



AUTO-TUNE SLICE

USER GUIDE

Contents

Introducing Auto-Tune Slice	4
Controls	5
Global Controls	5
Antares Central	5
Browse	5
Edit	5
Preset Menu	5
BPM Controls	6
Output Gain	6
Undo	6
Redo	6
Settings	7
Browse Mode	7
Sample Pack Browser	8
Auto-Tune	8
Effects	8
Edit Mode	9
Editing Slices	9
Creating Slices	10
Record Enable	10
Keyboard	11
Slice Mode	11
Chromatic Mode	11
Show Slicing Tools (Knife Icon)	12
Key Select	12
Remap	12
Per Slice Properties	13
Zoom Slice	13
Gain	14
Pan	14
Pitch	14
Root	14

Slicing Tools	15
Grid	15
Sensitivity	15
Reslice	15
Playback Controls	16
Playback Mode	16
Varispeed	17
Crossfade	17
Velocity	18
Voices	18
Amp Env	19
Sync	19
Attack	19
Decay	19
Sustain	20
Release	20
Pitch Env	21
Sync	21
Attack	21
Decay	22
Sustain	22
Release	22
Depth	22
Auto-Tune	23
Input Type	23
Key and Scale	23
Tracking	23
Retune Speed	24
Humanize	24
Transpose	25
Formant	25
Throat	25
Detune	26
Mix	26
Effects	26
Preset Menu	27
Doublers	28

Filter	29
3 Band EQ	30
Comp	31
De-Esser	32
Tube Amp	34
LoFi	34
Reverb	35
Delay	36
Chorus	38
Vibrato	39
Flanger	40
Phaser	41
Ring Mod	42
Settings and Preferences	44
Enable Auto-Key Detection	45
Enable Keyboard Edit	45
Detune Display	45
Enable Tooltips	45
Waveform Display	45
Open in Edit Mode	46
Use OpenGL Graphics	46
Save as Default	46

Introducing Auto-Tune Slice



Auto-Tune Slice is the world's first virtual sampler instrument with built-in Auto-Tune, providing an easy and intuitive workflow for vocal and instrumental sampling, slicing, looping, effects processing, and more!

A rich sample library and collection of over 100 professionally designed presets are included for instant inspiration.

Auto-Tune Slice lets you easily turn the human voice (and any other recorded sound) into a musical instrument with the power of Auto-Tune built right in.

Controls

Global Controls



Antares Central

Click on the Antares logo in the top left corner to open the Antares Central application.

Antares Central is a standalone application used for managing Antares license activations. Check out the support article [here](#) to learn more.

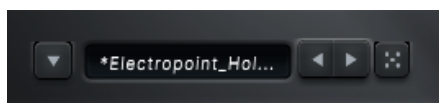
Browse

Click this button to enable [Browse Mode](#). This is the default view of Auto-Tune Slice.

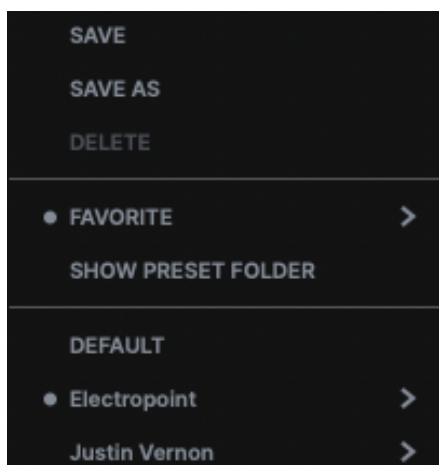
Edit

Click this button to enable [Edit Mode](#).

Preset Menu



Auto-Tune Slice comes loaded with a collection of presets to help you get started.



Browse through the artist preset folders to play with different samples and effects designed by artists like J Chris Griffin, Justin Vernon, and more.

Click **Save** or **Save As** to create your own personal presets, and save them to the User folder.

Click **Show Preset Folder** to locate the folder on your hard drive where your user presets are stored. This is

useful for moving custom presets from one computer to another.



Click the **Like** button (heart icon) next to a preset to add it to your favorites folder.



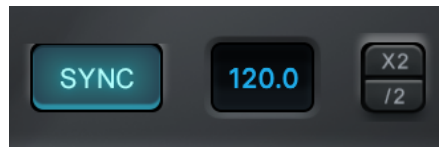
The **Random Preset** button (dice icon) lets you quickly try out a variety of different effects. Click it to load a random sample from the Presets Menu.

Pro Tip

To play a sample from beginning to end, switch over to [Edit Mode](#), and select *Forward Past End Point* from the [Playback Controls](#) dropdown menu.

Then, press and hold the first slice mapped on the keyboard.

BPM Controls



Press the **SYNC** button to synchronize Auto-Tune Slice's BPM with your DAW. Or, enter the BPM manually by typing it into the box on the right.

Press the **X2** button to play back samples at double time. Similarly, use the **/2** button to play back samples at half time.

Output Gain



Use the Output Gain slider to boost or cut the amount of gain output by Auto-Tune Slice.

Double click anywhere on the slider to reset its value to 0dB (unity).

Undo



Click the Undo button to undo up to 99 actions.

Redo



Click the Redo button to restore previously undone actions.

Settings



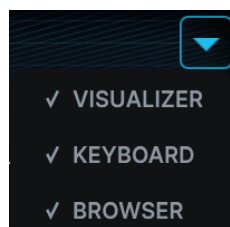
Click the Gear icon to open the [Settings Menu](#).

Browse Mode



Browse Mode is the default view of Auto-Tune Slice, and focuses on preset selection and playback visuals.

The Visualizer looks great in a session as it reacts to sample playback – it wiggles!



The layout of Browse Mode can be customized – use the dropdown menu to toggle sections on/off.

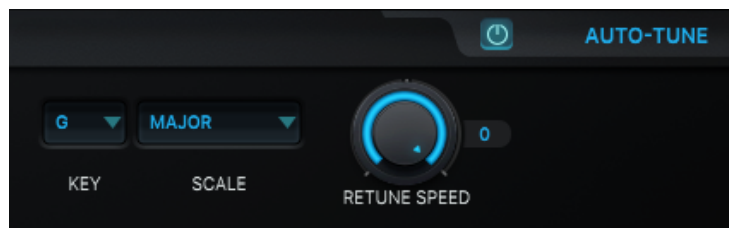
Sample Pack Browser

This section lets you explore the expansive collection of Sample Packs built into Auto-Tune Slice. Samples are organized into albums in the Sample Pack Browser, and are also browseable from the Preset Menu.

