# RePitch 2.0

## User Manual

Professional Pitch Correction and Audio Editing

## What's New in RePitch 2.0

Users of previous versions should read these notes to get a simplified list of the improvements and added features.

#### Smart Attack

RePitch 2 Standard introduces SmartAttack, a breakthrough tool that intelligently detects and aligns vocal phrasing to the grid—without sacrificing the natural character of the performance. It automatically adjusts note starts for tighter timing, making it easier than ever to achieve polished, professional results while keeping vocals feeling authentic and expressive.

### Multi-track Editing

Edit multiple vocal takes side by side in a single unified view. Multi-track editing lets you visualize harmonies, doubles, and stacks all at once, making it simple to align timing, pitch, and expression across performances. Perfect for vocal producers and engineers working with layered arrangements, this update speeds up editing and improves consistency across tracks.

### Floating Toolbar

RePitch 2 Elements introduces a new floating toolbar that keeps all your essential tuning tools just a click away. Designed for speed and flexibility, it lets users access pitch, timing, and correction controls from anywhere in the workspace—streamlining the creative flow from start to finish.

#### Note Edit Mode

The new Note Edit Mode button allows you to toggle between two methods of modifying note blocks:

- When enabled: Pitch controls are available in the top half of a note block, and time modification controls are available in the bottom half.
- When disabled: Pitch modification controls are available from anywhere on the block, and time modification controls are disabled.

#### **Shaper Tool**

The Shaper Tool is a groundbreaking new feature that allows you to place 'Shape Points' on a pitch or level trace for precise manipulation. This unique tool enables you to quickly and precisely 'shape' a pitch curve while retaining the character of the performance, resulting in more natural-sounding corrections.

#### Key features:

- Manipulate pitch curves without splitting note blocks
- Maintain the natural character of vocal performances
- Quick and precise editing workflow

### Improvements to Note Block Controls

We have increased the number of parameters that can be edited from a note block by introducing Control Points which sit around the note block and enable values to be changed quickly, speeding up user workflow. Note Blocks now also allow for a variety of time-based controls via click-and-drag.

### **Speed Enhancements**

If edits are being applied in RePitch to a long signal, we now only process the segment of audio which has been changed. This can significantly speed up processing time.

## Bypass Shortcut Key 'B'

Bypass is now on a hotkey for easier A/B comparison of before and after processing.

### Level Editing Improvements

- Notes selected in the pitch view are selected in the level view
- Warp Time is available in the level display
- Shape Shifter works on the level display
- When moving notes the interpolation of transition and ungrouped audio now sounds better
- If you cut a note on the pitch display it is also cut on the level display

### **Custom Keyboard Shortcuts**

Can be accessed from the General Settings Dialog to customize your workflow preferences.

## **Operational Overview**

#### **Basic Workflow**

RePitch works similarly to most other non-realtime pitch and time manipulation plugins. It lets you manually edit notes and unvoiced audio. However, RePitch can also be set to process the captured audio automatically after capture via a Macro that can snap the notes to a detected scale or to a Scale selected from a user-created list.

The main basic steps for RePitch are:

Load the RePitch plugin onto a track or section of audio (usually as an Audio Effect or "FX"). The specifics of how to do this will depend on your DAW.

If the audio hasn't been automatically captured (using an ARA plugin version), you'll need to capture (load) the audio via a straightforward realtime "recording" process.

After capture, RePitch will use the selected Macro to process the captured audio automatically (or not).

You can review the signal and manually adjust the audio in terms of pitch, time, level and/or formants, using RePitch's manual and/or automatic tools.

The modified audio will be instantly ready to playback in the DAW.

If you have VocAlign Ultra, you can use RePitch's output audio to be passed as the Guide to VocAlign Ultra, and transfer its time and/or pitch features to Dub signals in VocAlign Ultra.

#### Important Note

How you get audio into RePitch depends on your DAW. RePitch is a non-realtime plugin, which means it requires the original source audio to be captured (loaded) into the plugin, and then the audio is processed and returned to the host DAW.

## RePitch Plugin Versions and DAWs

The installers for macOS and Windows OS will install all the RePitch plugin formats discussed below. Only some will work with your DAW and those that are supported by your DAW will appear in your DAW's plugin lists.

Important: If your DAW supports both AU and VST3 plugins, ALWAYS use the RePitch VST3 plugin.

### VST/AU ARA Plugin Features

- Fast capture of audio
- Ease of setup
- Processing of entire tracks, audio clips/events or both, depending on host DAW
- Transportable projects the DAW takes care of loading and saving all ARA data
- Instant replay of processed signals
- Control from the plugin of the position of the DAW's playback cursor and Playback Loop range
- Tracking of Bar/Beats

**WARNING:** The RePitch ARA plugin must be the first plugin in the effects chain, and there can be only ONE ARA plugin in a chain. This means you cannot apply RePitch and any other ARA plugin (e.g., VocAlign or Melodyne) to the same segment of audio.

PLUG IN TYPE	Modes	Will work with
AAX	• ARA*	• Pro Tools 2024.06 and later
	AudioSuite	<ul><li>Pro Tools 11.1 and later</li><li>(Not Pro Tools 10)</li></ul>
<b>AU</b> (Audio Units)	• AU (ARA)*	• Logic Pro 10.5.1 and later**
	• AU	• Logic Pro 10.0.0 and later
VST3	• VST (ARA)*	<ul> <li>Studio One 4</li> <li>Cubase Pro/Nuendo</li> <li>Cakewalk</li> <li>Reaper</li> <li>Most other DAWs supporting VST3</li> </ul>
	• VST	<ul> <li>Studio One 4</li> <li>Cubase Pro/Nuendo</li> <li>Cakewalk</li> <li>Ableton Live</li> <li>Most other DAWs supporting VST3</li> </ul>

## Macros and Capturing Audio

#### Start with a Macro?

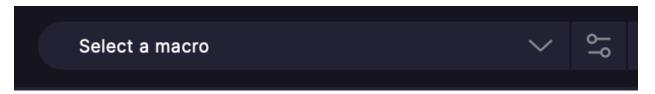
RePitch features a small library of task-orientated Macros (Initial Processing Settings) covering a few common usage scenarios. It's often entirely possible to get most of your desired tuning results by applying a Macro when you capture the audio, with relatively little further adjustment required.

