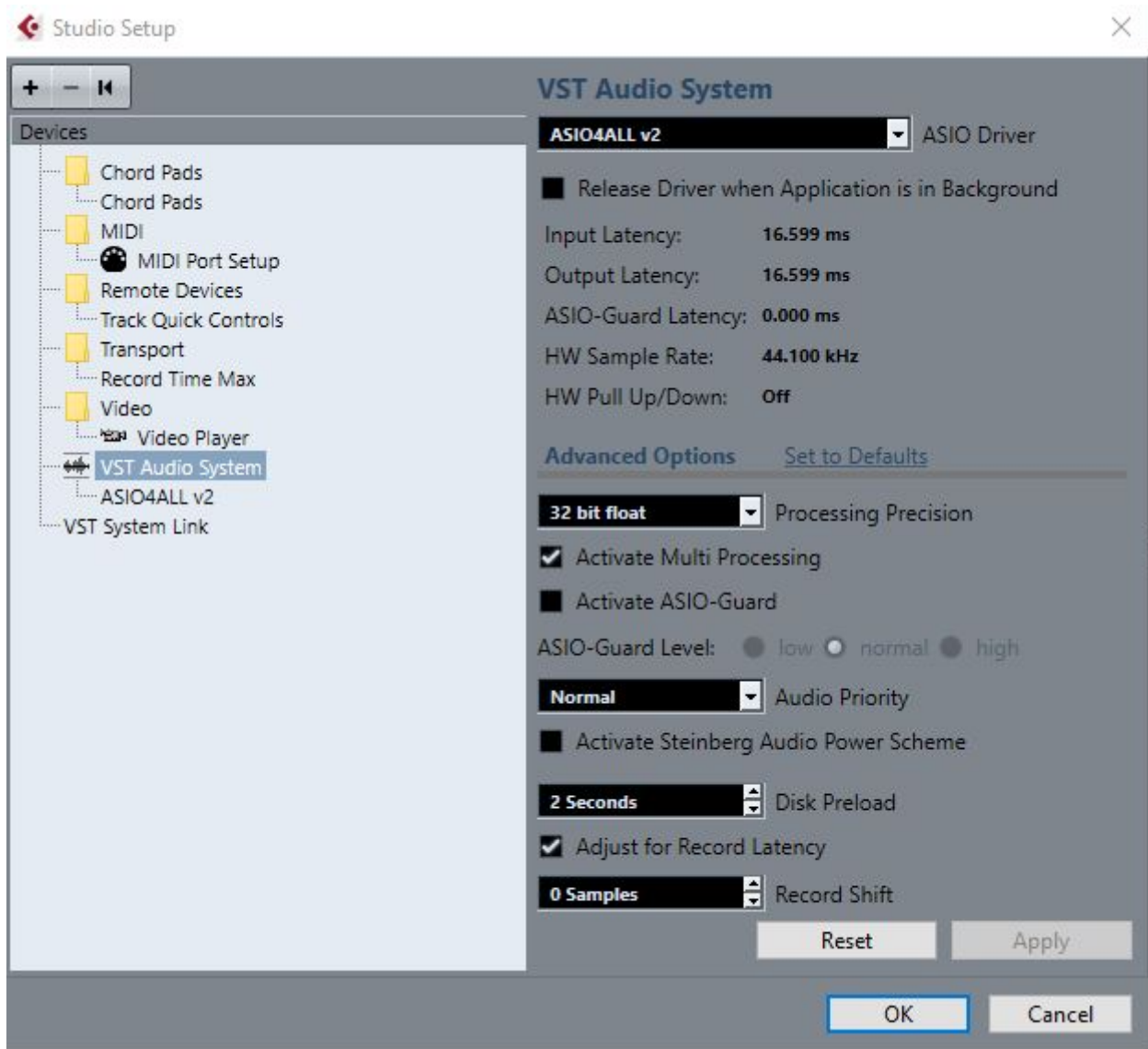
The complete setup looks like this:



Cubase Setup

Important note

In order for ReChord to work properly in Cubase it is necessary to **disable the “ASIO Guard”**. To do this, go to Studio / Studio Setup / VST Audio System and uncheck the “Activate ASIO-Guard” option.



A) Setting up the ReChord Scanner track:

Create an instrument track with the ReChord Scanner plugin.

To use an external keyboard turn make sure that the “Input Routing” is set to “All MIDI inputs”, or select there your keyboard.

Turn on the monitor on this track.