Click on a Sample Pack to view its contents on the right. Add any sample to your Favorites folder by clicking the Like (heart icon) button to the left of the sample name.

The collection of Sample Packs available in Auto-Tune Slice is constantly expanding. Check back regularly for new content!

Auto-Tune



While in Browse Mode, only the most essential Auto-Tune controls are displayed.

More controls are available in [Edit Mode](#).

Effects

The Effects section is visible in both Browse Mode and Edit Mode.

After loading a sample from the preset menu, an accompanying [Effects Preset](#) will also be loaded. These effects presets were designed by the same artist that produced the samples.

Edit Mode



Edit Mode is designed for sample tweaking and customization. Some of the same sections available in [Browse Mode](#) have been expanded in Edit Mode to provide more customization options.

The waveform visualizer displays the locations of Slices within the sample. Two stems separate each slice – white stems mark the boundaries of the currently selected slice.

Editing Slices

Slices can be moved anywhere on the sample. Click and drag anywhere within the slice boundaries to move the entire slice while maintaining its timing. To edit the start or end point of a slice, click and drag the stem handle.

To alter the end point of a preceding Slice in the sample, hover slightly to the left of the bottom stem. The preceding slice will become highlighted and double arrows will allow slide-editing of the end boundary accordingly.

Creating Slices

To create new slices in a sample, click and drag in the waveform display, and release when you are satisfied with the length of your slice. Slices can overlap each other, have varying lengths, or be completely isolated from one another in the sample.

New slices are automatically mapped after all other slices on the keyboard, even if the new slice is from the middle of the sample.

Up to 127 slices can be made from a single sample.

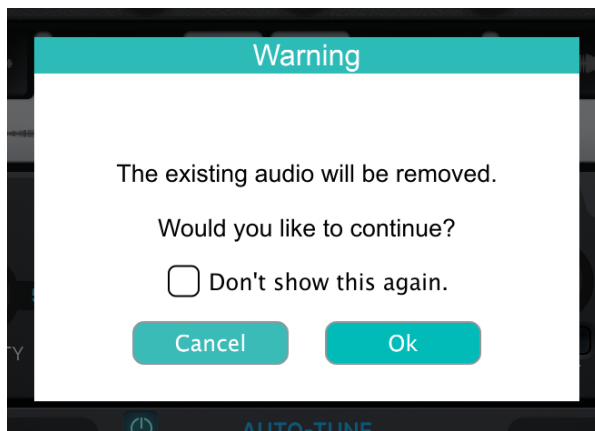
Record Enable



Auto-Tune Slice can record audio directly from your DAW. While record-armed, the Record button will flash red as it waits for the transport to start.

The filename field to the right will display “...waiting for transport”.

Note: The Record button cannot be enabled while DAW playback is actively running.



Recording over existing audio will invoke this warning dialog (left).

Clicking *Ok* will not remove the file from your presets or computer, just from the current instantiation of Auto-Tune Slice.

When you're ready to send audio to Auto-Tune Slice, arrange playback from a good point in your track and press the record button.

Stop playback in your DAW transport to end the recording, and the audio will be ready for editing in Auto-Tune Slice.

Keyboard



After loading a sample, slices are automatically mapped to the keyboard chronologically from left to right, starting at C2.

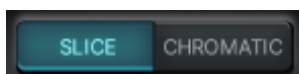
Note the waveforms on each key – they're a visual representation of where slices are mapped on the keyboard. To play slices, click the keys on the GUI or use a MIDI controller.

Slices can be arranged in any order you wish across the keyboard. Command+Click (Mac) or Control+Click (Windows), and drag slices on the keyboard to rearrange them. The slice that was there will be swapped with the new slice.

If you get lost, use the [Remap](#) button to revert back to the original slice mapping, or use the [Undo](#) button to go back a few steps.

To navigate across the Keyboard, use the left and right arrows on either side of the keyboard. Alternatively, hover over the keyboard, and scroll up/down with a mouse scrollwheel, or left/right on a laptop trackpad.

Slice Mode



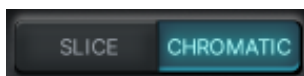
In Slice Mode, a sample's Slices are individually mapped across separate keys of the keyboard, as pictured below.

The waveform of each Slice is displayed on the keyboard.



In Slice Mode, every Slice from the sample is playable, as they are each mapped to their own key on the keyboard.

Chromatic Mode



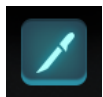
In Chromatic Mode, one slice from the sample is mapped across all 127 keys of the keyboard.

A capital *R* is placed on the keyboard to denote the root key of the sample.

When [Varispeed](#) is enabled, slices are not time-stretched during playback. The root key (**R**) indicates where natural-speed playback resides. Slices will speed up when played at pitches higher than the root, and slow down at pitches lower than the root.

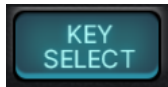


Show Slicing Tools (Knife Icon)



Click the knife icon to access the [Slicing Tools](#).

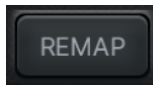
Key Select



While Key Select is enabled, playing an individual Slice on the keyboard will automatically highlight that Slice for editing.

This can save a lot of time while editing slices individually.

Remap



After rearranging slices on the keyboard, use the Remap button to reset them to their original mapping.

Per Slice Properties

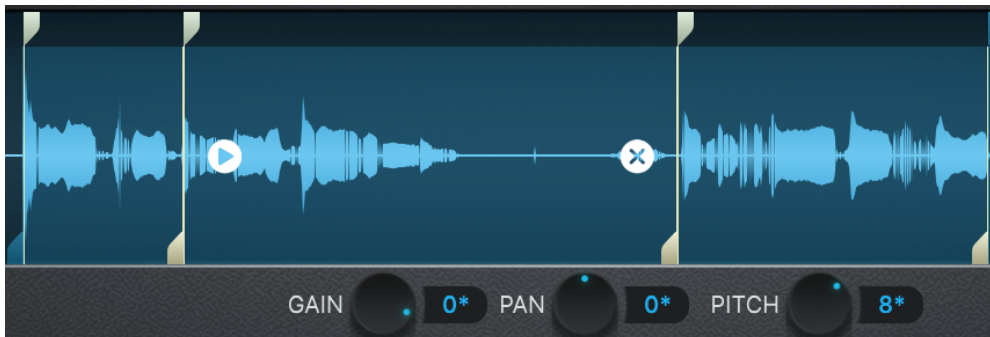


Certain parameters can be modified on Slices individually. To access the Per Slice Controls, select a slice from the waveform.