After capturing a signal in RePitch, you can choose to:

- Manually make all adjustments yourself, OR...
- Let RePitch automatically apply specified adjustments to the whole signal, or a section of the audio, then make further adjustments manually if required, or use RePitch's further automatic processing.

#### The Macro Selector

When you first open RePitch, the Macro selector allows you to choose from several pitch ranges. Setting the Pitch range makes RePitch process faster and its editing sound better.



### Pitch Range Options:

- Normal (60 to 850 Hz): The default 'general purpose' setting, for spoken word, vocals in non-extreme registers and the majority of single pitch instruments.
- High Pitched Vocal (60 1200 Hz): Sung vocals in 'higher-than-average' registers.
- Low Pitched Vocal (40 850 Hz): Sung vocals in 'lower-than-average' registers.
- High Pitched Instrument (60 4,000 Hz): High-frequency-dominant instruments such as violin, flute, lead guitar, lead synth.
- Low Pitch Instrument (25 850 Hz): Low-end instruments such as electric and acoustic bass, cello, bass synth.

## Navigation

Because audio modification tools have a large number of ways of manipulating the zooming and panning of the signal viewing window, RePitch offers several popular methods for users to choose from.

Although these controls ultimately do the same things, the different access methods will appeal to different users or be useful in different operations.

The Pan and Zoom functions (with links below to details) can be controlled by:

- 1. Individual and visible On-Screen Controls using the mouse wheel or alternative device
- 2. A Pan and Zoom "Tool" that can be selected on screen or by a Quick Key
- 3. A set of commonly used **Quick Key options** for multi-directional Pan and Zoom that must be memorised but will be familiar to many editors.
- 4. Simple held-down key plus Mouse-controlled Horizontal (Time) Zoom and Vertical and Horizontal Pan controls.
- 5. Using the Overview Window "thumb" control for Horizontal Pan and Zoom

Lastly, there are separate Waveform Height controls for the waveforms in the Main and Overview Windows.

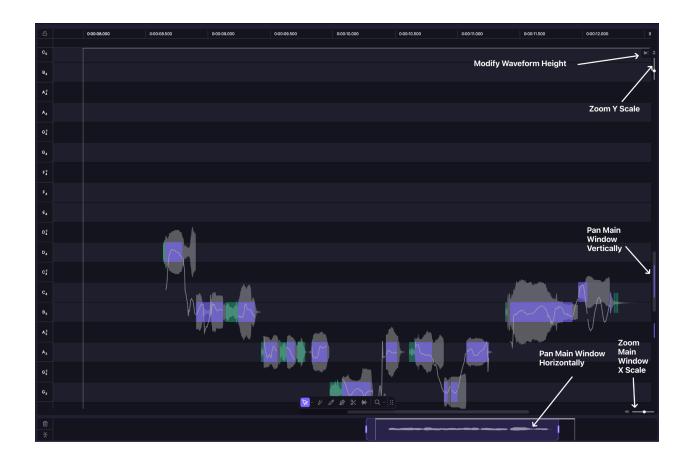
### On-Screen Pan, Zoom and Waveform Height Controls

In the figure below, the main controls are labelled, but in the RePitch plug-in, the controls all have pop-up Tool Tips.

All the Zoom and Pan controls can be controlled with the mouse wheel (or other device) while hovering over them (without clicking).

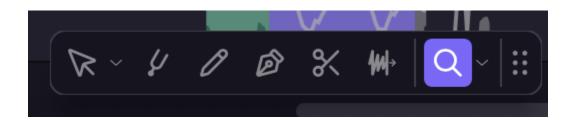
If they are clicked, a pop-up slider will appear.

If you are using a mouse or similar device, the ZOOM MAIN WINDOW X-scale control uses a Side-ways press of the mouse wheel (or left / right swipe).



#### Pan and Zoom "Tool"

The Pan and Zoom tool is in the floating toolbar and is shown selected (purple) in the picture below.



Select this tool by clicking the icon or pressing the key: **X** The Hand icon will appear.

**To Pan** - click and drag left, right up or down.

**To Zoom** - press ALT (or OPTION) key, click and drag left/right to modify X zoom or up/down to modify Y zoom.





When done with this tool, you can quickly return to the main Selector Tool by pressing the X key again.

### **Quick Keys Multi-directional Pan and Zoom Controls**

These Quick Keys combined with mouse (or other input device) provide a very immediate way to Pan (Drag) or Zoom the Main screen.

These Quick Keys must be memorized.

#### mac OS

• Pan (Drag) mode (hand icon) COMMAND + SHIFT

• **Zoom** mode (magnifying glass icon) COMMAND + ALT (=OPTION)

#### Windows OS

• Pan (Drag) mode [Hand icon] CTRL + SHIFT

• Zoom mode [Magnifying Glass icon] CTRL + ALT (=OPTION)

## Simple Scroll and Horizontal Zoom [single key with "mouse" wheel]

These must be memorised.

• **ZOOM time scale** in/out

o <u>at Cursor position</u>

o at Playhead or at left edge of screen if Playhead is not visible

• SCROLL Vertically

• SCROLL Horizontally

CTRL + mouse wheel ALT (=OPTION) + mouse wheel

Mouse wheel (alone) SHIFT + mouse wheel

#### **Overview Window Thumb**

The Overview Window offers a very quick and easy method of dragging and zooming the audio displayed in the Main Window.

In the picture below of a section of the Overview Window, the light-colored box (sometimes called a "Thumb" control) can be dragged left and right to make the Main Window show the same audio range as the "thumb".



