

# NECTAR<sub>2</sub>



NECTAR Soul and RAB · Motown Power Tizotope #178-02

HELP GUIDE

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# Introduction

Nectar was created out of a desire to provide engineers, musicians, and voice-over artists with a vocal mixing tool that could provide a great sound with just a few clicks of the mouse.



### **Key Features**

- Over 200 Vocal Presets in 12 Genres giving you instant access to a wealth of vocal sounds
- 10 DSP modules relevant to vocal production including Equalizer, Compressor, De-Esser, Gate, Limiter, Saturation, Pitch Correction, Reverb, Delay, FX, and Harmony
- Freely adjustable signal path allowing you to rearrange the flow of all DSP modules
- Simple preset system for saving your own adjustments and creating new sounds
- Innovative Metering which provides powerful feedback that can assist you when making adjustments

# What's New in Nectar 2?

- Harmony module that allows you to easily add harmonized accompaniments to your vocal tracks or add your own custom backing vocals with your MIDI controller
- Reverb module accurately modeled after the renowned EMT 140 stereo plate reverb unit
- FX module containing 7 new DSP effects including: Distortion, Decimate (Downsampler), Phaser, Flanger, Chorus, Echo, and Shred
- Component plug-ins Pitch Editor and Breath Control\*
- Refreshed manual pitch editing including: refined note detection, Vibrato control, and ReWire Support\*
- Streamlined Overview Panel with the most relevant settings for the modules of Nectar
- Added five additional filter types to the EQ module including Bass and Treble Baxandall filters and Vintage Pultec-style shelf filters
- Key Detection to assist you in setting the key of your song for both real-time pitch correction and auto-harmonization
- Enhanced metering including gain reduction traces and threshold control meters in dynamics modules
- Added integrated Meter Tap functionality for seamless routing to Insight and Ozone 5's Meter Bridge
- Added Floor control to the Gate Module

<sup>\*</sup>Only included in the Nectar 2 Vocal Production Suite

# **Authorization**

Each purchased copy of Nectar contains a unique serial. After downloading Nectar directly from iZotope or another re-seller the serial number will be emailed along with the link to download the product. The serial number should resemble: SN-NECTAR2-XXXX-XXXX-XXXXX

### Launching the Authorization Wizard

The first time you open Nectar 2, the Authorization Wizard will appear. You can choose to either authorize Nectar or use it in Trial mode for evaluation purposes. Please use your supplied Nectar serial number to fully authorize your product.

### Trial vs. Demo Mode

For the first 10 days after the first instantiation, Nectar 2 will run in Trial mode, which offers full functionality. After 10 days, Nectar will revert to Demo mode. In Demo mode, Nectar will periodically mute audio output.

### **Authorizing Your Copy of Nectar Online**

After opening Nectar and launching the Authorization Wizard, the following steps will complete the authorization process online:

- 1. First, click on 'Authorize'.
- 2. Next, enter the serial number emailed to you. It should look like this:

#### SN-NECTAR-XXXX-XXXX-XXXX

3. You must also enter your name and a valid e-mail address.

Make note of the e-mail address you use to authorize your license. Your license and iZotope account will be linked directly to this e-mail address.

Note: Clicking the 'Advanced' button reveals a set of options that allow you to store your Nectar authorization on a portable hard drive or flash drive. Click here for more information on these options.

- 4. When you have confirmed that your serial number and e-mail information is accurate, click once more on 'Authorize'.
- 5. Lastly, click on 'Submit' in order to send your authorization message to the iZotope servers. If the authorization is accepted, click on the 'Finish' button to complete the authorization.

### **Authorizing Your Copy of Nectar Offline**

Some customers choose to keep their audio workstations offline, and a simple offline authorization option has been included. After opening Nectar and launching the Authorization Wizard, the following steps will complete the authorization process offline:

- 1. When first prompted to authorize Nectar, click on 'Authorize'
- 2. Next, click on the option for 'Offline Authorization' at the bottom of the authorization window, select "Authorize with iZotope challenge/response" and click next.
- 3. You will be given a unique Challenge Code that is specific to your computer only. Write down or make a copy of the exact Challenge Code. It will look like this:

#### 

- 4. Next, using a system with internet access, login to your customer account at the iZotope website: <a href="http://www.izotope.com/store/account.asp">http://www.izotope.com/store/account.asp</a>
- 5. Click the 'Activate Software with a Serial Number' button, enter your full serial number and click 'Submit'.
- 6. Select the 'Challenge/Response' option and click on 'Submit'.

- 7. Read the License Agreement and click "Agree" if you find it agreeable.
- 8. Now enter your full Challenge Code copied in step 3.
- 9. After submitting your Challenge Code, you will receive a unique Response Code. The response code will look like this: IZ-NECTAR2-XXXX-XXXX

Write this response code or save a text file with the response code onto a flash drive.

- 10. Type or paste the Response Code into the text field of Step 3 in the Offline Authorization window.
- 11. Click 'Next' to authorize Nectar.
- 12. You should now receive a message that your authorization has been successful and may click Finish to begin using Nectar.

### iLok Support

Nectar does support iLok. Our plug-ins will be able to detect iLok keys and assets if you already use iLok and PACE software on your system. If you don't already have PACE or iLok, we will not install any PACE or iLok software to your system, and iLok authorizations will be unavailable.

### **Authorizing Nectar with iLok**

- 1. When first prompted to authorize Nectar 2, click on 'Authorize'
- 2. Next, enter the serial number emailed to you. It should look like like this:

SN-NECTAR2-XXXX-XXXX-XXXX

3. You must also enter your name and a valid e-mail address.

Make note of the e-mail address you use to authorize your license. Your license and iZotope account will be linked directly to this e-mail address.

4. Select 'Use iLok Authorization' and enter your iLok ID.

- 5. When you have confirmed that all your information is accurate, click once more on 'Authorize'.
- 6. Lastly, click on 'Submit' in order to send your authorization message to the iZotope servers
- 7. You will now be instructed to log in to your iLok account and transfer your Nectar license to your iLok.
- 8. When you have completed this step and have your iLok connected to the computer on which you want to use Nectar, click 'Next'.
- 9. You should now receive a message that your authorization has been successful and may click Finish to begin using Nectar.

### **Nectar 2 Vocal Production Suite**

If you purchased Nectar 2 Vocal Production Suite, you will also receive the Nectar 2 Pitch Editor and Nectar 2 Breath Control plug-ins. By authorizing your main Nectar 2 plug-in your Pitch Editor and Breath Control plug-ins will also be authorized.

### Web Help

Should you encounter any problems during authorization please consult our online portal with additional information:

https://www.izotope.com/support/portal/authorization.asp

### **Contact Support**

Should you not be able to resolve your authorization issue please contact the customer at <a href="mailto:support@izotope.com">support@izotope.com</a>.

iZotope's highly trained support team is committed to responding to all requests within one (1) business day and frequently respond faster. Please try to explain your problem with as much detail and clarity as possible.

# Quickstart

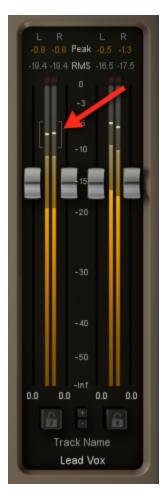
Nectar's Presets are designed to give you a quick starting point for your own projects.

Every vocalist is different so no one preset will always work well for your audio. However we have attempted to provide a wide range of Presets that will help you find a good starting point for your own material.

**Step 1: Select your Genre and Preset** 



The Preset Manager tells Nectar what style of vocals you're trying to produce and automatically sets the appropriate values for all the controls to achieve that sound. Click the Preset Display at the bottom of the Nectar interface to open the Preset Manager. We've organized presets into genre categories that will let you search easily for presets for every purpose. Because every vocal track is different, we've aimed to give you a lot of starting points so that you can choose the best one for your project.



# **Step 2: Setting Your Input Level**

Setting your input level is important when selecting a preset as it will sound drastically different if your input level is too loud or quiet. In order to ensure that you have a good neutral levels as a starting point, we recommend setting Nectar's input level so that the input meter is peaking within the recommended range bracket.

Learn more about the Input and Output Gain of Nectar here.

**Step 3: Adjust Presets to Taste** 



When you've found a Preset that has what your track needs, further adjust the controls to your liking to define your own unique sound. The Overview Panel view gives you instant access to the most relevant controls of Nectar's modules. Quickly adjust the settings of a given module to tailor the sound or quickly enable or disable modules.

# Step 4: Dig Deeper



Once you've found an appropriate Preset and adjusted some module settings to your taste from the Overview Panel, have a look at the individual modules in the Advanced View. In each module's Advanced view you have access to deeper settings for a more customized sound as well as metering which can assist you when making adjustments.

### Global Menu



### Overview/Advanced View

Clicking the Overview/Advanced button toggles between Nectar 2's Overview Panel and Advanced View which allows you to dig deeper into each module.

### **Tracking/Mixing Mode**

Tracking Mode forces Nectar 2 to process with low latency, which assists in using Nectar 2 while tracking (recording) vocals. Tracking Mode performs less transparent dynamics processing and is lower quality. Mixing Mode performs high quality processing, but incurs more latency.