Multiple slices can be selected by holding Command (Mac) or Control (Windows) and clicking on them. Their parameters can then be adjusted simultaneously.

If multiple slices are selected and contain different properties, the properties of the last selected slice will be displayed along with an asterisk (*).

See example below:



When no slice is selected, the Per Slice Controls are disabled (greyed out).

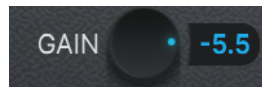
Zoom Slice



Select a Slice, then click the Zoom Slice button to display the selected slice across the entire waveform display.

Click and drag while Zoom Slice is active to move the entire slice. To return to full waveform view, click Zoom Slice again.

Gain



Use the Per Slice Gain knob to adjust the gain of the selected Slice(s). Double-click the knob to reset its value to 0dB (unity).

Pan



The Per Slice Pan knob adjusts the position of the selected slice(s) in the stereo field. Double-click the knob to return it to the center pan position.

Pitch



The Per Slice Pitch knob transposes the pitch of the selected slice(s) in semitones. Double-click the knob to return it to 0 (no pitch transposition).

Note: The Per Slice Pitch control is only active in [Slice Mode](#).

Root



The Root Key display indicates the pitch detected for the selected Slice.

Note: The Root Key display is only active in [Chromatic Mode](#).

Slicing Tools



The Slicing Tools determine the rules for automatic slicing. By default, samples are sliced via transient detection. If you'd like, samples can also be sliced by musical note divisions.

Grid

The Grid menu offers a selection of automatic slicing methods. Transient detection is selected by default, but you can also use the following musical note divisions to slice your sample – Standard (1/2 note - 1/64 note), triplets, dotted notes, and bars.

Grid lines are displayed on the Waveform view based on your selection. The sample will not be resliced until you click the [Reslice](#) button.

Sensitivity

The Sensitivity knob controls the transient detection sensitivity during automatic slicing. This control is only available when *Transient* is selected in the [Grid menu](#).

Reslice

Apply Grid menu and Transient Sensitivity changes by clicking the Reslice button. The sample will be automatically sliced and re-mapped to the keyboard.

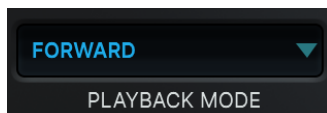
Pro Tip

While in [Slice Mode](#), drag this vertical white bar around the waveform to set the starting point of automatic slicing. By default, the bar is placed at the leftmost side of the waveform.



Playback Controls

Playback Mode



Select a Playback Mode to determine how slices are played. There are 9 options to choose from, described below:

Forward

Plays the slice from start to finish.

Reverse

Plays the slice backwards from end to start.

Forward Past End Point

Plays each slice from its beginning and continues to the end of the sample.

Reverse Past End Point

Plays each slice from its end point backwards, past the slice start point, and stops when the beginning of the sample is reached.

One Shot Forward

Plays a slice in a triggered fashion without regard for how long the note is held on the keyboard.

One Shot Reverse

Triggers a slice in reverse without regard for how long the note is held on the keyboard.

Loop Forward – Loops the selected slice until the key is released on the keyboard.

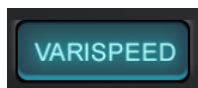
Loop Reverse

Loops the selected slice in reverse until the key is released on the keyboard.

Forward To Reverse

Plays a slice forward, and immediately upon reaching its end, plays it in reverse.

Varispeed



Enabling the Varispeed button applies variable speed playback when pitch shifting.

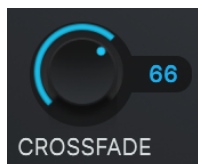
This applies to [Keyboard](#)-based pitch shifting in Chromatic Mode, and to envelope-based pitch shifting with the Pitch Env controls.

When Varispeed is *on* pitch shifting is accomplished by speeding up or slowing down playback, just like on a tape machine or turntable.

In this mode, if a Slice is being pitch-shifted up, the playback rate will be faster. If it's pitch-shifted down, the playback rate will be slower.

When Varispeed is *off*, pitch-shifting a Slice has no effect on its playback rate.

Crossfade



Use the Crossfade control to adjust the amount of overlapped audio at a loop point.

Lower settings result in more abrupt loops, while higher settings produce smoother, crossfaded loops.

Note: Crossfade is only active when “Loop Forward” or “Loop Reverse” playback modes are selected.

Velocity



The Velocity knob controls how slice volume responds to keyboard velocity. This applies to MIDI controllers, and also to the onscreen Keyboard.

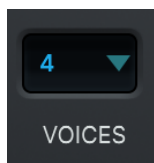
Pro Tip

You can control the velocity (loudness) when triggering Slices with the onscreen Keyboard by clicking higher or lower on the key.

Click near the top of the key for low velocity (*red arrow*), or near the bottom for high velocity (*green arrow*).



Voices



The Voices parameter determines polyphony, or the number of Slices that can be played simultaneously.

To prevent overlap when retriggering samples, use the lowest Voice value. Use up-to eight voices for playing chords or multiple slices at once.

Amp Env

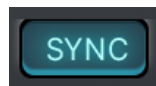


The Amplitude Envelope (Amp Env) controls allow you to apply a dynamic gain envelope to your Slices, so that they vary in loudness over time.

The shape of the envelope can be defined in absolute time (milliseconds/seconds), or in musical divisions of the beat. A graph on the right side illustrates the envelope applied to the sound.

Note: The Amp Env controls are global, meaning they apply to all Slices during playback.

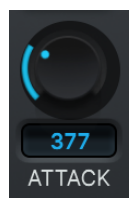
Sync



The Sync button toggles between absolute time and musical divisions.

When Sync is *on*, the parameter values are displayed as musical note subdivisions, and timing is based on the tempo of your DAW.

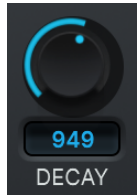
Attack



The Attack control determines the amount of time it takes to reach full gain when the key is pressed.

When Sync is *on*, the attack time is specified in divisions of the beat (e.g. 1/4 or 1/8). When Sync is *off*, attack time is specified in milliseconds or seconds.

Decay



The Decay control determines the amount of time it takes to reach the designated sustain level from the peak attack level.

When Sync is *on*, the decay time is specified in divisions of the beat (e.g. 1/4 or 1/8). When Sync is *off*, decay time is specified in milliseconds or seconds.

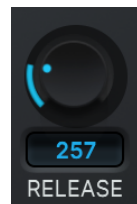
Sustain



The Sustain control sets the gain level held throughout a Slice duration, from the end of the initial attack until the key is released.