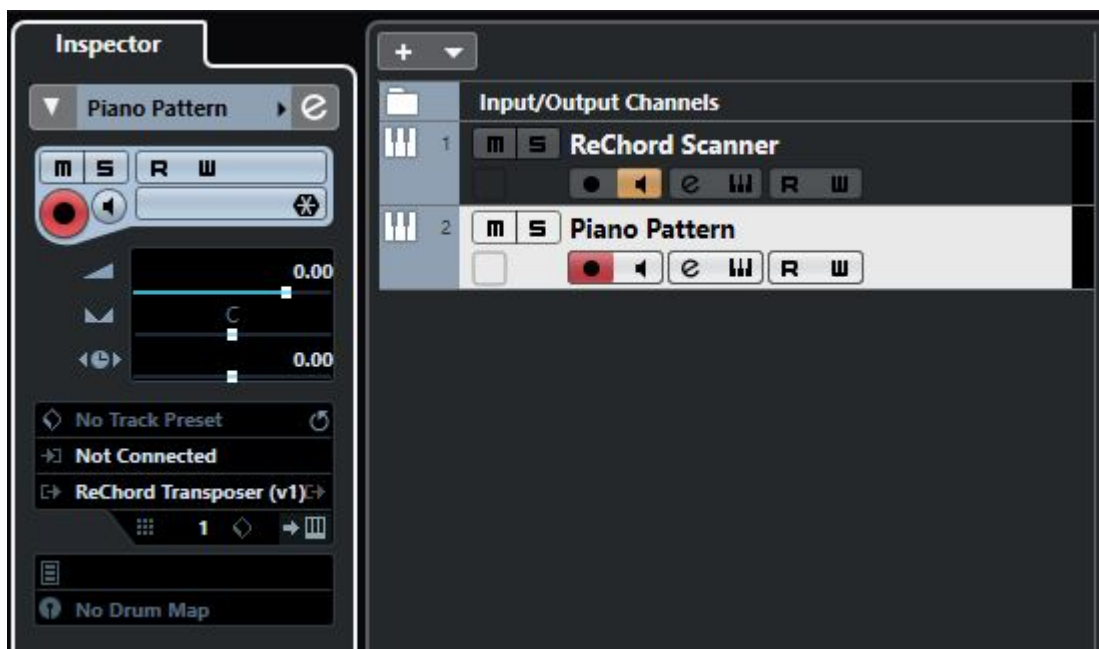
The ReChord scanner receives midi data from your keyboard, detects chords and automatically sends all the information to all ReChord Transposer units in your project.

B) Setting up an accompaniment instrument:

For each accompaniment instrument you should create two instrument tracks. For some piano accompaniment, for instance, create two instrument tracks, labeled, say, “**Piano Pattern**” and “**Piano Output**”.

B1) On the first track “**Piano pattern**” load a ReChord Transposer unit. If you already prepared the ReChord Scanner track, the ReChord Transposer unit should display “Status: ON” in the chord window.

For this track’s midi, set the “Input routing” to “Not connected”.



On this track you write your piano pattern.

B2) On the second track “**Piano output**” load the piano virtual instrument you wish to use for the piano.

For this track, in the “Input Routing” dropdown select the track “Piano Pattern – MIDI Output”.

Also, turn the monitor on for this track.



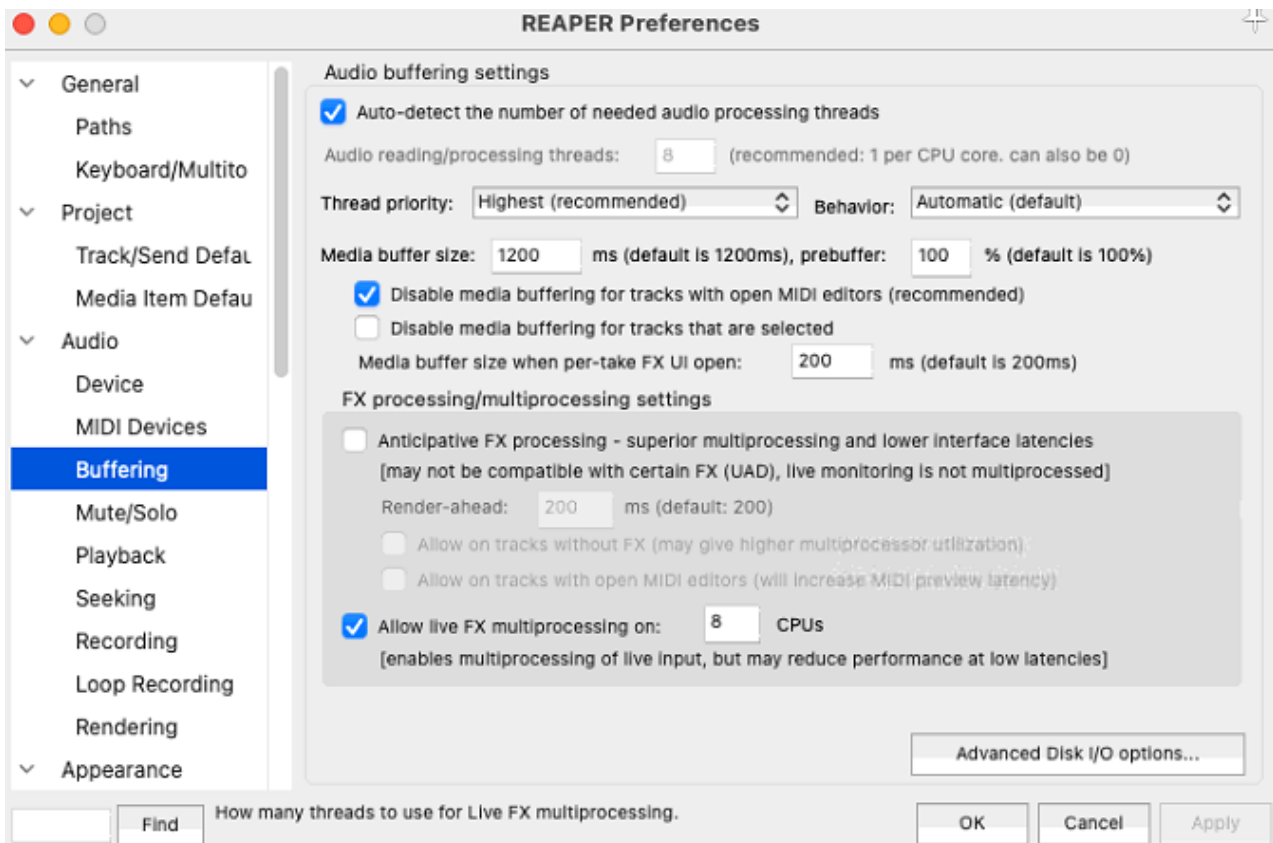
This routes the midi output from your ‘Piano pattern” to the “Piano output” virtual instrument, passing through the ReChord Transposer.