**Note**: Modules affected by Tracking Mode are Gate, De-Esser, Compressors, Limiter, Pitch Correction, and Harmony.

### **Options**

Clicking the Options button loads the Options Menu from which you can authorize your copy of Nectar, access additional resources for working with Nectar, adjust visual settings, and more. Learn more about Nectar's Options here.

# **History**

Clicking the History button opens the History menu which allows you to recall and compare settings and adjustments. Learn more about the History menu <a href="https://doi.org/10.2016/j.com/here">here</a>.

### Reset

Clicking the Reset button clears the current working settings and loads the currently selected module's or Overview panel to it's default state. A single-click often resets the most commonly adjusted settings, while a double-click will restore all settings to their factory default.

# Help

You may click the Help button at any time to launch this Help Documentation.

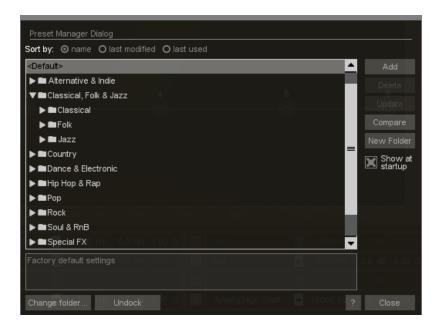
### **Bypass Button**



Clicking the Bypass button in the lower right of the interface will bypass Nectar's processing in your DAW allowing you to compare your vocal track with and without Nectar.

# **Preset Manager**

Nectar's Genres and Presets are designed to allow you to take full advantage of the underlying signal processing in the most concise and creative way possible. Click on the Preset Manager at the bottom of Nectar's interface in order to select your desired Genre and Preset from the preset menu that appears.



When a Genre and Preset is chosen, Nectar will automatically load settings in Nectar's modules to allow you to recreate that style on your vocal track.

**Note**: You can also use the arrow keys on your keyboard to scroll Up and Down between Presets and Genres. This can be especially helpful to audition the direction different presets will take your vocals.

Learn more about Nectar's Preset System <u>here</u>.

# **Overview Panel**

Nectar 2's Overview Panel gives you instant access to the most relevant settings of many of Nectar's modules. Use the Overview Panel for a quick glance at a preset's settings or for quick tweaking of modules to adjust them to suit your vocals.



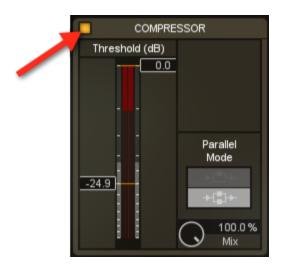
# **Choosing a Preset**

Start by selecting a Genre and Preset by clicking the large display at the bottom of Nectar's interface. From here, you can adjust your settings to taste.



### **Module Controls**

Nectar's Overview Panel View presents you with the most relevant controls for each of Nectar's modules. You can engage or bypass processing in the different modules by using the power buttons in the upper left corner of each block in the Overview Panel.



## **Equalizer**

Within the EQ section of the Overview Panel you have the ability to interact with all enabled nodes from the EQ module. Adjust any of Nectar's EQ nodes in order to shape your vocals to fit your mix. Click and drag to alter the frequency and gain of any node and use the node brackets or the mouse-wheel to adjust the Q of that particular node. The Equalizer section also features a spectrum analyzer. Learn more about interacting with these EQ nodes in the EQ Module section here.

### Compressor

The Overview Panel allows you to instantly adjust the most commonly adjusted settings within the Compressor module. Learn more about the settings described below in the Compressor Module section here.

#### **Threshold Controls**

Controls for both the compressor's thresholds are displayed alongside an input and gain reduction meter. The threshold control sets the level at which the compressor will begin to affect the incoming signal.

#### Parallel Mode

These modes determine whether Nectar uses just one compressor and the dry signal routed in parallel or two independent compressors routed in parallel.

#### Mix Control

The mix control determines how much signal is sent to the first compressor versus the second compressor or the dry signal (depending on the Parallel Mode you have selected). In the first Parallel mode (one compressor in parallel with the dry, uncompressed signal), a setting of 100% blends no dry signal with the compressed signal and a setting of 0% completely bypasses the compressor. In the second parallel mode (two compressors) a setting of 100% routes all of the signal to the first compressor and a setting of 0% routes all of the signal to the second compressor.

### Gate

You can raise the Threshold of Nectar's Gate in order to reduce the gain of any low level signals in your audio like room tone. It takes program material below the threshold and reduces it by a factor determined by the ratio. Learn more about the settings described below in the Gate Module section here.

#### Threshold Slider (dB)

The Threshold slider sets the level where the Gate processing takes place. As the threshold is increased, more of the signal will be reduced.

### **De-Esser**

Nectar's De-Esser is a powerful tool for controlling sibilance on vocal takes. By applying the same amount of Ess reduction regardless of the incoming audio level, Nectar's De-Esser allows you to transparently reduce sibilance, no matter how dynamic your vocal take is. Learn more about the settings described below in the De-Esser Module section here.

#### Ess Slider

The Ess slider controls the amount of gain reduction that is applied to the incoming vocal take by setting a threshold at which detected sibilance is attenuated. This gain reduction is applied quickly and transparently to the entire incoming vocal take instead of simply reducing the gain of a particular set of frequencies, allowing for much more natural sibilant reduction.

### **Saturation**

Nectar's Saturation module can add rich harmonics to your vocals, recreating the sounds of tube circuits and tape recordings. Breathe new life into a vocal recording giving it instant sparkle or a subtle gritty edge. Learn more about the settings described below in the Saturation Module section <a href="here">here</a>.

#### **Amount Slider**

The amount slider controls the amount of drive in the saturation or how pronounced the added harmonics will be.

#### Mix Slider

The Mix slider allows you to blend dry (unsaturated) signal with wet (saturated) signal to get the perfect amount of warmth while retaining the qualities of the original recording. A setting of 100% will be purely saturated without any blended dry signal while a setting of 0% will add no saturated signal at all.

### **Harmony**

Nectar 2's Harmony module allows you to quickly add harmonized vocal accompaniments to your vocal tracks without multiple performers or tracking passes. In addition, the Harmony module functions as a Doubler allowing you to add up to four voices to recordings. Learn more about the settings described below and the Harmony module here.

#### **Gain Slider**

The Gain slider determines the levels of the added voices produced by the Harmony module in relation to the original lead voice.

#### Pan Slider

The Pan slider affects the stereo width of the added voices produced by the Harmony module. Lower settings make the location of added voices more narrow while higher settings spread the stereo location of the added voices.

### **Pitch**

Nectar's Overview Panel features a meter that reflects the amount of pitch correction processing taking place in real time. This meter is enabled only when you're using the real-time Pitch Correction module. Learn more about the Pitch Correction module here.

### Reverb

Nectar's Plate Reverb module allows you to instantly add a warm depth to your vocal tracks reminiscent of timeless recordings. Learn more about the settings described below in the Reverb Module section here.

#### Decay

The Decay control corresponds to the physical damper present in the EMT 140. While not an explicit control of reverb time as often seen in digital reverbs the control will affect the overall decay of the reverb.

#### Wet

The Wet control affects how much wet (reverberated) signal will be blended with the dry (not reverberated) signal. A setting of 0% will add no reverb while a setting of 100% will add reverb to all of the incoming audio.

### **Delay**

Nectar's Delay module can help to create transparent or colorful delayed copies of your original vocal track. Learn more about the settings described below in the Delay Module section here.

#### **Time**

Determines the amount of time that will pass before each successive repeat of your incoming dry vocal.

#### Wet

The Wet control affects how much wet (delayed) signal will be blended with the dry (not delayed) signal. A setting of 0% will add no delay while a setting of 100% will add delay to all of the incoming audio.

### FX

Nectar's FX module allows you to create both otherworldly and subtle vocal sounds with distortion, modulation, and time-based effects. Learn more about the settings described below in the FX module section here.

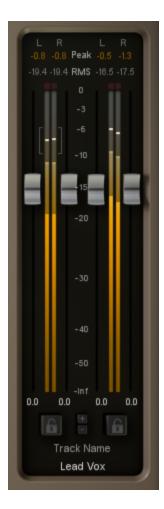
### Dry

The Dry control affects how much dry (unaffected) signal will be blended with the wet (affected) signal.

### Wet

The Wet control affects how much wet (affected) signal will be blended with the dry (not affected) signal.

# **Input and Output Gain**



The panel on the right side of the interface is the main input/output section for Nectar. This is used for setting and monitoring gain levels going in and out of the Nectar plug-in.

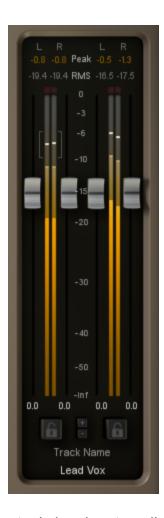
# **Setting Input and Output Gain**

You can adjust the input or output gain by sliding the silver faders with your mouse, either by clicking and dragging or using the wheel of a wheel mouse.

# **Double-click to Reset Faders**

Double-clicking on either input fader will reset the Input faders to 0 dB. Double-clicking on either output fader will reset the Output faders to 0 dB.