The range of Sustain is from 0 to 100 percent gain.

Release



Use the Release knob to adjust the amount of time it takes for the gain to reach zero, once the key is released.

When Sync is *on*, the release time is specified in divisions of the beat (e.g. 1/4 or 1/8). When Sync is *off*, release time is specified in milliseconds or seconds.

Pitch Env



The Pitch Envelope (**Pitch Env**) determines how sounds change in pitch over time. Changes can be applied in absolute time (milliseconds – seconds), or in musical divisions of time. The graph illustrates the envelope applied to the sound.

The Pitch Env controls are global, meaning they apply to all slices during playback.

Sync

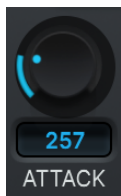


The Sync button toggles between absolute time and musical divisions.

When Sync is *On*, the time-based envelope parameter values ([Attack](#), [Decay](#), [Release](#)) are displayed as musical note subdivisions, and timing is based on the tempo of your DAW project.

When Sync is off, those parameters are specified in milliseconds/seconds.

Attack



The Attack knob determines the amount of time it takes to shift to the target pitch when the key is pressed.

Decay



Use the Decay knob to adjust the amount of time it takes to reach the sustain pitch from the peak attack level.

When Sync is *on*, the decay time is specified in divisions of the beat (e.g. 1/4 or 1/8). When Sync is *off*, decay time is specified in milliseconds or seconds.

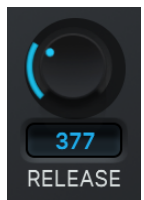
Sustain



The Sustain setting determines the pitch held throughout a sound's duration, until the key is released.

It's specified as a percentage of the total pitch shift ([Depth](#)).

Release



Use the Release knob to adjust the amount of time it takes to return to the original pitch, once the key is released.

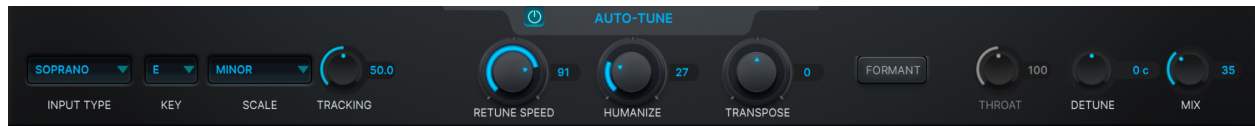
When Sync is *on*, the release time is specified in divisions of the beat (e.g. 1/4 or 1/8). When Sync is *off*, release time is specified in milliseconds or seconds.

Depth

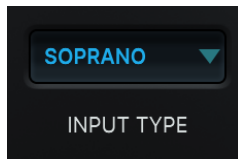


Pitch Depth describes the change in pitch in semitones. Pitch can be shifted from -48 – +48 semitones.

Auto-Tune



Input Type

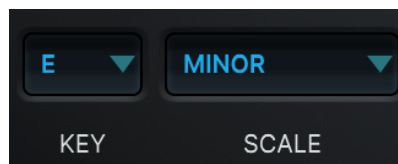


Auto-Tune Slice offers a selection of processing algorithms optimized for various audio input pitch ranges.

Options include: *Soprano*, *Alto/Tenor*, *Low Male*, *Instrument*, and *Bass*.

For the most accurate pitch detection and correction, choose the Input Type that best matches the audio's pitch range.

Key and Scale

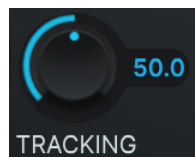


The Key and Scale menus let you define the set of notes that your audio will be tuned to.

For best results, set them to match the actual key and scale of your music.

If you're not sure what key your music is in, use the Auto-Key plug-in to automatically detect it and send that information to Auto-Tune Slice.

Tracking



In order to accurately identify the pitch of the input, Auto-Tune Slice requires a periodically repeating waveform, characteristic of a solo voice or solo, non-chordal instrument.

The Tracking control determines how much variation is allowed in the waveform for the Auto-Tune algorithm to consider it periodic.

In most cases, the Tracking can be left at its default value of 50.

A noisier signal or a vocal performance that is unusually breathy may require a more 'relaxed' setting (higher Tracking value).

If you're hearing artifacts such as clicks or pops, try setting the Tracking to a 'choosier' setting (lower Tracking value).

Retune Speed

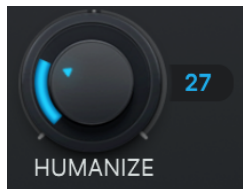


Retune Speed controls how rapidly the pitch correction is applied to the incoming audio. (Units are in milliseconds).

To achieve the classic Auto-Tune Effect, set the Retune Speed to zero. This will cause immediate changes from one pitch to another, and will completely suppress any vibrato or deviations in pitch.

A Retune Speed between 10 and 50 is typical for more natural sounding pitch correction. Larger values allow through more vibrato and other interpretive pitch gestures, but slow down how rapidly corrections are made.

Humanize



The Humanize control lets you add realism to sustained notes when using fast retune speeds.

One situation that can be problematic for pitch correction is a performance that includes both short and long sustained notes.

In order to get the short notes in tune, you would need to set a fast Retune Speed, but this can cause sustained notes to sound unnaturally static.

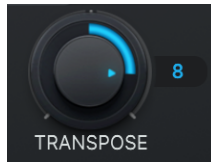
Humanize applies a slower Retune Speed only during the sustained portion of longer notes, making the overall performance sound both in tune and natural.

Pro Tip

Start by setting Humanize to zero, and adjust the Retune Speed until the shortest problem notes in the performance are in tune.

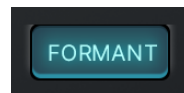
If sustained notes sound unnaturally static, increase the Humanize setting until they sound more natural.

Transpose



In addition to any pitch correction applied by Auto-Tune, the Transpose control lets you shift the overall pitch of your performance over a two octave range (+/- one octave), in semitone increments.

Formant



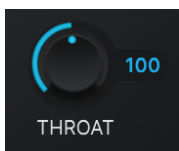
Formants are the resonant frequencies that result from the physical structure of whatever is producing the sound (e.g. the human mouth and vocal tract).

When a vocal is pitch-shifted by large intervals without formant correction, not only is the fundamental pitch shifted, but the formants are shifted as well. If not corrected, this can result in an unnatural, chipmunk-like effect.

When the Formant button is on, Auto-Tune automatically corrects the formant frequencies for a more natural sounding vocal performance.

Note: Formant correction is applied when pitch-shifting via the Transpose control, but not when pitch shifting with the Keyboard in Chromatic Mode.