You need no midi notes on this track.

Reaper Setup

Important note

In order for ReChord to work properly in Reaper it is necessary to **disable the “Anticipative FX processing”**. To do this, go to Options / Preferences / Audio / Buffering and uncheck the “Anticipative FX processing” option.

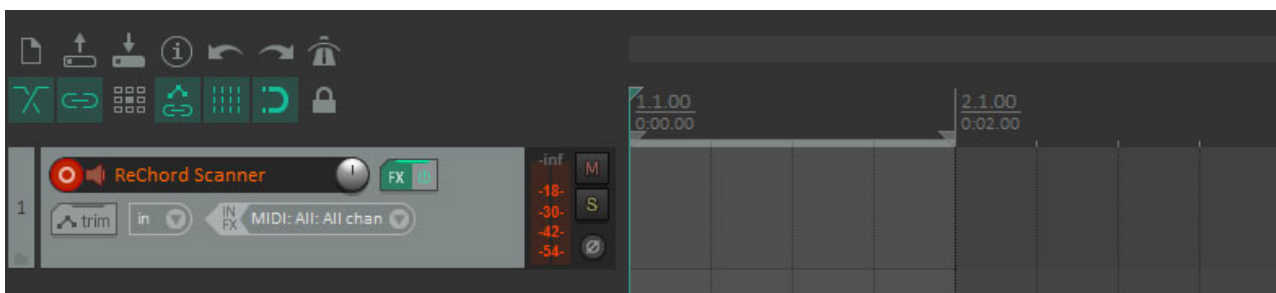


A) Setting up the ReChord Scanner track:

Create a midi track and load the ReChord Scanner plugin.

To use an external keyboard, make sure it is set on “MIDI : All, or specifically select your keyboard there.

Arm the track for recording and set the record monitoring to On.



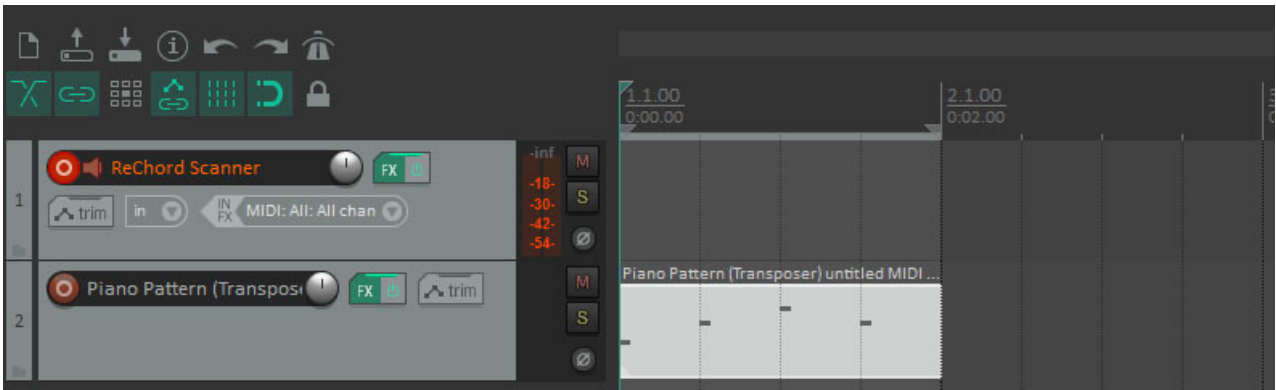
The ReChord scanner receives midi data from your keyboard, detects chords and automatically sends all the information to all ReChord Transposer units in your project.

B) Setting up an accompaniment instrument:

For each accompaniment instrument you should create two midi tracks. For some piano accompaniment, for instance, create two midi tracks, labeled, say, “**Piano Pattern**” and “**Piano Output**”.

B1) On the first track “**Piano pattern**” load a ReChord Transposer unit. If you already prepared the ReChord Scanner track, the ReChord Transposer unit should display “Status: ON” in the chord window.