The left and right dots in the Thumb are also control points for positioning and clicking the mouse to drag the left or right edges of the box in or out as shown below .

Dragging the edges will result in the audio shown in the Main Window zooming in or out from the left or right of the window.

## **Waveform Height Controls**

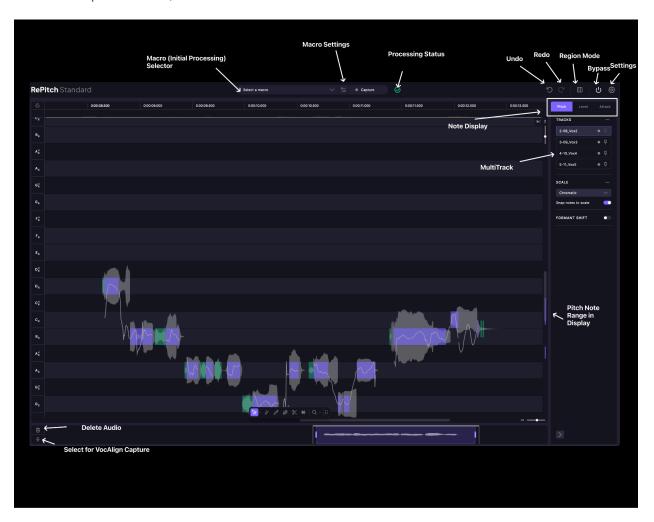


This allows a clear view of the note box position relative to the note lanes, indicating a sharp, flat or in tune note.

## User Interface and Operation

## Interface overview

Once you have installed RePitch, inserted it as an Insert or FX process in your DAW, and captured audio (either using an ARA or Realtime Capture), you will see an interfaces similar to the one below (which is the ARA version interface). This will contain audio waveforms, different colour pitch traces and boxes similar to the picture below, which also has most of the outer border and screen items labelled.



## Main Window (ARA)

This usually contains a small range of your audio, which normally will have been analyzed and separated into notes based on the white and orange pitch traces and further classification of where the waveform contains audio with Pitch, or no Pitch (unvoiced) or silence. We will look at this in further detail later. There is also a yellow playhead that moves through the audio.

All of your manual editing will take place in this Main Window.

### MultiTrack

- 1. Every instance of RePitch added will add an additional instance that is viewable in the Right side Panel
- 2. The Capture button is able to be selected on 1 or more tracks at the same time in Realtime and should capture audio for all instances that are enabled once audio is played
- 3. The Pin is used as a reference which will overlay the Referenced waveform over another instance of RePitch

#### **SmartAttack**

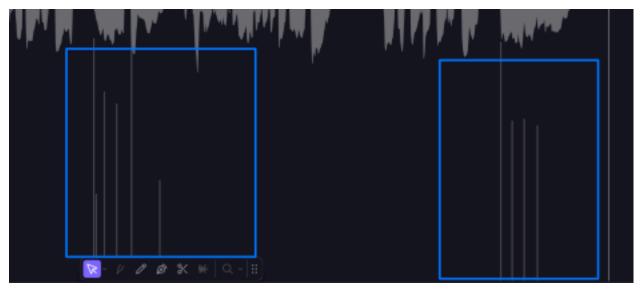
## Operating instructions

Put RePitch in ARA mode / Realtime on the tracks you want to process in your DAW



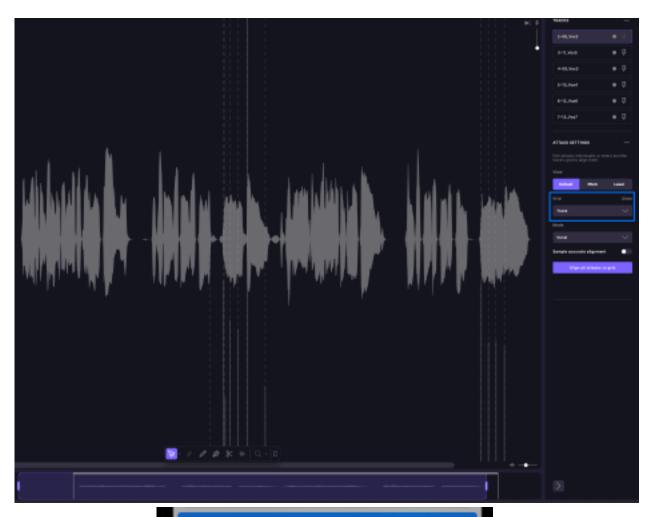
Match Attack RePitch 2.0 1

You will see the normal RePitch display, with the addition of grey vertical lines at the bottom of the track.



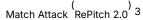
These lines show where we have detected attacks in the audio.

To align other tracks to a reference track right click to show the context menu in RePitch and select **Make Track Attack Grid or Select** or select the grid from the right panel selection



## Make Track Attack Grid

Align Track Attacks to Grid Sample accurate alignment for track Percussion Editing





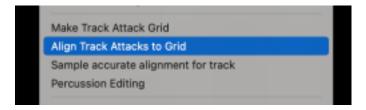
You will see dashed lines in the track, the full height lines are for attacks detected in the audio and the half height lines are (calculated?) filler points between attacks when there is a gap of greater than 1/4 beat between attacks.

Select RePitch on another track or Flip to another instance directly from the Multitrack panel

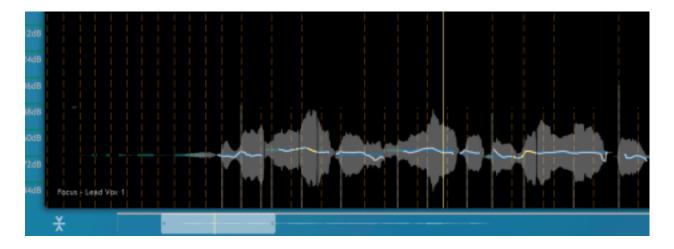
You will see the grid dashed lines from the previous track and the attacks detected in this track's audio. You may notice the attacks in this track are not  $_{\rm Match}$ 

precisely aligned with the reference track.