Throat



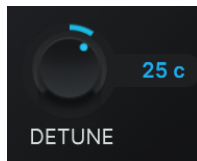
The shape of a singer's throat is a prime contributor to their vocal character.

Auto-Tune Slice's formant correction uses our unique throat modeling technology to modify the sound of a voice by passing it through a physical model of the human vocal tract.

The Throat control lets you specify the length of the modeled throat, which has the effect of shifting the formant frequencies up or down.

Note: Throat is only enabled when Formant correction is on.

Detune

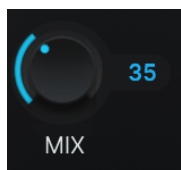


The Detune parameter allows you to change the pitch reference of Auto-Tune Slice from the default A = 440Hz.

This is useful when working with an instrument or track that uses a different reference frequency.

Values can be displayed in Cents or Hertz (you can specify this in the Settings Menu). The range of adjustment is -100 cents to +100 cents.

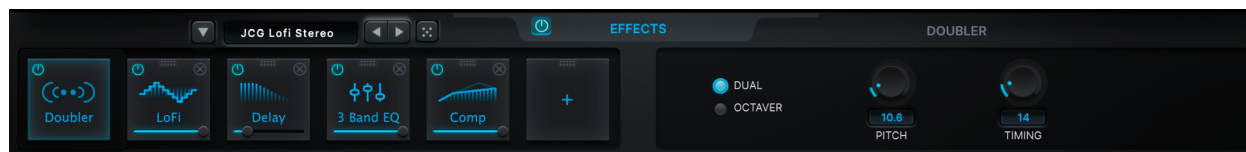
Mix



The Mix knob combines the original untuned sample with the pitch corrected output.

When Mix is set to 0, you'll only hear the output of the untuned sample. At 100, you'll only hear the Auto-Tuned output.

Effects



The Effects section is a comprehensive effects rack that adds further processing to slice playback. All 14 effects are described in detail below.

Each effect can be toggled on and off as needed, and has its own independent wet/dry slider. The Doubler is locked in the first slot of the effect chain, but the remaining effect slots can be swapped around or deleted.

Effects are applied sequentially from left to right. The wet/dry slider functions as a parallel override to produce some incredible sounds.

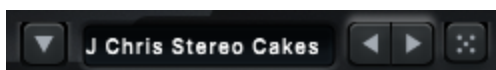
The Power Button in the top-left corner of each module toggles the effect on/off. Click and drag anywhere on the module to move it around.

To delete an effect, click on the **X** icon in the top-right corner of the module. To add a new effect, click the blue **+** on an empty slot.

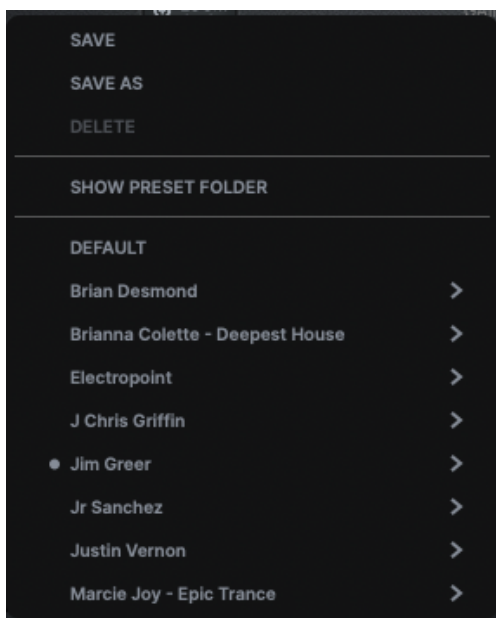
Click on a module to reveal the effect parameters on the right.



Preset Menu



The Effects section is also loaded with a variety of presets.



Use them as is, or as a starting place to inspire your creativity.

Browse through the artist preset folders (left) to try out different effect settings designed by J Chris Griffin, Marcie Joy, Justin Vernon, Brianna Colette, and more.

Click **Save** or **Save As** to create your own personal presets, and save them to the User folder.

Click **Show Preset Folder** to locate the folder on your hard drive where your user presets are stored.

This can be useful if you need to move your presets from one computer to another.

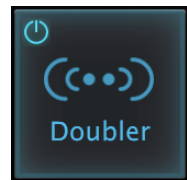


Click the **Like** button next to a preset to add it to your favorites folder.



The **Random** Preset button lets you quickly try out a variety of different effects. Click it to load a random preset from the Presets Menu.

Doubler

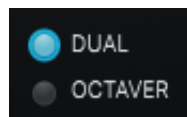


The Doubler effect is a great way to thicken up a vocal sample, with realistic timing and pitch variation between the original and doubled voices.

It includes options for both unison and octave doubling.

Note: For technical reasons, the Doubler effect is fixed in the first slot of the effects rack. It can be turned on and off, but cannot be moved to a different position or removed.

Dual/Octaver



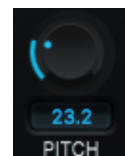
The Dual/Octaver switch lets you choose between a standard doubler effect and an octaver effect.

When set to *Octaver*, the doubled voice is either an octave above or an octave below the pitch of the original voice, depending on the setting of the Pitch control.

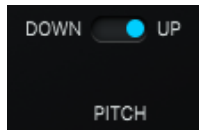
When set to *Dual*, the doubled voice is approximately the same pitch as the original voice (with some detuning applied by the Pitch control)

Pitch

The Pitch control has two different modes of operation, depending on the setting of the Dual/Octaver switch

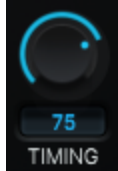


In Dual mode, the Pitch control is a knob that lets you set the amount of pitch variation between the unison doubled voices.



In Octaver mode, the Pitch control is a switch that lets you set the doubled voice to either one octave above (*up*) or one octave below (*down*) the original pitch.

Timing



The Timing control lets you set the amount of timing variation between the doubled voices.

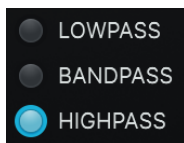
Filter



The Filter module is a great way to quickly roll off some highs or lows, or create a filter sweep effect by automating the cutoff frequency.

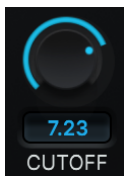
Lowpass, Highpass, and Bandpass filters are all included, with adjustable Q.

Lowpass/Bandpass/Highpass



This control lets you choose between three different types of filters: Lowpass, Bandpass, and Highpass

Cutoff



The Cutoff control determines the cutoff frequency of the highpass or lowpass filter, or center frequency of the bandpass filter.