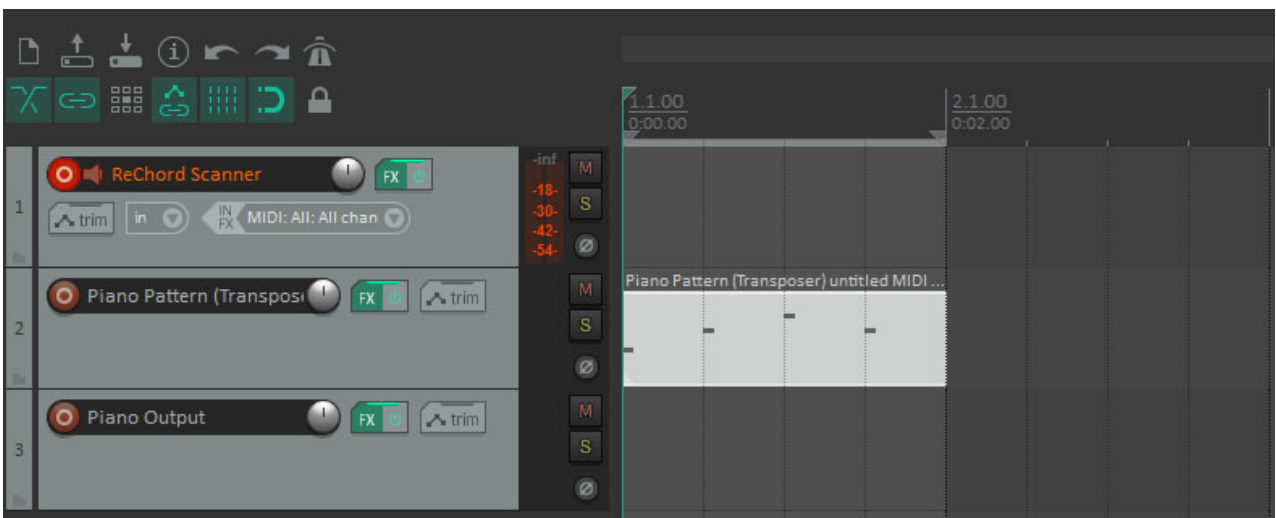
Disarm the recording monitoring on this track.



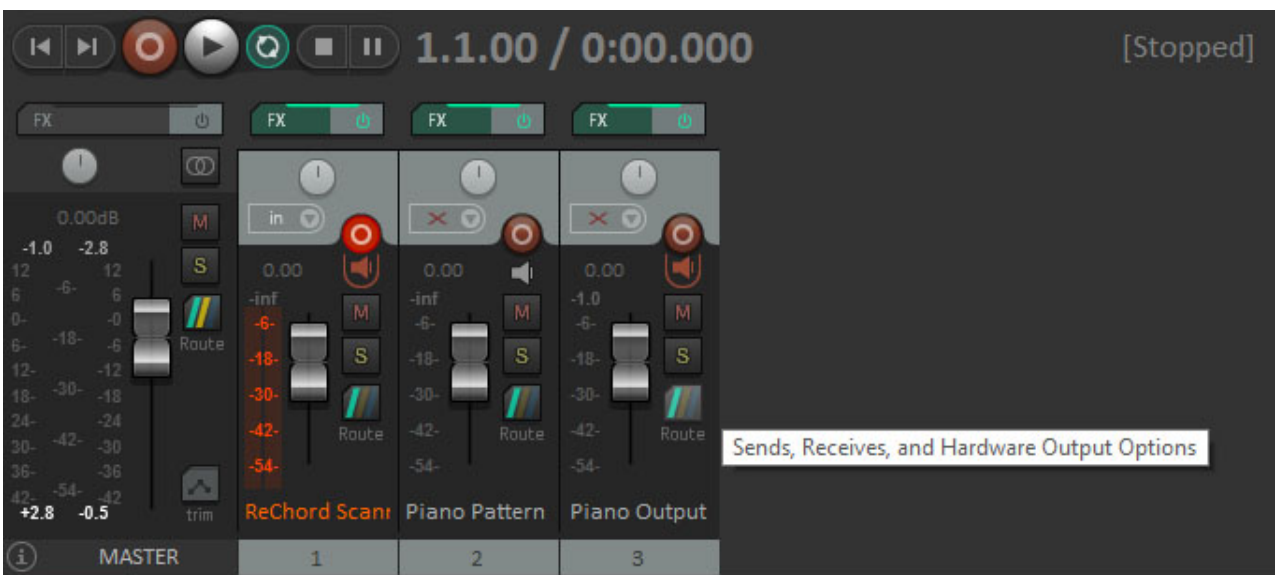
On this track you write your piano pattern.

B2) On the second track “**Piano output**” load the piano virtual instrument you wish to use for the piano.

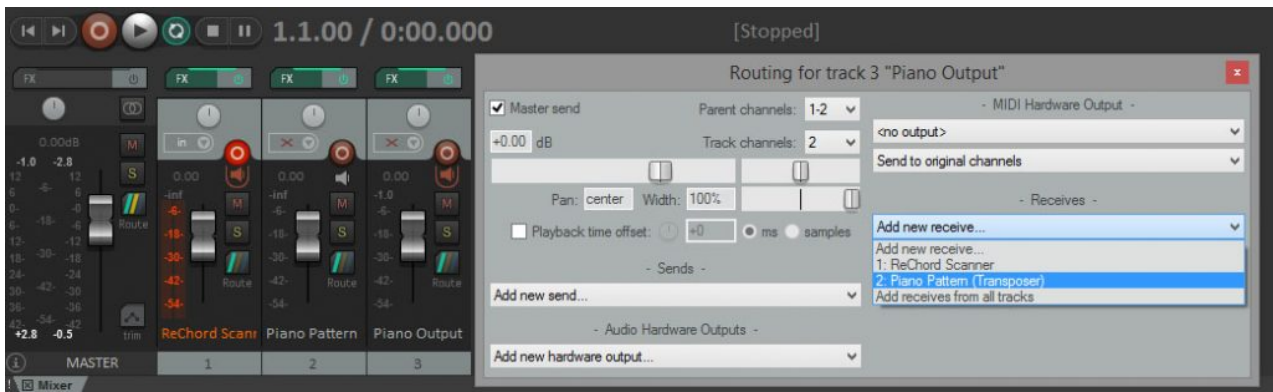
Disarm the record monitoring for this track.