# **Input and Output Meters**



Nectar's level meters display the input and output level for the left and right channels as your audio enters and exits Nectar. You can set options for the Input/Output meters by opening the 'I/O' tab of the Options menu.

#### Peak

The Peak meter is a fast meter that measures the instantaneous maximum sample value of your signal. If you are tracking the peaks for possible clipping, the Peak meter is an appropriate choice.

#### **RMS**

RMS (Root Mean Square) is a software-based implementation of an analog style level meter. The RMS meter displays the average level calculated over a short window of time. The result is a meter that is appropriate if you are interested in tracking the overall loudness.

#### RMS + Peak

This is a combined RMS and Peak meter. This meter displays a lower bar representing the average level (RMS) and a higher bar representing peak level. There is also a moving line above the bar representing the most recent peak level or peak hold.

#### **Peak Hold**

By default, the meters will temporarily hold the peak values of your incoming audio.

#### Clipping

Above the meter is a red LED that serves as a clipping indicator. If the level exceeds 0 dB at any point, this LED will light up and remain lit until you double-click anywhere on the LED itself.

# **Equalizer Module**

Nectar's versatile EQ allows you to add warmth and character with analog matched filters. Nectar 2 adds a range of new filter shapes, including Baxandall Treble and Bass, which allow you make more complex boosts and cuts with less EQ nodes.



# Frequency and Gain

The grey circles mark each of the eight EQ nodes. You can adjust an EQ band by clicking on a node and dragging the crosshairs to change the frequency and gain of the band. You can also use the arrow keys to adjust a selected band, or the Shift key in combination with the arrow keys to adjust in larger increments.

### Q/Bandwidth

If you move the mouse over the "handles" on the side of the band, you can adjust the Q or bandwidth of the EQ by dragging with the mouse and widening the band. If you have a wheel mouse, you can use the mouse wheel to widen/narrow a selected band.

### **Selecting Filter Shapes**

Nectar provides the ability to set the type or shape of any of the eight EQ nodes. A number of new filters are available:

#### Flat Lowpass/Highpass

These are Butterworth filters; optimized for maximum flatness without ripple or resonance in the passband or stopband.

### **Brickwall Lowpass/Highpass**

These are elliptic filters; optimized for steepness with minimal ripple in the passband and stopband.

### Vintage Low Shelf/High Shelf

These high and low shelf filters exhibit a complimentary frequency dip modeled after the renowned Pultec analog equalizer creating a complex slope with one node.

### Resonant Low Shelf/High Shelf

These high and low shelf filters exhibit a complimentary resonance at both ends of the filter slope creating a complex shape with one node.

#### Vintage Bell

This is an asymmetrical bell filter that is more narrow when cutting frequencies than when boosting frequencies.

#### **Baxandall Bass/Treble**

These filters are based on a vintage equalizer designed by Peter Baxandall that originally had just two knobs: "treble" and "bass". The Baxandall EQ curves are known for their gentle slopes which are sonically pleasing. Unlike the original Baxandall EQ design which had no frequency control, Nectar's Baxandall Filters allow you to freely adjust frequency.

### **EQ** Table



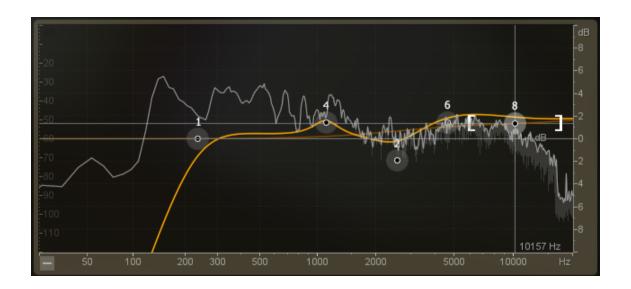
To change the filter shape, select a node and click on the drop down menu in the bottom right or simply right-click the node. To work in the expanded info view, click on the "+" button.

From this table, you can specify a different filter shape for each node. If you had selected a node in the main screen before opening the expanded screen, that node is shown as selected in the table (i.e. Node 5 has brackets around it, indicating that this was the EQ node that is currently selected.

Note that you can also use the dialog boxes to enter values for the EQ bands directly. You can also disable bands with this table by clicking on the square number box to the left of a band in the table.

### **Visuals**

As you adjust a band you will see two EQ curves. The bright orange curve is the composite of all EQ bands while the darker orange curve shows the EQ curve of the selected band.



### **Spectrum Overlay**

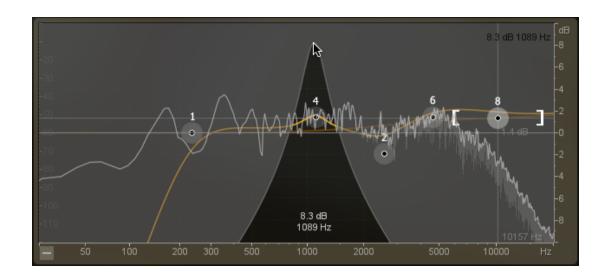
A spectrum by default is overlaid on the EQ module for visual feedback of the incoming audio. You can set options such as average or real time spectrum, show peak spectrum, etc. These are available in the Spectrum Options screen.

On the right you'll see the gain scale for the EQ. This will change as you zoom the EQ in or out. On the left you'll see the scale for the spectrum. On the bottom you'll see the frequency scale which applies to both the EQ and the spectrum.

**Note**: The scales for the EQ and spectrum are different, by design. If they were made to match, you wouldn't see enough of the spectrum for it to be useful.

### The Alt-Solo Feature

If you hold down the Alt key and click on the spectrum, you have an "audio magnifying glass" that lets you hear only the frequencies that are under the mouse cursor, without affecting your actual EQ settings. This is useful for pinpointing the location of a frequency in the mix without changing your actual EQ bands. You can set the default bandwidth of this filter in the Options screen under "Alt-Solo Filter Q" or simply use your mouse's scroll wheel. Once you've pinpointed a particular frequency using the Alt-Solo feature, double-click that area to activate a new node in that exact location.



# Additional Tips using Nectar's Paragraphic EQ

1. The Paragraphic EQ's scales are freely zoomable and scrollable, allowing you to focus on a specific frequency and dynamic range. While hovering over the dB meter on the right of the spectrum, you may use your mouse wheel to zoom in on a more focused dynamic range, then click and drag to scroll the dB scales. Additionally, while hovering over the frequency scales at the bottom of the spectrum, you may use your mouse wheel to zoom in on a particular frequency then click and drag to scroll the scales.

- 2. If you hold down the Shift key and drag an EQ node, the EQ band will be "locked" in the direction that you're dragging. So if you just want to change the gain without affecting the frequency (or vice-versa) just hold the Shift Key while you drag.
- 3. If you hold down the Ctrl key (Windows) or the Command key (Mac), you can click and select multiple bands. Once selected, you can adjust them as a group by clicking and dragging on any band you selected in the group.
- 4. If you'd rather enter specific values for each node instead of using the visual EQ bands, clicking on the "+" button gives you a table view of the EQ band settings. You can enter values for the EQ bands directly in this table. You can also disable bands with this table by clicking on the square box to the left of a band.
- 5. If you've chosen to display an averaging spectrum or a peak hold spectrum (using the Spectrum Options screen) you can reset the peak hold or the averaging by clicking anywhere on the spectrum.
- 6. Right-click on the spectrum to quickly access the EQ Options or the Spectrum Options screen.

# **Compressors Module**

The Compressors module allows you to shape the dynamics of your vocal tracks by reducing the dynamic range of a recording, making it more consistent in volume, and increasing its average level. When the audio input level is greater than its threshold setting, gain will be reduced by an amount controlled by the ratio parameter.



### **Using Parallel Compression**

Nectar splits the audio input to the compressors module into two paths. Depending on the Parallel mode selected these paths are either the first compressor and a dry (uncompressed) signal or the first compressor and a second compressor. This allows you to affect the two paths of your audio differently so that you can achieve the sound of aggressive compression while preserving some dynamics. To turn the second compressor on, simply click the dual-compressor logo button. When enabled, the second compressor will appear and the audio will now be routed into both compressors simultaneously. You can blend

between the dry and compressed sound using the Mix control described below. When only using one compressor, one signal will be sent dry through the compressor module. In this case the mix control affects the amount of dry (uncompressed) and wet (compressed) signal.

# **Controls**



#### Threshold (dB)

The Threshold control sets the level at which the dynamics processing takes place. Lower threshold settings will perform more compression.

#### **Ratio**

The Ratio determines how much gain reduction happens when the input audio exceeds the threshold. Higher ratios will result in more extreme compression.

#### Attack (ms)

The attack time is the amount of time in milliseconds it will take to apply the specified ratio and compression algorithm when the incoming signal has passed the defined threshold value. Shorter attack times will result in much quicker

compression and faster reaction to incoming peaks in your audio, while longer attack times can result in much more subtle processing.

Release (ms)

The release time is the amount of time in milliseconds that it takes for the compressor to stop processing once the signal has fallen back below the threshold. Shorter release times can give an unnatural pumping sound on certain audio material, while longer release times have a more gradual feel.