Q



The Q control lets you adjust the steepness of the highpass or lowpass filter, or the bandwidth of the bandpass filter. Higher Q settings result in steeper or narrower filters.

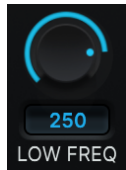
3 Band EQ



The 3 Band EQ module is the perfect tool for quickly and easily dialing in the EQ of your samples.

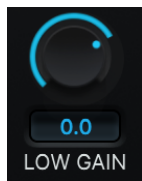
Gain and center frequency are fully configurable for all three filter bands.

Low Freq



The Low Freq control sets the center frequency of the lowest filter band, in hertz.

Low Gain



The Low Gain control sets the gain of the lowest filter band, in decibels.

Mid Freq



The Mid Freq control sets the center frequency of the middle filter band, in hertz or kilohertz.

Mid Gain



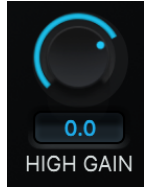
The Low Gain control sets the gain of the middle filter band, in decibels.

Hi Freq



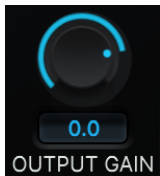
The Hi Freq control sets the center frequency of the highest filter band, in kilohertz.

Hi Gain



The Hi Gain control sets the gain of the highest filter band, in decibels.

Output Gain



The Output Gain control lets you adjust the overall output gain of the 3 Band EQ.

Comp



Need to even out the dynamics of a sample to sit better in your mix? Auto-Tune Slice has you covered with this built-in compressor module.

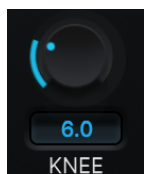
Threshold



The Threshold control sets the threshold of the Compressor in decibels.

The threshold of a compressor is the level that the audio must exceed before gain reduction is applied.

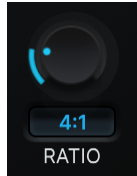
Knee



The Knee control lets you adjust how suddenly or gradually compression is applied when the signal exceeds the threshold.

Lower settings result in more abrupt (hard knee) compression, and higher settings result in more gradual (soft knee) compression.

Ratio



The Ratio control sets the compression ratio, which determines how much gain reduction is applied once the threshold is exceeded.

For example a 4:1 compression ratio means that for every 4 dB that the signal exceeds the threshold, 1 dB of gain reduction is applied.

Higher ratios will result in a more compressed sound, and a narrower dynamic range.

Attack



The Attack control lets you adjust the attack time of the compressor in milliseconds.

The attack time is the time it takes to reach full compression once the threshold has been reached.

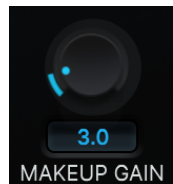
Release



The Release control lets you adjust the release time of the compressor in milliseconds.

The release time is the time it takes for the compressor to return to zero gain reduction once the signal level has fallen below the threshold.

Makeup Gain



The Makeup Gain sets the output level of the compressor.

After setting the other compressor controls, turn up the Makeup Gain to match the output level to the peak level of the original audio.

De-Esser



Auto-Tune Slice includes a built-in De-Esser module to help tame any excessive sibilance (sss and shh sounds) in your vocal samples.

It works by isolating the sibilance with a highpass filter, and then using it to trigger a compressor, which is applied to the full signal, so that gain reduction is applied whenever sibilance is present.

Threshold

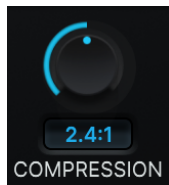


The Threshold control sets the threshold level of the compressor which is applied to the sibilant portion of the signal.

Set it in combination with the HP Freq control and listen during playback.

Choose a setting that causes most of the gain reduction to happen during audible sibilance and not during vowels or soft consonants.

Compression



The Compression control sets the ratio of the compressor, which determines how much gain reduction is applied when the sibilant signal exceeds the threshold.

Higher compression ratios generally result in more gain reduction.

Attack Time



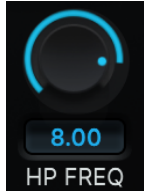
The Attack Time control determines how quickly gain reduction is applied when the sibilant signal exceeds the threshold.

Release Time



The Release Time control sets the time it takes the compressor to return to zero gain reduction after the sibilant part of the signal drops below the threshold.

HP Freq



The HP Freq control sets the cutoff frequency of the highpass filter that feeds into the compressor.

The highpass filter isolates the high frequency sibilant sounds to trigger gain reduction when sibilance is detected.

Set the HP Freq control in combination with the Threshold control and listen during playback. Choose a setting that causes most of the gain reduction to happen during audible sibilance and not during vowels or soft consonants.

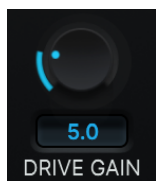
Note: The highpass filter within the De-Esser module is only used to isolate the sibilance for the purposes of triggering the compressor. It's doesn't get applied to the De-Esser's output, so you'll only hear its effect indirectly, when it triggers gain reduction during sibilance.

Tube Amp



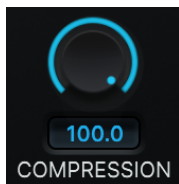
The Tube Amp module is perfect for adding that final touch of analog modeled warmth or screaming tube distortion to your samples.

Drive Gain



Use the Drive Gain knob to control the gain and intensity of the tube saturation effect.

Compression



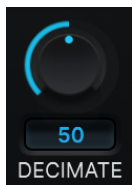
The Compression knob controls the amount of compression applied by the Tube Amp.

LoFi



The LoFi module gives you built-in access to classic lo-fi distortion effects, with real-time bit crushing and sample rate decimation.

Decimate



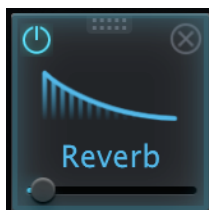
The Decimate knob creates a lofi distortion effect by applying real-time sample rate conversion.

Bitcrush



The Bit Crush knob creates distortion by applying a real-time bit rate conversion.

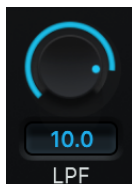
Reverb



Quickly and easily add reverb to your samples without the need for additional plug-ins, using the built-in Reverb module.

It comes complete with configurable high and lowpass filters, room size, and damping.

LPF



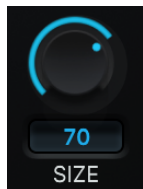
The LPF control lets you adjust the cutoff frequency of the low pass filter that's applied to the reverb. Turn it down to roll off high and mid frequencies.