In the context menu select Align Track Attacks to Grid

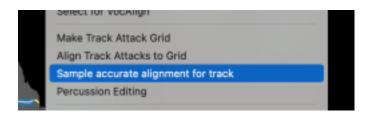


The audio will be adjusted so its attacks now match the reference track.



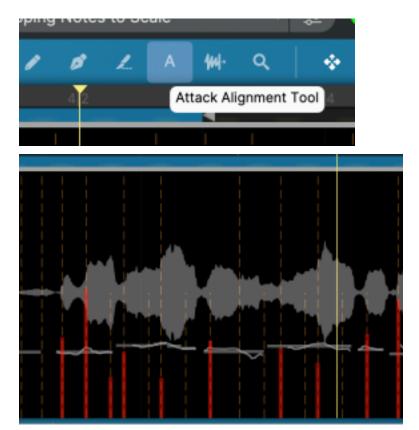
If you are aligning percussion and want to have phase accurate alignment select **Sample accurate alignment for track.** Then select **Align Track Attacks to Grid.** 

Note: This mode works well for attacks with significant separation, but can cause phase artifacts if used on string instruments and pitch shift problems on vocals.



Match Attack RePitch 2.0 5

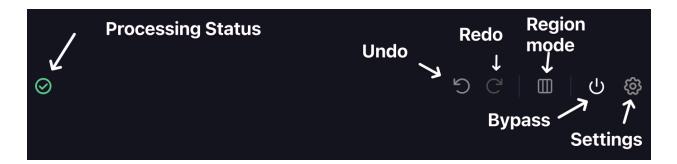
If the alignment is not correct at a position in the signal select the Attack Alignment Tool (E key)



The active attacks are now draw in red with thicker lines.

You can click and drag to select one or more points. Then move the selected points.

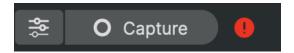
## **Top Controls**



## **Processing Status**

will display the yellow symbol shown above when any processing has been completed, or it will show a spinning symbol when processing is taking place - which will also be accompanied by a red line below the top border of the Main window. The red line will also disappear when the processing is done.

If an exclamation mark is shown in red as in image below, it usually means something needs to happen, such as capturing audio or that something is wrong. Below, the **Realtime Capture version** of Repitch is showing that audio needs to be captured.



#### **Undo and Redo Buttons**

(shown below)



**also have Key Commands (below). These** are standard commands that will undo or redo most (but not all actions).

<u>Action</u>	<u>macOS</u>	<u>Windows OS</u>
Undo	CMD Z	CTRL Z
Redo	CMD SHIFT Z	CTRL Y

## **Bypass indicator**



Indicates that you are hearing the processed RePitch audio during playback started in RePitch or the DAW.

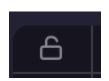


RePitch is ByPassed (but ONLY when playing back from your DAW)

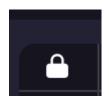
The Bypassed state will also be indicated by the audio in the Main Window going grey.

You can quickly bypass the plugin by pressing the 'B' key. Press 'B' again to re-activate RePitch.

#### Screen Lock



)FF



ON

Screen Lock ON stops the movement of the Main Window when playing back audio.

This lets you apply editing tools in the Main Window and playback check the results, and the screen will not scroll.

However while Screen Lock is ON, the viewing area can still be modified by using the various zoom and scroll controls which are described in the Navigation section.

There are TWO ways to turn the Screen Lock ON, and it is helpful if the user remembers which method Locked it in order to Unlock it.

#### To turn Screen Lock ON

- 1. Click the Screen Lock button (shown above left) or press the E key (think of "scrEEn lock")
  - If you have turned Screen Lock ON this way: you can only turn it OFF by clinking the (red) Screen Lock button or pressing the "E Key" again.
- 2. Select a Note Block (or Group)
  - If you have turned Screen Lock on this way: you can only turn it OFF by clicking in an empty area of the Main Screen to turn it OFF
     (i.e. do not click on another note).

3.

If you cannot turn Screen Lock OFF by clicking the Screen Lock button, then click in an empty area of the Main Screen (not on a note).



You MUST remember which way you turned Screen Lock ON in order to turn it OFF.

## **Settings**



Clicking the Settings button shown above opens the **Settings** menu below, which varies with what DAW your are using and whether you are using ARA or Real Time Capture

ALL the versions will have options for showing that an Update is available and where the Display and Audio Storage locations are (described previously).

When an **Update** is available, the Settings button will look like this:

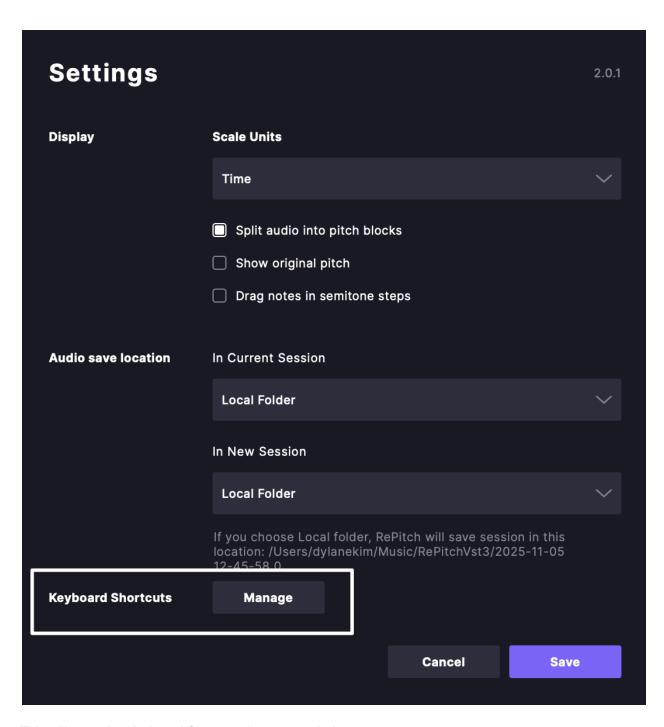


Other settings will be described when discussing the relevant topics.