RMS detection

When RMS Detection is enabled, instead of using the peak level of the incoming signal, the compressor detects the average signal level. By default, this is Off and the compressor will be triggered by incoming signal peaks. In general, peak detection is useful when you're trying to even out sudden peaks in your vocals. RMS detection is useful when you're trying to increase the overall volume level without changing the dynamic character of the sound.

**Compressor Modes** 

Nectar's compressors contain multiple algorithms tailored specifically for vocal processing that give you access to a range of compressor types with various characteristics of different hardware compressors.

**Digital** 

This compression mode is built upon modern, surgical compression techniques and is designed to provide very clear, precise, and linear compression to give a great sounding but minimally colored sound.

**Available Parameter ranges** 

Ratio: 1:1 - 50:1

Attack: 0.10 – 300ms

Release: 1 - 1200ms

#### Vintage

This mode emulates the program-dependant compression and non-linear release characteristics of classic analog compressors.

#### **Available Parameter ranges**

Ratio: 1:1 - 50:1

Attack: 0.10 - 300ms

Release: 1 - 1200ms

#### **Optical**

In this mode, the compressor will emulate the smooth compression of hardware optical compressors. With non-linear attack and release characteristics and subtle harmonic coloration, Optical mode can provide transparent but pleasingly colored compression.

**Note**: Turn RMS detection ON to further emulate the sound of hardware optical compressors which were based on this design.

#### **Available Parameter ranges**

Ratio: 4:1 fixed

Attack: 1 - 100ms

Release: 40 - 200ms

#### Solid-State

Based on early VCA transistor based hardware compressors, the Solid-State mode can give a clear but aggressive compression sound distinguished by the very fast attack and nonlinear release times characteristic of the original hardware units. With its own unique harmonic coloration, Solid-State can be a great mode for accentuating vocal transients.

**Note**: Leave RMS detection OFF to allow the Solid-State mode to react in a much quicker 'peak' detection mode to make the pleasing vocal sound of this algorithm more present.

#### **Available Parameter ranges**

Ratio: 4:1 - 12:1

Attack: 0.20 – 80ms

Release: 50 - 1200ms

#### Mix

This control will allow you to blend how much of each signal's audio is output from the module. In single compressor mode, the mix control can be used to blend between the first compressor and the dry (uncompressed) audio passing through the module. In dual-compressor mode, the mix control can be used to blend between the first and second compressor.

#### **Compressor 2 Post Filter**



The second compressor features a post filter with low and high shelf EQ nodes. After the audio has been compressed by the second compressor, the audio will run through the filter allowing you to further shape the sound. Boosting the high end of the second compressor audio, for example, will give a very pleasing bright sound when mixed in with the first compressor's audio, providing a more colorful alternative to a simple high end boost in the EQ module. This technique achieves what is known as the 'Motown' sound. This filter is only available in dual-compressor mode.

#### Gain (dB)

The Gain control adjusts the output gain of each compressor. This is useful for making up for any decrease in levels caused by compression.

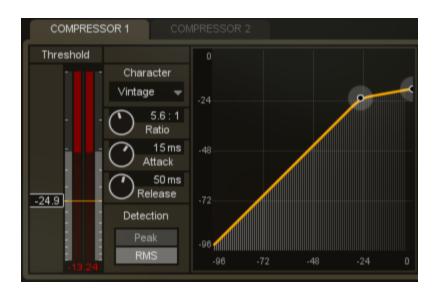
#### **Auto Gain**

When selected, Auto Gain calculates the RMS levels of both the input and output signals of the compressor and applies the appropriate gain to the output signal to compensate for the difference. This keeps you from needing to manually apply make-up gain after you set the compressor. Auto Gain is also a useful tool for A/B'ing the compressed signal against your original audio. If you compare your original audio to the audio being processed by Nectar's Compressor module by hitting the module's Bypass switch, having Auto Gain enabled will ensure you're really hearing the effect of the module, not just a change in volume.

## **Visuals**

The Threshold Control

The Threshold Control is a meter that allows you to adjust the thresholds of the Compressors with a slider on the left side. Additionally, the Threshold control allows you to monitor how the incoming signal is being affected in real time.



Two meters display the levels of the incoming signal and as gain reduction begins to take place, a gain reduction meter appears in red between the two level bars. The Threshold meter also displays the amount of gain

reduction in real-time with a dB readout at the bottom.

#### **Dynamic Curve Meter**

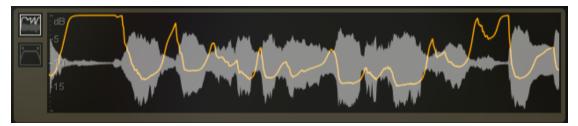
The Dynamic Curve Meter shows the input signal (x axis) plotted against the output (processed) signal (y axis). More horizontal compression curves means the signal is being flattened (compressed) more.

#### **Nodes**

The Dynamic Curve Meter features a node for the Compressor as well a node representing the output. These nodes are linked to the Threshold and Ratio

controls and can be used to adjust the curve in a visual way, rather than setting them with the standard controls. In dual-compressor mode you will see representations of both compressors' settings, with the one you're currently in highlighted.

#### **Gain Reduction Trace**



The Gain Reduction Trace display is a scrolling meter that displays the incoming signal's waveform with a superimposed curve illustrating the amount of gain reduction taking place in real-time. The Gain Trace can help you to set attack and release controls appropriately and monitor the envelope of gain reduction and addition.

### Mini-spectrum Display

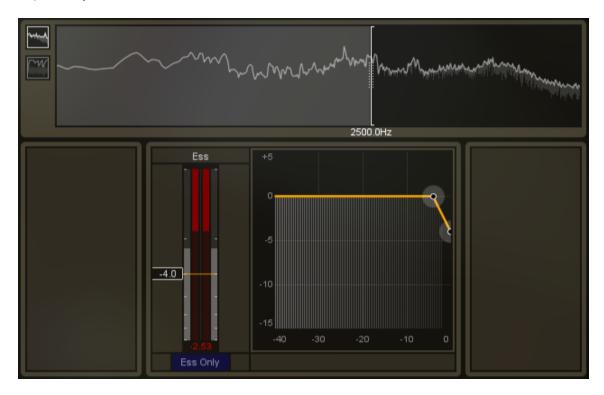
Each module of Nectar features a display of the frequency spectrum at the top for reference while making changes to your audio within the module. The Compressor's mini-spectrum features the second compressor's post filter mentioned above.

# Tracking vs. Mixing Mode

In Mixing Mode, Nectar's Compressor module will make use of lookahead in order to provide the most transparent results. However, this process requires a small amount of latency (delay). In Tracking Mode the Compressor will use very little latency to assist in tracking, but will be less transparent.

# **De-Esser Module**

Nectar's De-Esser is a powerful tool for controlling sibilance on vocal takes as well as other high frequency problems. Traditionally, De-Essing dynamically reduces loud sibilant noises by means of a threshold and ratio. Nectar's hardware-modeled De-Esser is level-independent allowing you to consistently and transparently reduce sibilance on inconsistent audio like vocals.



#### How Nectar's De-Esser Works

Nectar's De-Esser performs its processing independent of the incoming audio level. Whether your vocals are loud or soft, the amount of De-Essing taking place will be the same. This is performed by analyzing the current level of the audio above the specified frequency parameter, and measuring how loud it is in proportion to the full-bandwidth signal of your vocal take. If a large difference is detected due to a sibilance, an amount of Ess gain reduction will be applied.

## **Controls**



#### Ess

Sets the threshold and controls the amount of gain reduction that is applied to the incoming vocal take when a sibilance is detected. If the detected sibilance is over the threshold, the amount of gain reduction is relative to how high the signal goes above the threshold. This gain reduction is applied quickly and transparently to the entire incoming vocal take, instead of simply reducing the gain of a particular set of frequencies. This allows for much more natural sibilant reduction and prevents the effect of the singer having a lisp.

#### **Ess Only**

Allows you to audition the detected sibilance that is above the threshold. This can be useful if you find you need to adjust the Frequency control.

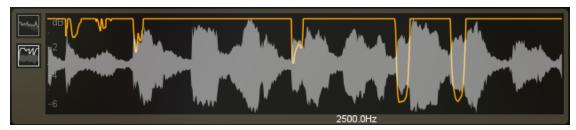
#### Frequency



The frequency control is used to set how the De-Esser is going to detect incoming sibilant material. This control serves as a cutoff point in which everything above the specified frequency will be used to detect sibilance, in proportion to the level of the full-bandwidth audio take. In general, this control can be left at its default value of 2500 Hz and should not need to be adjusted much in order to achieve excellent results on a wide variety of material.

### **Visuals**

#### **Gain Reduction Trace**



The Gain Reduction Trace is a scrolling meter that displays the incoming signal's waveform with a superimposed tracing that illustrates the amount of gain reduction taking place in real-time.

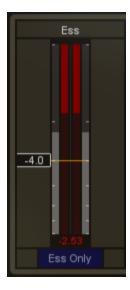
### Mini-spectrum Display

Each module of Nectar features a display of the frequency spectrum at the top for reference while making changes to your audio within the module.