In the mixer panel, click the “Route” button for the track “Piano Output” to open the routing dialog.



Here click on “Add new receive” and select the pattern track “Piano Pattern” in the dropdown list. Then close the routing dialog.



This routes the midi output from your 'Piano pattern' to the "Piano output" virtual instrument, passing through the ReChord Transposer.

You need no midi notes on this track.

The ReChord Scanner

Chord In Panel

This panel displays the last chord that has been played, with its octave and inversion. It also shows the status of the Scanner, which can be "Chord In" if the Scanner plugin is enabled in the host, or "Bypassed by host" if the plugin is disabled in the host.

Transposition Panel

You can set here the global transposition, in octaves and semitones. This is useful if you want to transpose everything in another key. "C" represents no semitone transposition, "C#" one semitone up, "D" two semitones up etc. To transpose one semitone down choose "B" and set octave to -1, for two semitones down set "A#" and octave -1 and so on.

The global transposition affects both chords and melody notes and will take effect on all the ReChord Transpose units.

Chord Out Panel

This panel displays the chord that is sent to all ReChord Transpose units. This chord might be different from the input chord, as possibly altered by the global transposition settings, and by the Inversion/Octave Slider.

The **Inversion/Octave Slider** raises or lowers the chord inversion through all the octaves. The octave of an inversion is the octave in which the root of the chord is. The ascending order of the inversions is the following: first inversion, second inversion, third inversion (for seventh chords), no inversion, and then first inversion again in the higher octave etc. (note that some chords do not have all these inversions, so the inversions that a chord does not have are skipped).

By default, the **Inversion/Octave Slider** responds to the CC1 message (modulation), but you can configure the midi mapping to your convenience.

The output chord octave and inversion are displayed in blue, while the alterations produced by the Inversion/Octave Slider are displayed in yellow. You may set up each ReChord Scanner unit to apply or not the Inversion/Octave alterations.

Chord In Keyboard

This virtual keyboard displays the current chord being played and is clickable. You can use it to play individual notes, or to input chords and store them on chord buttons.

The Chord In Keyboard works in two modes:

1. In the **Hold Off** mode, which is the default mode, a note is held as long as you keep the left click button pressed. You can play individual notes and they are sent to the ReChord Transposer as melody notes.
2. In the **Hold On** mode, a note is held after you release the left click button, until you click the same note again. In this mode you can input several notes at a time, so you can build chords. Once you click a chord, it becomes the current chord, and you can store it on any chord button. This is an easy and convenient way to store chords on chord buttons.

Also, when in Hold On mode, the other controls of the keyboard are activated: you can use “**Clear Keyboard**” button to release all the notes that are playing, and you can use “**Inversion +**” or “**Inversion -**” to raise or lower the current chord one inversion up or down.

Chord Out Keyboard

This virtual keyboard is not clickable, it shows the chord that is being sent to the ReChord Transposers. Under this keyboard you have three important global controls:

The “**Active**” button: In a project you might use, if you wish so, several ReChord Scanner units. However, only one of them at a time can control the ReChord Transposers, and this is the active unit. Pressing “Active” in any of the ReChorder Scanner unit sets it to be the active Scanner and disables all the other Scanners.

The “**Transposers On/Off**” button enables or disables the transposing function on all the ReChord Transposers in the project. When in Off mode, the transposers will just play the notes as they are written on each of their tracks. Use this if you want to listen the (untransposed) patterns on each track.

The “**Transposers Mute**” button mutes all the patterns for all the ReChord Transposer tracks. Use this mode if you have already recorded your song and you do not want the Transposers to output notes any more.

Chord Button Panel

This area contains ten configurable buttons on which you can store chords. The chords are organized in twelve banks, B1 to B12, and pressing any of these bank buttons loads the corresponding chord bank onto the buttons.

Left clicking and holding on any of the chord buttons triggers and holds the corresponding chord, making it the current chord, and sending it to the ReChord Transposers, together with the chord notes. Releasing the left click button stops the chord notes.

You have three ways to store chords on chord buttons:

1. Play and hold the chord on your external keyboard, and while holding the chord press the “Record” button on the chord button on which you want to store that chord.
2. Use the “Hold On” mode on the Chord In Keyboard (see the Chord in Keyboard section), compose your chord on the Chord In Keyboard and then press the “Record” button on the chord button on which you want to store that chord.
3. Set each element of the chord with the controls on the chord button. You can dial the root note, the chord quality, the root octave, and select the inversion from the inversions available for the chosen chord quality (for certain chords not all inversions are possible).

This panel also has some additional controls:

The “**Button Velocity**” control allows you to set the velocity of the chord notes played by the chord buttons.

The “**CC/Notes**” button allows you to set if the chord buttons are triggered by MIDI notes or by MIDI control change (CC) messages. See also the MIDI Learn section for more details.