HPF



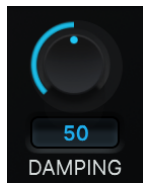
The HPF control lets you adjust the cutoff frequency of the high pass filter that's applied to the reverb. Turn it up to roll off low and mid frequencies

Size



The Size control determines the size of the room that's modeled by the Reverb effect. Higher settings result in more reverb with a longer decay time.

Damping

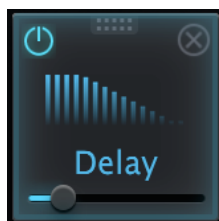


The Damping control determines how long it takes for the higher frequencies in the reverb to decay.

High Damping settings cause the high frequencies to decay faster, resulting in a warmer sound.

Low Damping settings allow the high frequencies to sustain longer, for a brighter tone.

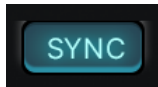
Delay



The built-in Delay module has everything you need to add delay effects to your samples, including a stereo ping-pong effect.

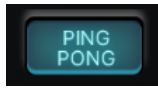
You can even sync it to the tempo of your DAW.

Sync



The Delay Sync button lets you synchronize the delay time to the tempo of your DAW.

Ping Pong



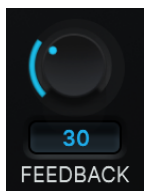
The Ping Pong button creates a stereo delay effect by alternately panning the delayed signal to the left and right channels.

Time



The Time control allows you to set the delay time, either in divisions of the beat (when Sync is *on*) or in milliseconds/seconds (when Sync is *off*).

Feedback



The Feedback control determines how much of the Delay's output is fed back into its input.

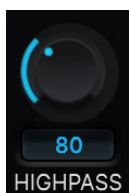
Higher Feedback settings result in a longer lasting delay effect, with a slower decay.

Lowpass



The Lowpass control lets you adjust the cutoff frequency of the low pass filter that's applied to the delay. Turn it down to roll off high and mid frequencies.

Highpass



The Highpass control lets you adjust the cutoff frequency of the high pass filter that's applied to the reverb. Turn it up to roll off low and mid frequencies.

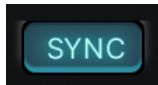
Chorus



Add some lushness and warmth to your samples with the built-in chorus effect.

Depth, rate, feedback, and phase are all fully configurable, and you can even sync the modulation rate to the tempo of your DAW.

Sync



The Chorus Sync button lets you synchronize the modulation rate of the chorus to the tempo of your DAW.

Rate



The Chorus Rate control determines the speed or frequency of modulation for the chorus effect, either in hertz or in divisions of the beat.

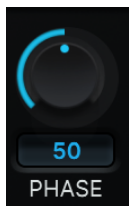
When Sync is *on* the Rate is specified in divisions of the beat (e.g. 1/8 or 1/4). When it's *off*, the Rate is specified in hertz (cycles per second).

Depth



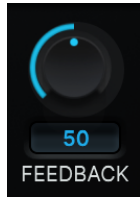
The Chorus Depth control lets you adjust the depth or intensity of chorus modulation

Phase



The Chorus Phase control sets the amount of phase offset between the original and doubled voices in the chorus effect.

Feedback



The Chorus Feedback control determines how much of the Chorus effect's output is fed back into its input.

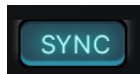
Vibrato



The Vibrato module lets you seamlessly add natural sounding vibrato to your vocal samples, with fully configurable rate and depth controls.

Plus, you can add stereo width with the Offset control, and even sync the rate of the vibrato to your DAW's tempo.

Sync



The Vibrato Sync button lets you synchronize the rate of the vibrato to the tempo of your DAW.

Rate



The Vibrato Rate control determines the speed or frequency of the vibrato, either in hertz or in divisions of the beat.

When the Vibrato Sync button is *on* the Rate is specified in divisions of the beat (e.g. 1/8 or 1/4). When it's *off*, the Rate is specified in hertz (cycles per second).

Depth



The Depth control determines the width of the vibrato, or the amount of pitch bend that's applied to the audio.

Offset



The Vibrato Offset control lets you create stereo width by offsetting the phase of the vibrato between the left and right channels.

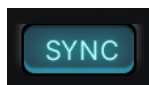
Flanger



Add some depth and character to your samples with the built-in Flanger module, complete with a stereo-widening L/R Offset effect.

You can also sync the modulation rate to your DAW's tempo.

Sync



The Flanger Sync button lets you synchronize the rate of the Flanger modulation to the tempo of your DAW.

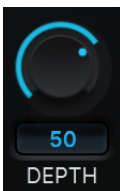
Rate



The Flanger Rate control determines the speed or frequency of modulation for the Flanger effect, either in hertz or in divisions of the beat.

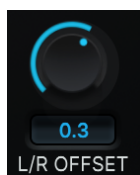
When Sync is *on* the Rate is specified in divisions of the beat (e.g. 1/8 or 1/4). When it's *off*, the Rate is specified in hertz (cycles per second).

Depth



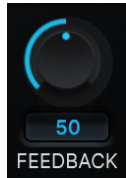
The Flanger Depth control lets you adjust the depth or intensity of the Flanger modulation.

L/R Offset



The Flanger L/R Offset control lets you create stereo width by offsetting the phase of the modulator signal between the left and right channels.

Feedback



The Flanger Feedback control determines how much of the Flanger effect's output is fed back into its input.

Phaser



The built-in Phaser effect is a great final touch to add some motion and depth to your samples.

You can add some stereo width with the L/R Offset control and also sync the modulation rate to your DAW's tempo.

Sync



The Phaser Sync button lets you synchronize the rate of the Phaser modulation to the tempo of your DAW.

Rate



The Phaser Rate control determines the speed or frequency of modulation for the Phaser effect, either in hertz or in divisions of the beat.

When Sync is *on* the Rate is specified in divisions of the beat (e.g. 1/8 or 1/4). When it's *off*, the Rate is specified in hertz (cycles per second).

Depth



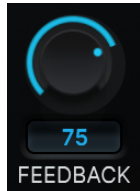
The Phaser Depth control lets you adjust the depth or intensity of the Phaser modulation.

L/R Offset



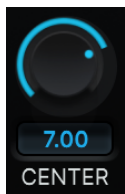
The Phaser L/R Offset control lets you create stereo width by offsetting the phase of the modulator signal between the left and right channels.

Feedback



The Phaser Feedback control determines how much of the Phaser effect's output is fed back into its input.

Center



The Phaser Center control sets the center frequency of the Phaser modulation.