#### The Threshold Control

The Threshold Control is a meter that allows you to adjust the threshold of the De-Esser with a slider on the left side. Additionally, the Threshold Control

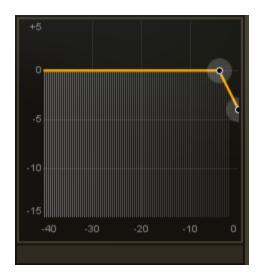
allows you to monitor how the detected sibilance is being affected, by displaying gain reduction as it is taking place.



Two meters display the levels of the detected sibilance and the gain reduction. As gain reduction begins to take place, a gain reduction meter appears in red between the two level bars. The Threshold meter also displays the amount of gain reduction in real-time with a dB readout at the bottom.

#### **Dynamic Curve Meter**

The Y (vertical) axis of the graph represents the amount of gain reduction in dB being applied to your vocals. The X (horizontal) axis shows the difference in level between the high frequency audio content as defined by the Frequency control, and the overall level of the incoming audio.



#### Node

The meter features a node for the De-Esser's threshold. The node is linked to the Threshold control and can be used to adjust the curve in a visual way, rather than setting it with the standard controls.

# Tracking vs. Mixing Mode

In Mixing Mode, Nectar's De-Esser module will make use of lookahead in order to provide the most transparent results. However, this mode requires a small amount of latency (delay). In Tracking Mode, the De-Esser will use very little latency to assist in tracking, but will be less transparent.

# **Gate Module**

The Gate can be thought of as performing the opposite task as the compressor. It takes audio below the threshold and reduces it. Depending on the Ratio setting, this module can function as a noise gate (silencing quiet sections) or an upward expander (boosting quiet sections).



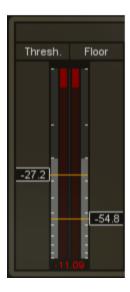
# **Controls**

#### Threshold (dB)

Sets the decibel level where the gate/expander processing begins.

### Floor (dB)

Sets the decibel level where the gate processing ends allowing you to preserve some noise floor.



#### **Ratio**

Sets the ratio for the dynamics process. Higher ratios will result in more extreme gating.

**Tip**: The Gate can have a ratio greater or less than 1.0. When the ratio is greater than 1, it is operating as a gate and any signals below the threshold will be decreased in volume. With ratios less than 1 the Gate can act as an "upward compressor" by boosting the low level signals. This is an effective technique for adding fullness to a track as you can bring up the lower levels without compressing or limiting the upper levels.



#### Attack (ms)

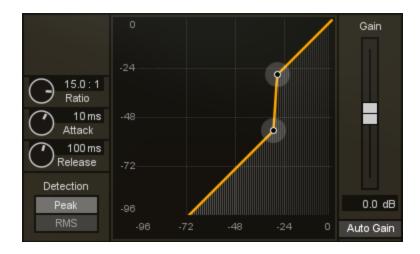
The attack time is the amount of time in milliseconds that it takes for Nectar to bring its gain reduction back to zero once the signal has fallen below the threshold.

**Tip**: Shorter attack times can tend to unnaturally pump on certain audio material, where longer release times have a more subtle gradual feel to them.

#### Release (ms)

This is the amount of time in milliseconds that Nectar will wait after the incoming signal has passed the defined threshold value, to apply the specified ratio of gain to the signal. Shorter release times will engage the Gate module much more quickly, while longer release times can result in slower more subtle processing.

## **Detection Modes**



#### **Peak**

When this option is enabled Nectar looks at the incoming peak signal level to trigger the gating dynamics process. This allows for more surgical and exact processing and can be effective when trying to remove room tone or noise from a signal.

#### **RMS**

When this option is enabled, instead of processing your audio based on the incoming peak level of the signal, Nectar looks at the RMS average signal level. This can allow for much more gradual processing and may give more natural results depending on the incoming audio.

#### Make-Up Gain (dB)

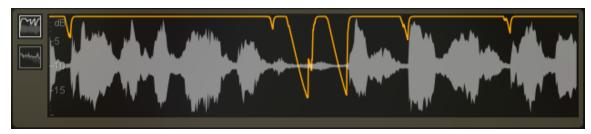
Adjusts the output gain of the signal after being processed by the Gate module. This is useful for compensating for any change in volume caused by the processing.

#### **Auto Gain**

When selected, Auto Gain calculates RMS levels of both the input and output signal and applies the appropriate amount of gain to the output signal to compensate for the difference. This allows you to not worry about manually applying make-up gain as you set the module's controls.

## **Visuals**

#### **Gain Reduction Trace**



The Gain Reduction Trace display is a scrolling meter that displays the incoming signal's waveform with a superimposed curve illustrating the amount of gain reduction taking place in real-time. The Gain Trace can help you to set attack and release controls appropriately and monitor the envelope of gain reduction and addition.

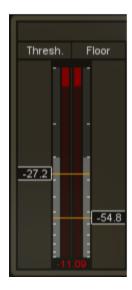
#### **Mini-spectrum Display**



Each module of Nectar features a display of the frequency spectrum at the top for reference while making changes to your audio within the module.

#### **Threshold Meter**

The Threshold Meter is a meter that allows you to adjust the thresholds of the Gate and Gate Floor with sliders on the left and right side. Additionally, the Threshold meter allows you to monitor how the incoming signal is being affected by displaying gain reduction as it is taking place and level meters.

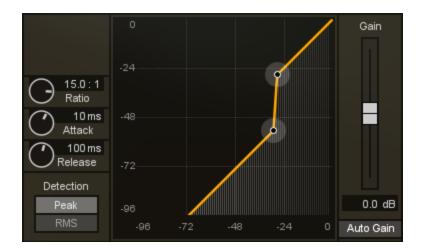


Two meters display the levels of the incoming signal and as gain reduction begins to take place, a gain reduction meter appears in red between the two level bars. The Threshold meter also displays the amount of gain

reduction in real-time with a dB readout at the bottom.

#### **Dynamic Curve Meter**

The Dynamic Curve Meter shows the input signal (x axis) plotted against the output (processed) signal (y axis).



#### **Nodes**

The Dynamic Curve Meter features individual nodes for the Gate and Gate Floor. These nodes are linked to the Threshold and Ratio controls and can be used to adjust the curve in a visual way, rather than setting them with the standard controls.

# Tracking vs. Mixing Mode

In Mixing Mode, Nectar's Gate module will make use of lookahead in order to provide the most transparent results. However, this process requires a small amount of latency (delay). In Tracking Mode, the Gate will use very little latency to assist in tracking, but will be less transparent.

# **Saturation Module**

Nectar's Saturation module can infuse your vocals with the subtle effects of tube, tape and other analog hardware by emphasizing even and odd harmonics in varying amounts.



# **Controls**

#### Amount

Controls the drive of the selected harmonic-generating saturation mode.

#### Mix

Allows you to control the mix of the saturated (wet) signal with the original (dry) signal.

## **Modes**

#### **Tape**

Tape mode emphasizes odd harmonics but with a shorter harmonic slope than a transistor, and emulates the sound of analog tape when pushed to saturation.

#### **Tube**

Tube mode emulates the sound of tube saturation with a mix of even and odd harmonics. It is characterized by its clear "tonal" excitation.

#### Warm

The Warm mode generates only even harmonics with a steep slope and, as such, may be used as a subtle warming effect.

#### **Analog**

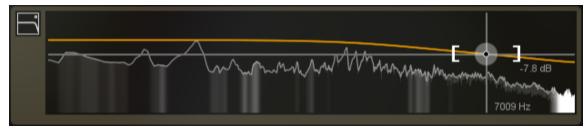
The Analog mode emulates the sound of transistor type odd harmonics giving a driven grit to your audio.

#### Retro

This algorithm is based on a row of odd harmonics characteristic of transistors resulting in a sharp, somewhat aggressive sound.



# **High-shelf Filter**

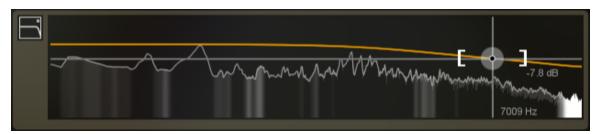


When saturating your vocals, often times the added harmonic content can make the sibilant frequencies in a vocal take harsh or biting. Click and drag on the high-shelf filter node in order to reduce the gain of these high frequencies.

The high-shelf filter will only reduce the high frequencies present in the saturated (wet) signal. Different saturation algorithms such as the Tube and Warm modes, rely on a strong dry signal in order to perform their saturation. As such, the high-shelf filter will have varying amounts of perceived effect on your vocals depending on the algorithm chosen.

## **Visuals**

## Mini-spectrum Display



Each module of Nectar features a display of the frequency spectrum at the top for reference while making changes to your audio within the module. The Saturation module's Mini-spectrum Display also features a high-shelf post-filter which filters only the wet (saturated) signal.

#### Harmonic Highlights

The Saturation module's Mini-spectrum display additionally features highlights to pinpoint where harmonics are being added to your signal. Brighter white highlights indicate more prominent added harmonics at that frequency.

# **Pitch Correction Module**



## **Controls**

### **Vocal Range**

An important control to set to correctly, the specified Vocal Range will control how Nectar detects and analyzes any incoming vocal data. Start with the Middle setting for most audio applications, and if you notice any undesirable behavior or artifacts in the detected pitches, experiment with the Low and High options to achieve the best results.