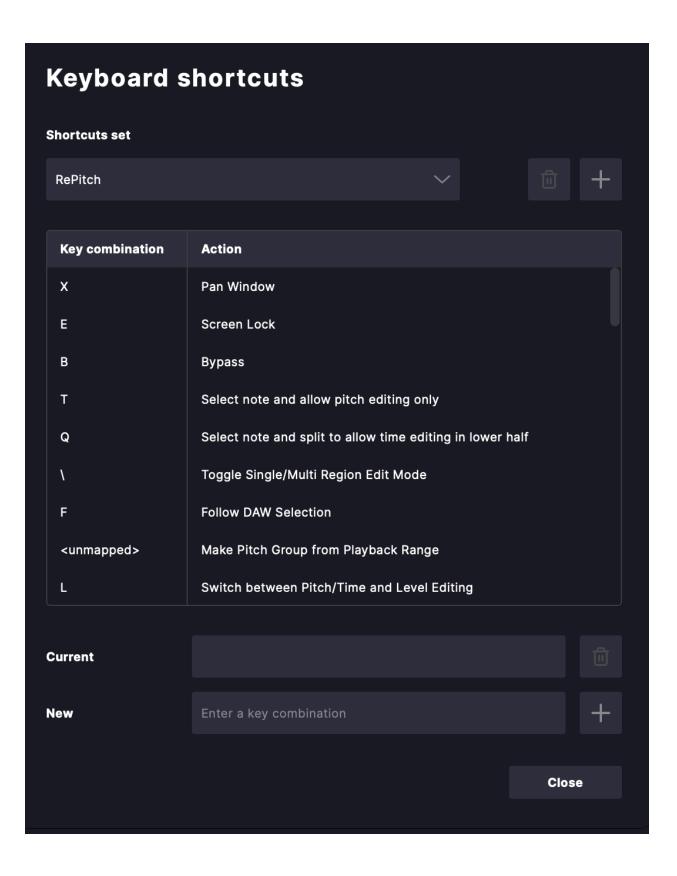
## **Keyboard Shortcuts**

Keyboard shortcuts can be edited in the settings window. You can do this to customize your workflow, or to change keyboard shortcuts that might conflict with your DAW or other applications in your workflow.

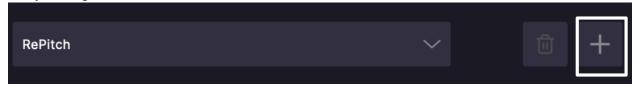
To do so, first open the settings panel as shown above, then click 'Keyboard Shortcuts'



This will open the Keyboard Shortcuts list as seen below.



In order to customize your shortcuts, you will need to edit the shortcuts then save them as a new shortcut set by clicking the + button shown here:



Once the new set is created, you can modify the keyboard shortcuts as needed. The dropdown beside 'Shortcut Set' will contain any sets you create, as well as the default set called 'RePitch' which cannot be modified. You can create new copies or delete sets as needed.

#### Resize controls

The RePitch interface is freely resizable to suit any size or resolution of monitor. Different DAWs allow different resize dragging options.

The main control for clicking and dragging the plug-in's sides that works in all DAWs is in the bottom right corner



Some DAWs allow independent dragging of the interface sides, but this depends on the DAW and OS.

The interface can be made very small and this might be useful if you have a lot of tracks on the screen that you need to see and are happy to operate the plug-in with Macros alone and expand when needed.

#### Multichannel audio

RePitch will operate with mono or stereo signals. Note that channel 1 (the left channel in a stereo pair) is always used as the main signal being analysed to extract pitch and define waveform editing positions.

If the stereo signal contains two different signals, they should be separated and processed independently.

## **Heat Map of Processing Effort**

Below the Time scale at the top of the Main Window is a track that contains the Playback Loops (in ARA versions only) and a display which shows a **'heat map**' that provides insight into the amount of processing being applied to the audio along the timeline. In the picture below, the further the white pitch (current) trace is from the red pitch (original) trace, the heat map "glows" brighter. Both pitch and time changes in the picture below are contributing to the intensity of the yellow mapping of the amount of processing.



This visual information is useful while auditioning the processed signal, as it directs your attention to the brightest areas showing the greatest changes and processing effort.

It is usually a good idea to listen to the audio where these markers are to ensure there are no significantly audible artifacts.

## Playback Methods

### Overview of Playback Methods

There are significant differences between ARA and Realtime versions in how RePitch connects to the DAW's playback mechanisms. The playback features of RePitch are more limited in the Realtime versions than the ARA versions.

### Realtime RePitch Playback

After you have captured the audio you want to process, make sure the track you have RePitch in and want to hear is solo'd in the DAW.

#### To play only the audio in RePitch:

- **To start Playback** at a position in waveform double click in the RePitch Main window or the Overview window where you wish playback to start.
- To stop Playback double click in the RePitch Main window or the Overview window.

#### To play RePitch audio on a solo'd track with any other solo'd DAW Tracks

- To start Playback, use the methods the DAW provides for example press the Space Bar.
- To Stop press the space bar again.

### **ARA RePitch Playback**

After you have captured the audio you want to process, make sure the track you have RePitch in and want to hear is solo'd.

### To play only the audio in RePitch:

- **To start Playback** at a position in waveform double click in the Overview window or the Main window where you wish playback to start.
- **To stop Playback** at a position the the waveform double click in the Overview window or the Main window where you want the Playhead to stop.
- OR to stop playback, press the spacebar.

#### To play RePitch audio with any solo'd DAW Tracks

- **To start Playback**, use the methods the DAW provides for example press the Space Bar to start from the DAW's Playhead postion or from the start of a Playback Loop if one is created (and the DAW is set to use it).
- To Stop press the space bar again.