Keyboard Split Panel

This panel allows you to choose the keyboard split mode that you want to use for your external keyboard (as well as for your Chord In Keyboard). There are three modes available:

1. **Full Keyboard:** In this mode all the notes on the keyboard are taken into account when detecting a chord. You can use this mode for instance if you only play chords on the keyboard, not melody.
2. **Keyboard split:** This is the usual mode for hardware arrangers. You can set a fixed split point on the keyboard and only notes below this point can form chords. Notes above the split point will automatically be melody notes. An additional control allows you to transpose just the chord notes one or two octaves up, in case you want them to be played as a supplementary layer in a higher octave.
3. **Dynamic split:** This is a novel mode that ReChord features, which allows you to play both chords and melody anywhere on the keyboard. You specify a length in semitones for a dynamic area that is supposed to contain the notes in a chord. Then, any time you press more than three keys on the keyboard, the notes in the area that starts with the lowest note you played, up to the specified length, are considered chord notes, and every note above this area is a melody note. The default (minimal) length of the chord area is 11 semitones (an octave), which guarantees that you can comfortably play any chord with one hand, but you can augment this length up to two octaves, if you are used to stretch your fingers over more than an octave when playing chords. It is probably convenient to keep the chord area length as small as possible, since this leaves more room for melody notes just above.

Menu and Messages Panel

You can manage here the MIDI mappings for the Scanner to work with external MIDI controllers, the chord banks, the messaging system and ReChord deactivation.

Also, in this panel you are notified if there are new versions or updates of ReChord available, or other new ReChord-related information.

The MIDI Learn menu

MIDI Learn ON/OFF: Use this to control the ReChord Scanner with an external MIDI controller. While in “**Learn ON**” mode, all the elements in ReChord Scanner that can be MIDI mapped change their color to yellow. You may customize all the chord buttons, the transposition buttons and the Inversion Slider (make sure it is active). Clicking on one of these controls turns it to red and, while in this state, it waits for a MIDI message from the external controller. Then, on the external controller, press or slide the control that you wish to be assigned for that particular Scanner control. If successful, the Scanner control just learned turns back to yellow. When done, choose “**LEARN OFF**” in the Menu.

The chord buttons accept both MIDI notes messages and CC messages from an external controller. However, if you assign MIDI notes to control the chord buttons, you will not be able to use the assigned notes normally, so they will not be played. Use the toggle button “**CC/NOTES**” in the Chord Button Panel to specify if the chord buttons should be triggered by CC messages or NOTE messages. If the state of the button is “**CC**”, then note messages are considered normal notes and will not trigger chord buttons.

Unlearn All deletes all the learned mappings in the current project.

You can **Load** or **Save as** your current MIDI mapping to a from/to a file.

The **Save as defaults** option stores your current MIDI mapping as a default setting, to start with each time you load a Scanner into a project.

The **Load defaults** option restores your current MIDI mapping to the default setting.

Also, **Reset Defaults** clears the default setting, but does not change the MIDI mapping in the project.

The Chord Banks menu

In this menu, the **Reset Bank / Reset all Banks** options allow you to revert the current bank / all the chord banks to their factory setting. You can also **Load** or **Save as** your active chord bank from / to a file.

The Version and Messages window

Clicking the **Version and Messages** option in the menu opens the Version and Messages window. ReChord keeps you updated if there are new upgrades or updates available, and also notifies you on any new products, content updates or ReChord-related news. You can filter in this window which type of notifications you wish to receive.

The ReChord Activation/Deactivation option

For ReChord trial versions, choosing this will start the activation of your ReChord copy on this machine.

For activated ReChord plugins, choosing this will deactivate your ReChord licence on this machine.

These operations needs an Internet connection.

The ReChord Transposer

Chord In Panel

This area displays the incoming chord from the (active) ReChord Scanner and the status of the Transposer unit. The status can be one of the following:

1. **“On”** or **“Off”**, depending if the button “Transposers On” is pressed or not in the ReChord Scanner. If the Transposer is “Off”, it will just play the notes incoming from its track without performing any transposition. This is useful for listening to the pattern in its original key.
2. **“Idle”**, if the Transposer receives no data from a Scanner unit. This happens either if there is no ReChord Scanner loaded in the project, or if the Scanner is bypassed by the host. When in idle status, the Transposer just plays the notes on its track without any transposition.
3. **“Muted”**, if the “Mute Transposers” button is pressed in the Scanner. This is useful for disabling all the transposers, if you have already recorded your song and do not want the pattern tracks to play any more.
4. **“Bypassed by host”**, if the Transposer plugin is disabled in the host.

This panel also displays the “processor load” percentage (“Comm.”) affected to the communication between the Scanner and the Transposer. This represents the average fraction of the time the Transposer waits to receive data from the Scanner.

Octave Transpose Panel

In this panel you can individually adjust the octave transposition for each Transposer track. This setting affects both chord and melody notes.

Original Key Panel

In this panel you specify a crucial information, in which **original key** the patterns on each track are written. You can dial in the key root and may choose a major key or a minor key.

The original key is probably the most important parameter, that allows the Transposer to work properly. As an example, suppose the original key is set to F major, and suppose that the Transposer receives from the Scanner the current chord, say A minor. While this remains the current chord, each time the Transposer receives a note from its pattern track, say Bb, it will first interpret it as the fourth degree of the original key (F major), and then transpose it to the fourth degree of the A minor chord, which is a D.

Also in this panel you set the **main octave**. This setting takes effect if you want the Transposer to take into account the chord octave in order to transpose the patterns. Playing a chord in the main octave on the keyboard amounts to no octave transposition in your patterns, playing in higher or lower octaves produce corresponding octave transpositions. The default main octave is the octave 3 (containing the central C). This setting only affects notes in the pattern track, not the chord and melody notes coming from the Scanner. See also the section on the Main and Bass Zones.