#### Speed (ms)

You can use the Correction Speed control in order to control how quickly your incoming vocals will be snapped to any particular note. Set your Correction

Speed to 0ms in order to achieve robotic, immediate pitch snapping, or use values from 30-60ms in order to obtain more natural and transparent results.

#### **Transposition (semitones)**

This controls allows you to transpose anywhere between an Octave Up or Down.



## **Formant Controls**

#### **Preserve**

Enabled by default, this option preserves the original formants of your vocals, allowing pitch to be corrected while retaining the original character of the performer's timbre. When this option is enabled, you also have the ability to fine-tune formants using the Formant Shift and Global Formant Scaling controls for each Note Region.

#### Shift (semitones)

Use this control to specify the amount of Formant transposition you wish to apply to your incoming vocal tracks. In general, this can be left at 0, however use this control to manually adjust your vocal formants.



#### Scale

Nectar's Pitch Correction algorithm will preserve the formants of your incoming vocal takes exactly as they were recorded. These formants are what give the voice its timbre and are very important in keeping your vocals sounding as natural as possible when pitch shifting. However, it can be desirable to shift the formants slightly in the direction of the desired pitch shift, as this corresponds to what humans naturally do. When singers sing a higher note, our vocal formants also shift slightly higher. Global Formant Scaling can sometimes help achieve more natural results when necessary.

# Setting the Scale of your song

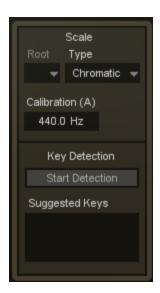
# **Root**

Here you can define the root note or key that your vocal takes are in. It is important to set an accurate Root Note as this can help the pitch correction algorithm determine the best possible pitches for your vocals to correct to.

# **Type**

#### **Chromatic**

A scale in which every note of every octave will be available as a pitch your vocals could be corrected to. If you are not sure of the scale that your vocal takes are in, be sure to set your scale type to Chromatic in order to get the best results.



**Note**: When in chromatic mode, as every pitched note is available for pitch correction, the defined root note has no effect.

### Major / Minor / Custom

Here you can select to snap your incoming vocal pitches to either a Major, Minor or Custom scale of your choosing based upon your specified Root Note. When defining a Custom scale, click upon the notes of the popup keyboard that you wish to enable as options for pitch correction. When the individual notes are enabled, they will turn gold or dark gold for black keys. White and black notes will be disabled and not used in pitch correction.

#### Calibration Pitch (Hz)

By default, all pitches will be based upon a standard A = 440Hz tuning reference. If your audio is not based on this standard reference pitch, or has been moved slightly due to analog tape recording, you can adjust Nectar's Reference Pitch here.

# **Key Detection**

#### **Start/Stop Detection**

This button toggles Nectar's Key Detection on and off. Click once to start detection and again when you feel you have accurate results. Generally, running detection for one verse and chorus of your song is sufficient.

#### **Suggested Keys**

Once Key Detection has started, this selection window will be populated with a prioritized list of suggested keys for your song. After Key Detection has been performed for an adequate period of time (usually one verse and chorus), you'll find that the top three suggestions remain the same. Clicking the suggestions from the list will automatically change the Root and Key settings described above.

## **Visuals**

#### **Mini-spectrum Display**

Each module of Nectar features a display of the frequency spectrum at the top for reference while making changes to your audio within the module.

# Tracking vs. Mixing Mode

In Mixing Mode, Nectar's Pitch Correction module will make use of lookahead in order to provide the best results. However, this process requires a small amount of latency (delay). In Tracking Mode, Pitch Correction will use very little latency to assist in tracking, but will be lower quality.

# **Harmony Module**

Nectar 2's new Harmony module allows you to instantly add harmonized vocal accompaniments to your tracks without time-consuming tracking, multiple takes, and performers. Key Detection technology intelligently suggests the key of your song to allow for real-time harmonized voice generation.



**Note**: The Harmony module has replaced Nectar's Doubler Module. The Harmony module will act as a doubler when all added voices are shifted either up or down an octave.

## **Controls**

**Voices** 

The Harmony module offers up to four vocal accompaniments, known as voices. Each voice may be in unison or shifted up/down intervals as large as an octave. To enable a voice, click its corresponding voice number to the left. Once enabled, you may select the direction and amount the voice is shifted relative to the lead voice or if it is in unison.

#### **Solo Voices**

Clicking Solo Voices mutes the lead vocal so the module only outputs added voices. This can be useful when placing Nectar on an aux track to process harmonies independently from your lead vocal.

#### **MIDI Control**

Enabling MIDI Control allows you to trigger backing voices with your MIDI Controller. When enabled, the voice table will dim, and the settings of added voices will be determined by the four nodes in the X/Y Pad discussed below. The first four voices triggered by your MIDI controller will have the settings of the four nodes in the X/Y Pad. After four voices are added, the settings in the X/Y Pad will be repeated for more than four voices.

Learn more about setting up MIDI Control here.



## **Variation**

#### **Pitch**

Pitch Variation allows you to give each added voice its own subtle differences in pitch. This creates a humanizing effect to the added voices and reduces phase cancellation.

#### Time

Time Variation allows you to create varying time offsets in each added voice. This simulates multiple performances and reduces phase cancellation.

#### **Pitch Correction**

Determines the amount of pitch correction performed on the added vocal accompaniments. Values of 100% will be corrected while values of -100% will be further detuned.

## X/Y Pad



#### **Modes**

The X/Y Pad features both Pan/Gain and Pitch/Delay modes. By default, the X/Y Pad displays Pan/Gain controls.

#### Pan & Gain

When in Pan/Gain mode, the Harmony module's X/Y Pad allows you to quickly adjust the level and stereo placement of each added voice. Each added voice is represented on the X/Y Pad as a node labeled with its corresponding voice number.

#### Pitch & Delay

When in Pitch/Delay mode, the Harmony module's X/Y Pad allows you to quickly fine-tune the pitch and adjust the offset/delay of each added voice. Each added voice is represented on the X/Y Pad as a node labeled with its corresponding voice number.

# Setting the Scale of your song

## **Root**

Here you can define the root note or key that your vocal takes are in. It is important to set an accurate Root Note as this can help the pitch correction algorithm determine the best possible pitches for added voices.

# **Type**

#### **Chromatic**

A scale in which every note of every octave will be available for added voices. If you are not sure of the scale that your vocal takes are in, be sure to set your scale type to Chromatic in order to get the best results.



**Note**: When in chromatic mode, as every pitched note is available for added voices, the defined root note has no effect.

#### Major / Minor / Custom

Here you can select to snap your outgoing harmonized voices to either a Major, Minor or Custom scale of your choosing based upon your specified Root Note. When defining a Custom scale, click one upon the notes of the keyboard you wish to enable as options for pitch correction. When the individual notes are enabled, they will turn gold or dark gold for black keys. White and black notes will be disabled and not used in pitch correction.

#### Reference Pitch (Hz)

By default, all pitches will be based upon a standard A = 440Hz tuning reference. If your audio is not based on this standard reference pitch, or has been moved slightly due to analog tape recording, you can adjust Nectar's reference Pitch here.

# **Key Detection**

#### **Start/Stop Detection**

This button toggles Nectar's Key Detection on and off. Click once to start detection and again when you feel you have accurate results. Generally, running detection for one verse and chorus of your song is sufficient.

#### Suggested Keys

Once Key Detection has started, this selection window will be populated with a prioritized list of suggested keys for your song. After Key Detection has been performed for an adequate period of time (usually one verse and chorus), you'll find that the top three suggestions remain the same. Clicking the suggestions from the list will automatically change the Root and Key settings described above.

## **Visuals**

### Mini-spectrum Display



Each module of Nectar features a display of the frequency spectrum at the top for reference while making changes to your audio within the module. The Harmony module's mini-spectrum includes both a high and low shelf filter that affect only the voices added by the Harmony module. These filters allow you to sculpt the added backing vocals independently of the lead voice.

# Tracking vs. Mixing Mode

In Mixing Mode, Nectar's Harmony module will make use of lookahead in order to provide the best results. However, this process requires a small amount of latency (delay). In Tracking Mode, the Harmony module will use very little latency to assist in tracking, but will be lower quality.

# **Reverb Module**

Nectar 2's completely revamped Reverb Module models the classic EMT 140ST Stereo Plate Reverb giving your vocals timeless space and character. Lacking early reflections of rooms and halls, Plate Reverb can add a dimension to your vocal tracks without making them muddy.



# EMT 140 History

Invented in 1957 by Elektro-Mess-Technik the 140 plate reverb unit was composed of a thin metal plate suspended within a 8x4' sound-resistant wooden enclosure (weighing 600 pounds). A speaker-like transducer on one end of the plate reproduced the input signal causing the plate to vibrate while two microphone like transducers received the signal at the opposite end creating a stereo reverb effect (the stereo unit wasn't introduced until 1961). The reverb time of the unit was affected by a damping pad which pressed against the plate. The unit was considered small at the time and was an option for smaller studios without an echo chamber. While the sound of the plate was unlike the natural

reverb that occurs in physical spaces, its warm and dense sound made it the preference of engineers at both Abbey Road studios and RCA Studio B in Nashville and was featured on records from Pink Floyd and the Beatles. Today the EMT 140 remains a mainstay of recording and is still very much in demand.