## Saving RePitch's Audio Data

Note: This Chapter is ONLY for VST3 and AU Versions of RePitch

### Overview of Saving RePitch Audio

When you use RePitch it creates new audio files containing the processed audio. RePitch offers you two ways of saving them:

Archive the audio data in the DAW's session data Save the audio in a local directory on your computer

### Archiving Audio in the DAW's Session

#### Advantages:

- The DAW can manage RePitch's audio data such that the DAW's filing operations will all work seamlessly
- If you transfer your session to another computer, all RePitch's audio will also be transferred correctly
- If you remove RePitch from your session, all RePitch's audio data will be deleted from your hard drive

#### Disadvantages:

• It may take noticeably longer to save your sessions (though for typical sessions, the extra time is minimal)

### Saving Audio to a Local Directory

#### Advantages:

- Saving sessions is not any slower than normal
- If you close and restart the DAW session, it will find the audio unless you move or delete it

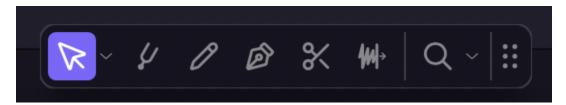
#### Disadvantages:

- The DAW cannot manage RePitch's audio data
- If you transfer your session to another computer, RePitch's audio will not be transferred
- If you remove RePitch from your session, the audio data will still remain on your hard drive

## Pitch Editing Tools

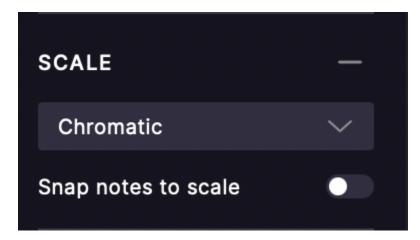
## The Floating Toolbar

Inside the RePitch window is the toolbar. This section will briefly explain the tools.



## Scales - Choosing and Adding

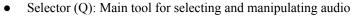
Lists of Scales and the Scale control panel are accessed by clicking on the drop-down control button. RePitch can automatically detect the scale from the audio frequencies, or you can select from a list of scales you create.



**QUICK TIP:** If your singer is normally close to being in tune, select "Chromatic" scale and use the Snap Notes to Selected Scale macro to perform a first pass of making slight tuning adjustments. This will often reduce the amount of manual tuning you will need to do.

## Tools and Quick Keys

The tools can be selected by clicking them or using Quick Keys:







• Center Notes (C): Centers selected notes to scale



• Draw (D): Draw and redraw pitch where there is voiced audio



• Split (S): Split note blocks at the red line position



• Shaper (V): Add shape points to pitch trace for fine pitch manipulation



• Warp Point (Shift+Click): Create warp points for time manipulation



• Pan & Zoom (X): Pan and zoom the display



• Note Edit Mode (T): Toggle between pitch/time editing modes

## **Editing Note Blocks**

Note Blocks in RePitch have a number of controls available depending on the position of the cursor and the Note Edit Mode setting.

#### **Control Points**

Note blocks provide several quick controls via Control Points that appear around a note block when moused over or selected:

• Drift on the left: Adjusts pitch drift

• Level Change in the middle: Adjusts level

• Pitch Correction on the right: Centers note to scale

#### Dragging Notes Up and Down in Pitch

Click in the top half near the center of the Note Block and drag up or down. Selected notes can be dragged either continuously in pitch or in semi-tone steps.

Hold ALT/OPTION key to toggle between continuous and semi-tone step modes (default behavior can be changed in Settings).

#### **Double Clicking Notes**

One or more notes can be selected and then double clicked inside the top half of the note box. The Note Block center will be moved to:

- The nearest Selected Scale Note frequency if Snap is ON
- The nearest Chromatic note if Snap is OFF

#### **Modulation Control**

This control reduces or expands the range of the note's pitch variation. Click and hold on the grey box centered just above the note block and drag down to reduce modulations or upward to expand them.

### Actions on a Range of Selected Notes

Three ways to make a selection in main window:

To select a small range: Click and drag a box around items

To select a larger range: Select first item, navigate to last item, press SHIFT and click last item

To select ALL: Press CMD A (mac) or [A] or CTRL A (Windows)

#### Right Click Menu Commands

- Join Selected Notes (J): Join notes together if no gap between them
- Smooth Selected Notes (M): Smooth discontinuous or jumpy pitch
- Reset Selected Notes: Remove all processing and return to original pitch
- Pitch Correct Selected Notes to 100%: Move notes to scale centers
- Set Playback Loop from Selected (Y): Create playback loop from selection
- Play Selected (/): Play the selected range
- Zoom to Selected (Z): Expand selection to window width

## Time Modification Tools

## Overview

In RePitch 2.0, we've greatly improved the workflow and control scheme for modifying timing. When the Note Edit Mode toggle is enabled, Note Blocks now have a number of time modification controls accessed by clicking in the bottom half of a note block. Additionally, groups of selected note blocks can be time warped together directly from the note block controls.

These time modification controls are only available when the Note Edit Mode toggle is enabled:

Note Edit Mode	Functionality
	Pitch modification tools are available in the top half of the note block. Time modification tools are available in the bottom half of the note block.
	Only Pitch modification tools are available. We recommend this mode when zoomed out to avoid accidental timing changes.

To read about the pitch modification tools, please see the previous section on pitch modification tools.

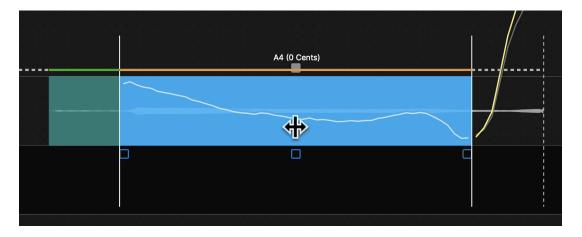
The below functions are discussed in detail in their corresponding sections following the overview table.