Track Velocity Panel

You can modify here the global volume for all the notes of the track. Adjusting the “**Random variation**” knob produces more or less random variations to the velocities of each note, which creates a more “humanized” performance.

Input and Output Keyboards

The chord input keyboard (on the left) displays the incoming chord. The output keyboard displays all the notes that the Transposer outputs, the transposed track notes and also melody and chord notes received from the Scanner, if these latter are set to be played (see the MIDI Thru/Out panel). Neither of these keyboards are clickable.

MIDI Thru/Out Panel

In this panel you can set which data coming from the ReChord Scanner is to be played or passed through by the Transposer.

“**Play**”: You can individually set the Transposer to play or not the melody notes and the chord notes coming from the Scanner.

“**On Top**”: If melody or chord notes are set to be played, the additional “**On Top**” option allows these incoming notes to have priority over the notes on the track. More precisely, suppose the “**On Top**” option is activated for melody notes. Then if a melody note from the Scanner is already playing and the same note also comes from the track, this latter is ignored. Conversely, if a note from the track is already playing and the same note comes from the Scanner as a melody note, the note from the track is interrupted and the melody note from the Scanner is replayed.

If the “**On Top**” option is unchecked, then the track notes have priority over melody or chord notes from the scanner.

The “**On Top**” mechanism is useful to spontaneously override the rhythmic chord patterns on the track.

“**Legato**”: By using the “**Legato**” option, the Transposer will play all the notes, regardless of their source (melody, chord or track) as smoothly as possible. If one same note comes from different sources it will not be replayed and will not be interrupted until it ends in every source.

“**Channel Out**”: Use this window to specify different output MIDI channels for melody, chord and track notes. Note that some DAW’s do not support routing on different channels.

“**PitchBend**”, “**Modulation**” and “**Channel Pressure**”: use these buttons to select if these control changes should be passed through or not by the Transposer. Note that some DAW’s do not support routing CC messages.

“**More MIDI settings**”: You can set in this window how the Transposer should pass through the CC123 message (all notes off), and also the non CC MIDI messages.

You also can set here the maximal fraction of time during which the Transposer waits for the Scanner to send data. The default of 30% is largely sufficient in general, you should only modify this if you experience brief glitches in the Transposer (the status flashing briefly to from “**On**” to “**Idle**”). A higher percentage might improve the performance on slow machines or when using a lot of resources on your machine, as the Transposer awaits longer for data from the Scanner. A too high value however may produce some latency.

Chord Inversion Mode Panel

In this panel you may set up how the Transposer should respond to chord inversions. You can choose seven possible modes, grouped into two categories:

Fixed Inversion: Within this category, the Transposer always plays a fixed inversion for all the chords, regardless of the inversion in which the chord was played on the keyboard. This is the regular operating mode for hardware arrangers.

You can choose here **no inversion**, **first inversion**, **second inversion** or **third inversion**. The first and second inversion can be set to be played below the root (default) or above the root (**oct +1**).

Also, in this category you can set the **octave break point**. When playing chords in the same inversion, higher rooted chords usually sound significantly higher than lower rooted chords. To prevent this from being too disturbing, you may choose to play higher rooted chords an octave lower than the others. The octave break point is the point in the octave above which chords are played one octave below. The default octave break is F#, meaning that the chords with roots G, G#, A, A# and B are played one octave lower than the chords rooted from C to F#. You can set the octave break point in a manner that suits best your song when played in a specific key.

Dynamic inversion: The inversion modes in this category allows you to take full advantage of the inversion response mechanism that ReChord provides. There are three available modes here:

“Standard”: In this mode, the Transposer revoices the chords in your patterns according to the inversions you play on the keyboard. When playing different inversion for the same chord, some of the notes are played in a different octave, while others remain the same.

“Random”: In contrast to the standard mode, the Transposer occasionally replaces the inversion you play by one inversion up or one inversion down. This “spices up” your performance if you are used to play chords in only one inversion.

“Modal”: This is possibly the most interesting mode to use in many cases. In this mode the Transposer does not only revoice your chords when you play inversions, but also rewrites melodic phrases in a natural manner. In more technical terms, in this setting, the different chord inversions are associated to different diatonic modes, depending on the degree of the first note in the inversion. For instance, in a major key, a chord without any inversion is associated to the Dorian mode, the first inversion with the Phrygian mode and the second inversion with the Mixolydian mode. Then each note in the pattern, besides being transposed to the key of the current chord, is also diatonically translated to the corresponding mode in that key. This produces a very natural variation which may transform a basic melodic phrase into a complex melody just by varying the inversions of its chords.

Note Range Panel

You can specify here a range to which the output notes should be restricted. This is useful for instance if you want to respect the note range of certain (real) instruments. You may also choose if the notes outside the range should be dumped or repitched to the closest octave in the specified range.

New Chord Panel

If a chord change occurs while some notes from the pattern track are playing, the Transposer ends the notes transposed to the old chord, retransposes them and and plays them again in the new transposition. However, depending on the chord change, some of these notes might not change at all. You can specify here if such notes that do not change should be stopped and played again (**“Retrigger”**) or to be played continuously (**“Legato”**).