# Modeling the EMT 140

In order to authentically recreate the sound of the EMT 140, iZotope first located an original unit that was still in good working order (sadly many have fallen into disrepair). Then by running sine sweeps through the unit at many damping settings we were able to generate impulse responses that accurately captured the sound of the particular plate. Rather than just use pure convolution, we've used a hybrid DSP algorithm which utilizes both convolution and algorithmic methods of generating reverb. Convolution is used to accurately generate the early reflections of the plate while an algorithm has been written to synthetically generate the late tails of the reverb. Using this sort of hybrid DSP provides continuous control of parameters like the damping in real-time, which isn't possible with pure convolution. Additionally, this hybrid DSP is significantly more CPU efficient than pure convolution.

### **Controls**



Pre-delay (ms)

This determines the amount of time the processed (wet) signal is delayed from being output. This can help to keep the wet vocals from sounding on top of the dry vocals increasing clarity in the overall vocal track with a greater sense of space. While the EMT 140 didn't offer any pre-delay, it is present in Nectar 2 to give you added control of the plate reverb.

### **Decay**

The Decay control corresponds to the physical damper present in the EMT 140 that pressed against the plate in order to affect the decay time. While not an explicit control of reverb time as often seen in digital reverbs, this damping effect will affect decay time though it is not constant across all frequencies.

#### Width

The width control affects the stereo spread of the reverb module. The default (100%) setting accurately represents the sound of a mono signal through the stereo version of the EMT 140, which was first offered as a mono unit, then stereo was later added, however explicit control of the spread was never offered. This control is only available in stereo and mono to stereo instantiations of the plugin.

#### Saturation

The saturation control allows you to add subtle harmonics to the wet (reverberated) signal. The EMT 140's original preamp was known to add subtle distortion to the signal when levels were pushed. The saturation control allows you to recreate this effect.

### Low and High Cutoff



Housed in the mini-spectrum window at the top of the module, these filters control the amount of low and high frequency material that is sent through the reverb. The High Cutoff control will filter out the high frequencies of the wet signal resulting in an overall darker reverb sound while the Low Cutoff control which filters out the lower frequencies of the wet signal resulting in a brighter reverb sound.

### Dry

The dry control affects how much dry (unprocessed signal) is output from the reverb module.

### Wet

The wet control affects how much wet (reverberated signal) is output from the reverb module.

# **Visuals**

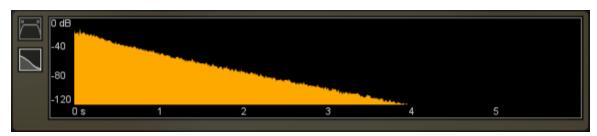
### Mini-spectrum Display



Each module of Nectar features a display of the frequency spectrum at the top

for reference while making changes to your audio within the module. The Reverb module's Mini-spectrum display also includes the high and low cutoff filters mentioned above.

### **Reverb Decay Plot**



The Reverb Decay Plot displays a graph that illustrates the decay characteristics of the reverb signal over time given the settings you have selected. This display can help you visualize how different settings affect the overall character of the reverb signal.

# **FX Module**

Nectar 2's FX module simulates a vocal pedalboard offering 7 new creative effects that give you a wealth of unique ways to process your vocals to achieve out of this world sounds.



## **Distortion Effects**

### **Overdrive**

The Overdrive effect adds a gritty and aggressive distortion to your vocals. Unlike Nectar's Saturation module, which subtly adds harmonics to your voice, the Overdrive effect has the ability to severely mangle your vocal tracks.



### **Decimate**

The Decimate effect is a downsampler that reduces the resolution rate of the incoming audio, creating a uniquely digital sounding distortion of the audio signal that adds artifacts. Used in combination with the Overdrive effect, you can quickly distort your voice beyond recognition. To use Decimate, you must first enable the effect then increase the amount control.

# **Modulation Effects**



### **Phaser**

The Phaser is a phase-shifting effect that adds an additional signal through a non-linear all pass filter creating a more subtle comb-filtering effect.

#### **Feedback**

The Feedback control determines the amount of the phased signal that is fed back into the Phaser.

### **Depth**

The depth slider controls the frequency range of the filters of the phaser sweep. At lower settings, the phaser will affect low-end frequencies, and at higher settings, the phaser will sweep into higher frequencies.

### **Flanger**

The Flanger is a phase-shifting effect that adds a slightly delayed signal to create a whooshing comb-filtering effect with frequency notches in linear harmonic series.

#### **Feedback**

The Feedback control determines the amount of the flanged signal that is fed back into the flanger.

#### Depth

The Depth control determines the amount of modulation by controlling the depth of the Flanger's filtering.

### **Chorus**

The Chorus adds a delayed pitch-modulated signal to the input, producing a shimmering effect that also widens the stereo spread.

### **Feedback**

The Feedback control determines the amount of the chorused signal that is fed back into the Chorus.

### **Depth**

The depth slider controls the range of the pitch modulation performed on your audio.

# **Repeat Effects**



### **Echo**

The Echo is a unique delay-like effect which repeats and fades out segments of your vocal tracks. It provides a more pronounced and impacting delay effect that adds a presence to your vocal tracks.

### **Feedback**

The Feedback control determines the amount of the echoed signal that is fed back into the Echo.

#### Time

The Time control affects the amount of audio captured before fading begins.

### **Shred**

The Shred effect is a unique stuttering delay-like effect that repeats samples of your audio, offering control of both sample size and the amount of repetition. It provides an upfront and aggressive repeating delay effect, allowing you to create complex rhythms.

#### **Shreds**

The Shreds control determines the number of times the repeated audio sample will play back within the specified capture window.

### Repeats

The Repeats control affects the size of the sampled audio window that will be repeated. This control is directly related to the Global Tempo/Speed control described below. For example, if Host Sync is on and Speed is set to 1 bar, setting Repeats to ¼ will repeat the first quarter note of each captured bar, setting Repeats to ½ will repeat the first eighth note of each captured bar, and so on. You can only repeat segments of audio when your Speed setting is greater than your Repeats setting, since the Speed setting determines the length of the captured audio. When Host Sync is disabled, 1 bar of audio is captured by default. The length of this bar is determined by the Tempo control.

### **Global Controls**



#### Series/Parallel Modes

In Series Mode, the effects contained in the module will affect the audio signal one after the other from Distort to Module to Repeat. In Parallel Mode, the effects will affect the incoming audio independently of each other. To visualize this, imagine that in Series Mode, the Distort effect output feeds the input of the Modulate effects, whose output feeds the input of the Repeat effects, whose output feeds the input of the Global Wet control. In Parallel Mode, imagine that the output of each effect is on its own path, all to be summed at the input of the Global Wet control.

### Tempo

This control allows you to manually set the speed of relevant effects within the FX module. These include the effects within the Modulate and Repeat sections. By default, this control is set to sync to the effects every 1 bar at the specified tempo.

### **Host Sync**

This button enables host syncing for relevant effects within the FX module. These include the effects within the Modulate and Repeat sections.

### **Speed**

When Host Sync is enabled the Tempo control becomes the Speed control. This control allows you to choose the note length used to sync the Modulate and Repeat effects, relative to your host's tempo setting.

### **Dry/Wet Controls**

The Dry/Wet Controls affect the amount of Dry (unaffected) and Wet (affected) signal output by the module.

## **Visuals**

### **Mini-spectrum Display**

Each module of Nectar features a display of the frequency spectrum at the top for reference while making changes to your audio within the module.

# **Delay Module**

Nectar's Delay module can help to create transparent or colorful delayed copies of your original vocal track. A helpful alternative to reverb, the Delay module can give your vocals a sense of space without losing any vocal clarity or adding unwanted clutter to your overall mix.



# **Controls**

### Mode

### **Digital**

Transparent and classic, the Digital delay mode provides exact copies of the incoming vocal signal with minimally colored repetitions

### **Tape**

A unique and colorful sound, the Tape delay mode will filter and distort each progressive repeat in the way a signal would be degraded over time on magnetic tape. This can help to add extra color to your delayed vocals while preserving the clarity of the repeats.

### Analog

Based off of circuit distortion, the Analog delay mode can give a large amount of grit and distortion to your signal. This grit can help to give your processed audio the extra edge that it needs.

#### **Trash**

This controls the amount of processing effect the specified Delay Mode will have upon the processed signal.

Note: The Trash control is disabled when in Digital mode.

#### Width

(Stereo Only) This controls stereo width of the delayed signal from mono (0%) to extra-wide spread (200%).

### Delay (ms / note values)

Determines the amount of time that will pass before each successive repeat of your incoming dry vocal. With Host Tempo enabled, these values can be specified in subdivisions or multiples of one musical beat determined by your host's time signature and beats per minute.

### **Feedback**

The feedback percentage will control how much the signal is repeated before it is faded out. For longer delays, increase this control whereas shorter feedback times result in very short one repeat slap back echoes.

**Note**: When increasing this control to 100%, special delay effects can be created which while interesting, can also grow to be very loud. Be mindful of the levels of your audio when adjusting this control into higher percentages.