Move Note Block	+++	Click and hold on the bottom half near the centre of a note block, then drag left or right to move the note block in time.
		Surrounding transitions and sibilances will move accordingly.

Adjust Note Block Length	H	Click and hold on the bottom half of the note block at the right or left edge. Drag left or right to lengthen or shorten the note block.  Surrounding transitions and sibilances will move accordingly.
	4	

### **Moving Note Blocks**

To move a note block click in the centre of the block, in the bottom half, and drag left or right. The cursor will change to a left-and-right arrow cursor .



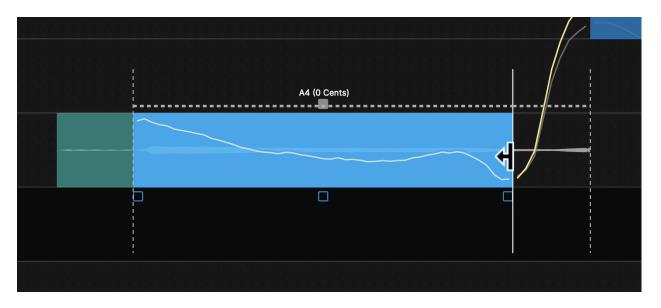
In the above image:

- The orange line shows the selected note block that will be moved. Surrounding notes and transitions will be adjusted as required.
- The green line indicates a sibilance, which will note be stretched or warped, only moved in time. By holding the ALT or option key, the sibilance will be allowed to warp.
- The vertical dotted lines show the limit of horizontal movement, typically where another note begins.

## **Lengthening and Shortening Notes**

To lengthen or shorten a note block, click and hold on the left or right edge of the note block in the bottom

half of the block. The cursor will change to a left or right drag cursor which can be used to lengthen or shorten the note. Surrounding note blocks will adjust accordingly, and sibilants will move with their connected note blocks.

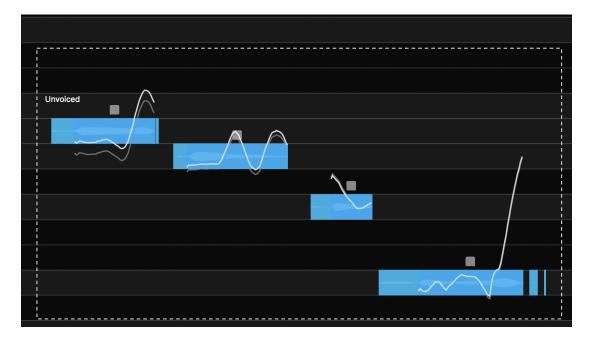


#### In the above image:

- The solid vertical line shows the selected end point that we will be adjusting.
- The dotted vertical line to it's right delineates the limit, or furthest the note can be adjusted. This typically corresponds with the start point of the following note.

## **Modifying Groups of Notes**

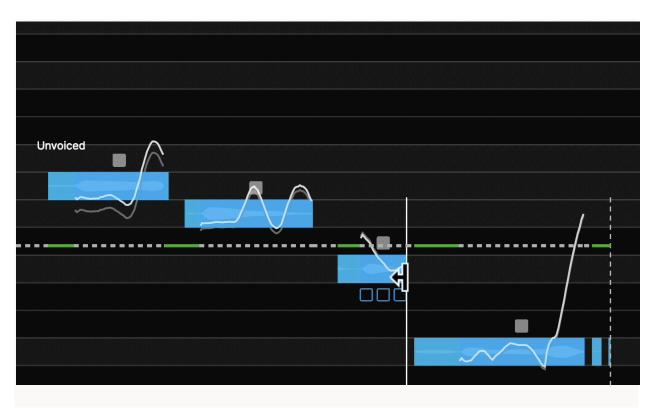
The above timing controls work with groups of selected notes as well. To begin, click and drag as normal to select a group of note blocks.



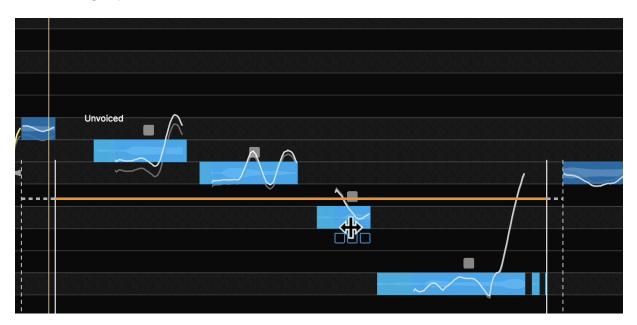
By clicking and the left or right side of note block, we can adjust the relative lengths of all blocks in the group. The blocks will warp around the adjustment made at the selected point.

#### **Before**

After



Note blocks can also be moved in groups by clicking as before in the centre bottom half of one of the note blocks in the group.



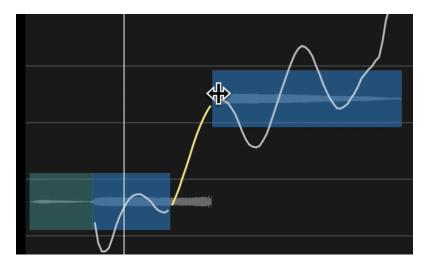
As before:

- The orange line shows are selected notes.
- The vertical dotted lines to either side show the limits of our movement.
- Dragging left or right will move the notes in time as a group and without any warping.

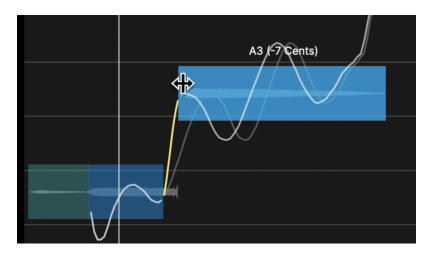
# Modifying Timing at Transitions

Interesting, useful and creative modifications can be created by changing the timing of a transition and the audio following it (or leading into it).

Below we show positioning the cursor at the junction of a transition and the following audio (in this case).