Ring Mod



The built-in Ring Mod module gives you access to classic ring modulation and amplitude modulation effects, perfect for special effects and character design.

Rectify



The Rectify button lets you switch between classic ring modulation and amplitude modulation effects.

When Rectify is *off* the modulator signal is bipolar, resulting in ring modulation.

In ring modulation, the frequency of the original input signal is absent from the output, and is entirely replaced by sideband frequencies.

When Rectify is *on* the modulator signal is unipolar, resulting in amplitude modulation.

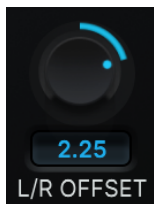
In amplitude modulation, the frequency of the original input signal is present in the output, along with the sideband frequencies.

Frequency



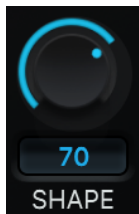
Use the Frequency knob to adjust the frequency of the modulator.

L/R Offset



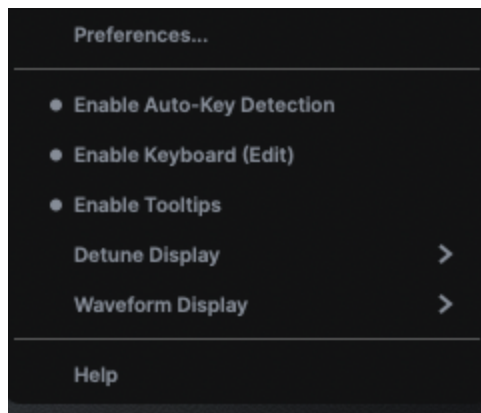
The Ring Mod L/R Offset control lets you create stereo width by offsetting the phase of the modulator signal between the left and right channels.

Shape



The Shape control morphs the shape of the modulator from a sine wave to a triangle wave.

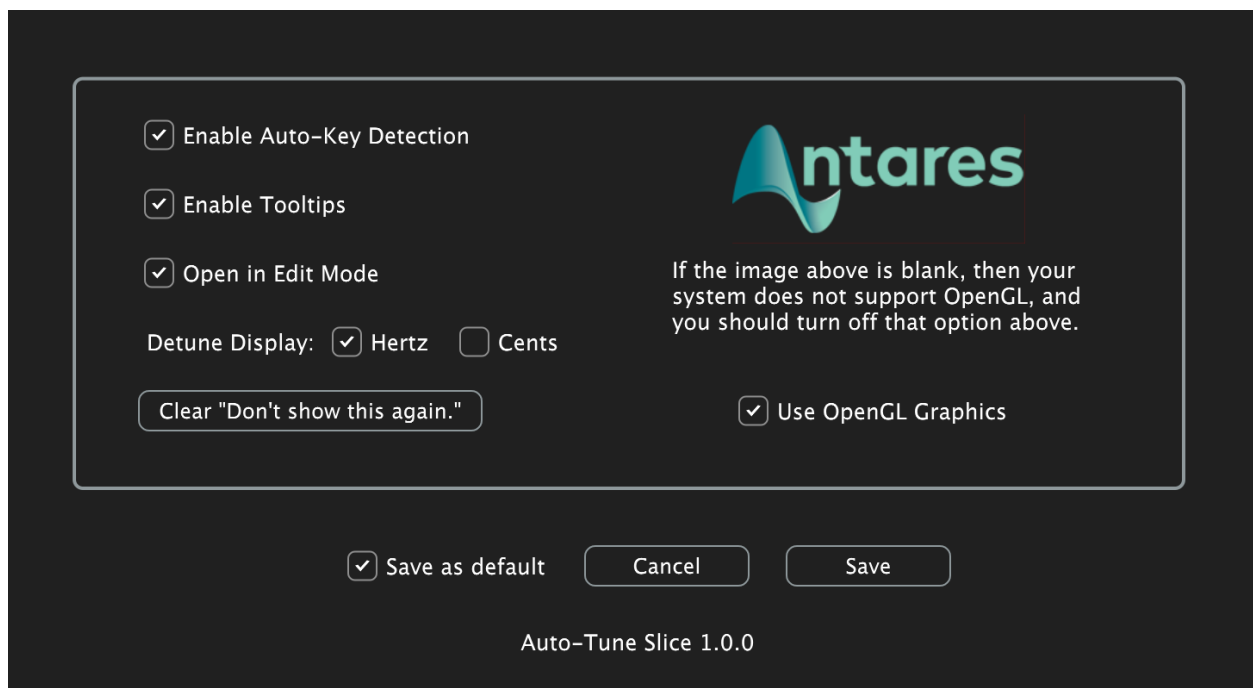
Settings and Preferences



The **Settings Menu** (left) gives you quick access to the most commonly used settings.

The **Preferences Window** (below) includes a few other settings, and allows you to save them as default.

Changes made in the Settings Menu will be reflected in the Preferences Window and vice versa.



Enable Auto-Key Detection

Auto-Key is a plug-in and mobile app (included in your Auto-Tune Unlimited subscription) that automatically detects the key of your music, and then sends it to Auto-Tune Slice.

When Enable Auto-Key is on, Auto-Tune Slice will listen for any incoming messages from Auto-Key.

The only time you should really need to turn this off will be if you are using Auto-Key, but you want this specific instance of Auto-Tune Slice to ignore any messages coming from it.

Enable Keyboard Edit

When this setting is on, the keyboard will be displayed while in Edit mode.

Detune Display

The Detune setting allows you to change the pitch reference of Auto-Tune from the default A = 440 Hz.

This can be useful when working with an instrument or track that's tuned to a different reference frequency.

The Detune Display setting lets you choose whether to specify Detune in hertz or cents. The range of adjustment is -100 to +100 cents, or about 415 to 466 Hz.

Enable Tooltips

When this setting is on you can hover your mouse over any of the controls in Auto-Tune Slice for a brief explanation of what the control does.

Waveform Display

Toggles between stereo and mono waveform view in Edit Mode.

Open in Edit Mode

Opens new instances of Auto-Tune Slice in Edit Mode by default.

Use OpenGL Graphics

Auto-Tune Slice uses OpenGL for improved graphics on computers with compatible graphics card hardware.

If the Antares logo does not appear in the Preferences window, that indicates that your system does not support OpenGL, and you should uncheck the box.

Save as Default

When the Save as Default box is checked, any changes to Preferences VG that you save will become the default settings for future instances of Auto-Tune Slice.

If you want to make a temporary change to the preferences just for this instance, without overwriting your default preferences, uncheck this box before clicking **Save**.