Main Zone and Bass Zone Panels

ReChord Transposer allows you to split the note range on each pattern track in two zones, the Main Zone and the Bass Zone. In a piano accompaniment score for instance, you most often have a bass line in the lower octaves and a chord/melodic part in the higher octaves. You may set up the split point between the two zones, and it will operate on the untransposed notes, as they are written on the pattern track.

In each zone you may set the Transposer to respond differently to various aspects, such as chord inversions, chord octaves and, most importantly, tensions in more complex chords.

For the notes in each zone you may set up individually:

1. Which tension management mechanism should be used in the zone, Tension Adding or Tension Substitution (see the Tension management section).
2. If the Transpose should take into account the octaves in which chords are played.
3. If the Transposer should use the Chord Inversion Mode settings or not.
4. If the Transposer should apply the inversion alteration produced by the Inversion Slider in the Scanner.

You also set here, for each zone, the reference octave, which is a parameter used in the Tension Substitution mechanism (see the Tension Management section).

Tension management (Add and Substitution)

ReChord Transposer provides a very flexible mechanism for properly handling chord tensions in your patterns. For this you can use two modes, called **Tension Adding** and **Tension substitution**, and choose the mode that suits better the musical contents of each pattern. As an example, here are two different situations when you would use one mode or another:

1. You write a rhythmic pattern with basically just chords triads, so the notes inside are essentially root, third and fifth mostly played together. To transpose this pattern to, say, a dominant seventh chord, you would most likely want to add the minor seventh to each triad. For this type of situation, you would choose the **Tension Adding** mode, which automatically adds the tension(s) when one of the triad notes are played.
2. You write a bass line with, say, an up and down arpeggio over an octave. To transpose this to a dominant chord, you would definitely NOT add the seventh to any of the existing notes, as you would in the first case, because you want your bass to play just one note at a time. Instead, you would rather substitute the high root note in the arpeggio with the minor seventh. In this case, you would prefer the **Tension Substitution** mode, which provides two natural substitution patterns.

You can choose one mode or another independently for the Main Zone and for the Bass Zone. As a general rule, it is probably better to use Tension Adding mode if you want your chords to sound full and you do not have much melodic contents, and Tension Substitution for melodic phrases, chords that you want to sound lighter, or for passages that have to be played one note at a time (such as for bases, wind instruments etc.)

Tension Adding mode:

In Tension Adding mode, the tensions in a chord are added to either the root, the third or the fifth degree note in the (1 3 5) triad of the original key of the pattern. You may choose which of the triad notes, 1, 3 or 5, triggers the tensions and which tensions should be added. You may also set one triad note to trigger other triad notes, so for instance you may set the root to trigger the whole chord. There are also several triggering presets. The default setting is for the fifth degree of the original key to trigger all the tensions. Note that only the checked degrees will be played, so for instance if you set the fifth to trigger 6-7 and 9-13, but not the 5 itself, the fifth will not be played. The duration and the velocity of a triggered tension are the same as for the note that triggered that tension.

As an example, suppose the original key is A major, and the Tension Adding mode is set as “3 TO 3, 6-7”, meaning that the third in the A major scale, i.e. C#, triggers the third, the sixth and seventh. Suppose also that the current chord sent by the Scanner is C 7 9, which has two tensions, the seventh and the ninth. While this remains the current chord, each time the Transposer receives from its track a C# note, i.e. the (major) third of the A major key, it will transpose it to an E (the third in C7) and also add a Bb (the minor seventh in C7), but it will not add the ninth. Therefore it will play an E and a Bb. If the Tension Adding setting were just “3 TO 6-7”, then it would play only the Bb, not the E. If the setting were “3 TO 3, 6-7, 9-13” it would also add the ninth of C 7 9 and play E, Bb and D.

You may also set how more complex chords are voiced. For the tensions/alterations in the second octave (9 11 13 and their alterations) you may set them to be played in the second octave or in the root octave (i.e. play a 9 as a 2, an 11 as a 4 or an 13 as a 6).

Tension Substitution mode:

In Tension Substitution mode, rather than adding notes that were not originally in the pattern, the Transposer will replace some of the (1 3 5) triad notes by tensions.

To do this, you specify a **reference octave**, which is the octave starting from which substitutions will be operated. There are two substitution patterns you can choose, “**Raise**” and “**Lower**”.

The “Raise” mode operates as follows:

- In octaves below the reference octave no substitution is operated.
- In the reference octave, the 5th is replaced by the 6th or the 7th.

- In the octaves above the reference octave, the root is replaced by the 9th, the 3rd by the 11th and the 5th by the 13th.

The “Lower” mode makes the following substitutions:

- In octaves below the reference octave no substitution is made.
- In the reference octave, the 5th is replaced by the 13th.
- In the octaves above the reference octave, the root is replaced by the 6th or the 7th in the octave below, the 3rd is replaced by the 9th and the 5th is replaced by the 11th.

The default mode is “Lower”.

As an example, suppose you write a classical boogie bassline in C major, in the octave 1, going:

C1, E1, G1, A1, C2, A1, G1, E1.

Choose then the octave 1 as the reference octave and choose the “Lower” substitution pattern. On a C major chord, the transposer will play exactly the same sequence. On a C7 chord it will play:

C1, E1, G1, A1, Bb1, A1, G1, E1,

on a CM7 chord it will play:

C1, E1, G1, A1, B1, A1, G1, E1.

and on a C6 chord it will play:

C1, E1, G1, A1, A1, A1, G1, E1.