If we simply drag the cursor forward, the transition gets shorter (and faster) and the audio in the following Note Block stretches, as shown below. The user can experiment with this to get an idea of the effects this can generate.



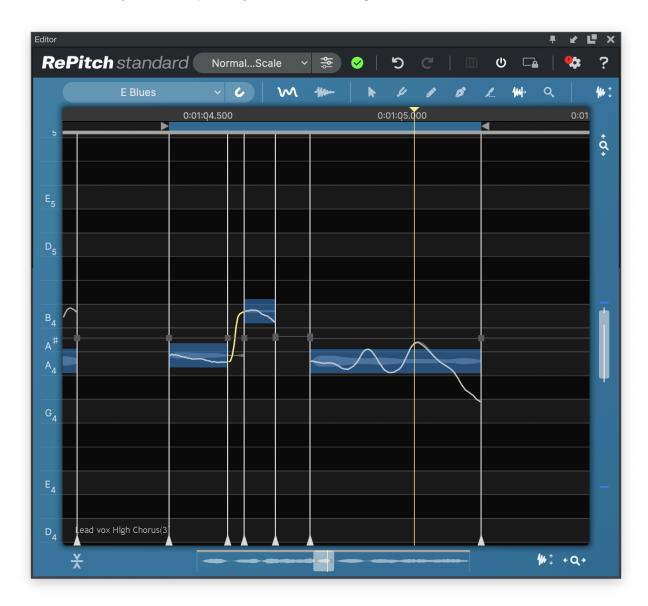
The Warp Point Tool

The Warp Point Tool provides a quick way to drop anchor and flex points, with visible lines showing their location in the signal.

Warp points are automatically populated at the beginning and end of each note block, and are used to power the Note Block time modification tools discussed above. If you add or remove warp points with the warp point tool, they will be taken into account when using the Note Block time modification tools.

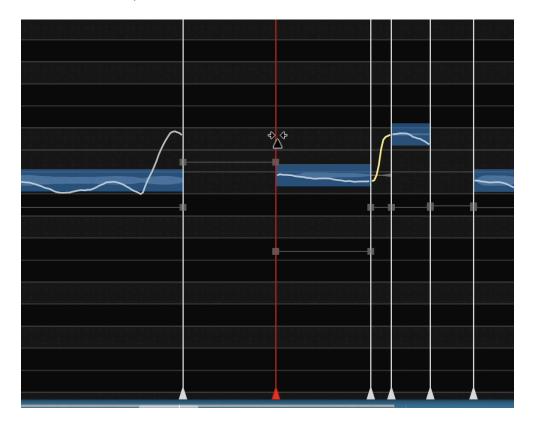
The picture below shows a typical view once the Warp Point tool is selected (ON).

The warp points have a triangle at the bottom of the Main Window and a line running to the top of the Main Window - so you can see precisely where it is in the signal.



**Flexing Time with Warp Points** 

Click and drag anywhere on the vertical white line indicating a warp point. The surrounding audio and note blocks will flex, and sibilant sounds will be moved rather than flexed.



## **Add and Remove Warp Points**

With the warp point tool selected:

- Add: ▲ Shift+click in a blank space over a note block to create a new warp point
- Remove: A Shift+click a warp point anywhere on the vertical white line to remove it
- **Reposition**: Option+click a warp point anywhere on the vertical white line. The line will turn yellow to indicate it is selected, now drag left or right to reposition a warp point

## **Speed Ramps**

Even more creative control is available, because the red horizontal lines seen with red squares on the Warp Points are actually speed controls.



When you hover over or near the square you will get a cursor like this:

Moving that square on the flexing Warp Point up will not move either Anchor points, but will go from a speed of 1.0 (when the line is horizontal) to a higher or lower speed in that section depending on whether the line slopes up (going faster) or down (going slower)

Experimenting for a short while with these tools will make these brief descriptions make more sense.

#### **Other Warp Point Facts**

You can insert as many Warp Points as you want, but it is always recommended if you are not at the start or end of the signal and you want to not change the timing of the start or end, to keep a Start Warp point and an End Warp points as anchors.

### Level Modification Tools

#### Level Control Overview

Control of signal Level in RePitch allows detailed control and understanding of the manipulations being done to the waveform and can display very low level signals. In a second screen in RePitch's Main Window, you are shown a trace of level measurements against a vertical axis of dBs. The segments of the traces can be moved up and down to control the level.

#### The Level Control Screen

Toggle between Pitch and Level screens by clicking the Level button or pressing the L key. Press L again to toggle back to the Pitch screen.

#### In the Level screen:

- Purple blocks at higher levels typically show waveforms of voiced (pitched) sounds
- Green blocks at lower levels show where waveforms are sibilants, breaths, or other noises
- The trace over those blocks shows the level based on the dB scale shown in the left border

#### Fine Control or 3dB Steps

Normal dragging up or down can be continuous (fine control) or in 3dB steps if the ALT (OPTION) key is held down.

## Using the Shaper Tool in the Level Screen

The Shaper Tool functions as in the Pitch Screen, however it now modifies the Level trace, as opposed to a pitch trace. Use the V key to activate the Shaper Tool.

#### Shape point operations:

- Click on the level trace with the shaper tool to add a shape point
- Hold and drag left and right to reposition a shape point
- Hold and drag vertically to increase or decrease the level
- Click and hold + option for a tilt movement
- Double click to remove a shape point

### Modifying the Loudness Modulations

The same control used for flattening pitch modulation (the control point at the top of the note box) can be used to reduce or even flatten the level modulations. Such a control may be useful in certain creative or correction situations.

## Additional Resources

### RePitch Videos

For video tutorials and walkthroughs, visit the Synchro Arts website for current RePitch videos.

## **PDF Version**

A PDF version of this User Guide is available for download from the Synchro Arts website.

## Support and Feedback

For support, feedback, or questions about RePitch, please contact Synchro Arts Limited.

© Synchro Arts Limited 2024. All rights reserved.