### Low and High Cutoff Filters



These filter nodes control how much low or high frequency content from the original audio will be sent to the Delay, controlling the frequency band of your delayed signal.

### **Modulation Depth and Rate**

In order to create more realistic delayed effects, the delay time will be varied in real-time within a certain limit. After enabling the Modulation check box, the Depth and Rate controls will determine how much of this effect is applied, and how fast the delay times will be varied.

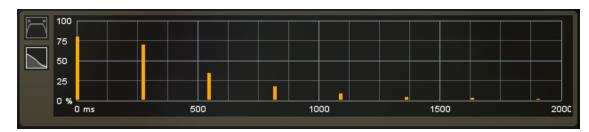
With subtle settings, a very gentle movement of the signals delay time can create a natural cohesive delay and with more extreme settings, creative delay effects can be achieved to fit the creative goals of your session.

# **Visuals**

### Mini-spectrum Display

Each module of Nectar features a display of the frequency spectrum at the top for reference while making changes to your audio within the module. The Delay module's Mini-spectrum display also includes the high and low cutoff filters mentioned above.

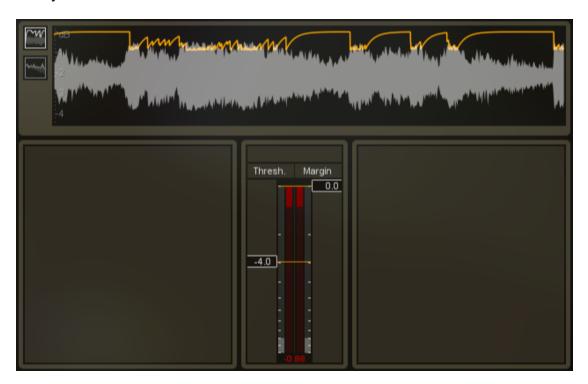
### **Delay Decay Plot**



The Delay Decay Plot displays a graph that illustrates the decay characteristics of the delayed signals over time given the settings you have selected. This display can help you visualize how different settings affect the overall character of the delayed signals.

# **Limiter Module**

Nectar's Limiter serves two purposes: it allows you to aggressively limit high level signals to prevent clipping, and it allows you to create an overall louder or fuller sound by limiting the dynamic range and boosting the perceived overall level of your vocals.



# **Controls**

### Threshold (dB)

Determines the level at which the limiter will begin limiting. Turning down the threshold limits more of the signal and in turn will create an overall louder output. In other words, by turning down the Threshold you limit the dynamic range of the audio. The limiter also automatically applies gain as you bring down the Threshold, boosting the overall level of your audio.

### Margin (dB)

Determines how much to attenuate the output signal after limiting.

# **Visuals**

### **Threshold Control**

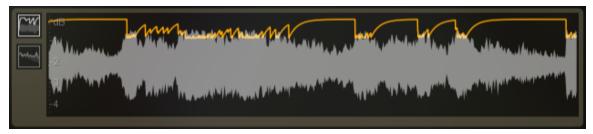
The Threshold Control is a meter that allows you to adjust the Threshold and Margin of the Limiter in visual relation to the levels of the incoming signal.



The Threshold Control displays gain reduction as it is taking place with level meters. Two meters display the levels of the incoming signal and as gain reduction begins to take place, a gain reduction meter appears in red between the two signal level bars. The Threshold Control meter also displays the amount of gain reduction in real-time with a dB readout at

the bottom.

### **Gain Reduction Trace**



The Gain Reduction Trace is a scrolling meter that displays the incoming signal's waveform with a superimposed tracing that illustrates the amount of gain reduction taking place in real-time.

### Mini-spectrum Display

Each module of Nectar features a display of the frequency spectrum at the top for reference while making changes to your audio within the module.

# **Tracking vs. Mixing Mode**

In Mixing Mode, Nectar's Limiter module will make use of lookahead in order to provide the more transparent results. However, this process requires a small amount of latency (delay) and is only available in Mixing Mode. In Tracking mode, Nectar's Limiter will incur less latency making tracking possible, but processing will be less transparent.

# Pitch Editor Plug-in

Nectar 2 offers a new resizable component plug-in dedicated to offline pitch correction simplifying the manual pitch correction process from within your DAW.



**Note**: The component Pitch Editor plug-in is only available in Nectar 2: Vocal Production Suite.

# **Capturing Audio**

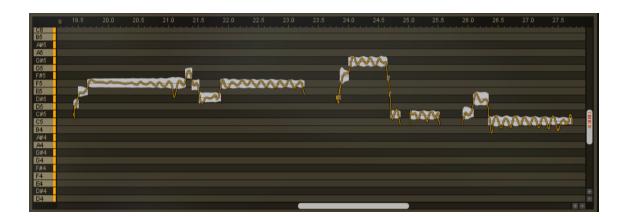


To begin performing offline pitch correction you must first click the Capture button then playback audio from your DAW. The Capture button puts the Pitch Editor plug-in into record mode and will begin capturing any audio played back through the plug-in. If you are using ReWire, you may click the Play button after the Capture button to initiate capture. Learn more about setting up ReWire in your host here.

**Note**: The detected note regions will not be displayed until after you stop capture.

# **Note Workspace**

After capture, the detected notes will be displayed as regions on the Note Workspace. Superimposed on the note regions are drawings of the pitch contours that make up each note.



### Piano Roll

The Piano Roll on the left side of the Note Workspace represents the note scale. Enabled notes of the given scale are designated by an illuminated tick to the right of the associated piano roll key. By default, the Piano Roll (in Chromatic mode) will have all notes enabled.

#### **Timeline**

The Timeline of captured audio is represented at the top of the Note Workspace. You may click anywhere on the timeline to move the playhead to that location when using ReWire.

**Tip**: When hovering over the Piano Roll or Timeline you may use your mouse wheel to zoom in and out on the note or time scale in the workspace. You may also click and drag the piano roll to scroll vertically.

### **Note Regions**

Notes detected after capture are represented by Note Regions on the Piano Roll and are shaped corresponding to their amplitude envelopes.

#### **Pitch Contours**

The Pitch Contours of each detected note will be superimposed on the Note Regions. These contours represent the continuous pitch variation of your vocals. This allows you to easily detect pitch variations such as vibrato and glissandos. By default, these contours will represent pitch after correction.

#### **Note Scroll Bar**

The scroll bar on the right side of the Note Workspace allows you to scroll vertically and zoom in and out within the Piano Roll of the Note Workspace. Additionally the scroll bar has visual representations of the location of capture notes in the form of orange ticks.

**Tip**: When hovering over the scroll bar you may use your mouse wheel to scroll up and down on the note scale in the workspace.

### **Note Zoom Buttons**

Below the Note Scroll Bar, explicit zoom in and out buttons are available for vertical zooming on the Piano Roll.

#### **Timeline Scroll Bar**

The scroll bar on the bottom of the Note Workspace allows you to scroll horizontally and zoom in and out within the Timeline of the Note Workspace.

**Tip**: When hovering over the scroll bar you may use your mouse wheel to scroll left and right on the Timeline in the workspace.

#### **Timeline Zoom Buttons**

To the right of the Timeline Scroll Bar, explicit zoom in and out buttons are available for horizontal zooming on the Timeline.

# **Waveform Display**

After capture, the waveform of the input audio will be represented in a display at the top of the Pitch Editor plug-in. This display may also be used for navigation and zooming within the Timeline.



### **Selection Handles**

The Waveform Display features Selection Handles, which indicate the portion of audio viewable within the Note Workspace. You may click and drag these handles to expand the viewable region or click and drag the selection within the handles to navigate across the timeline.

**Tip**: When hovering over the Waveform Display you may use your mouse wheel to zoom in and out on the timescale in the workspace.

# **Transport Controls**

Transport Controls are available when using ReWire to control playback from within the Pitch Editor plug-in.



### **Capture Button**

To begin capturing note data, you must first click the Capture Button and then either click the Play Button when using ReWire, or click play in your DAW.

### **Play Button**

The Play Button begins playback at the current playhead location.

### **Stop Button**

The Stop Button stops playback at the current playhead location.

### **Skip Backward Button**

The Skip Backward Button instantly moves the playhead to the beginning of the captured portion of audio.

### **Skip Forward Button**

The Skip Forward Button instantly moves the playhead to the end of the captured portion of audio. It may be used to quickly navigate to the end of captured audio in order to capture subsequent audio after the captured portion.

### **Loop Selection/Transport Button**

The Loop Selection/Transport Button loops playback of selected notes within the note workspace.

# **Note Editing Tools**

### Cursor



The Cursor is the default tool selection in the Pitch Editor plug-in. It is used for selecting notes and for dragging Note Regions vertically within the Piano Roll to change their pitch. Clicking and dragging with this tool allows you to lasso select multiple notes at once. The following actions may performed with the Cursor tool:

### **Auditioning Notes**

You may click and hold on any Note Region to hear playback of that note at its current pitch. This preview audio reflects a note's corrected pitch, not just its original pitch.

### **Dragging Notes**

You may easily click and drag Note Regions to a given note lane. Note Regions will snap to note lanes, unless you hold the Control button while drag-

ging them (but after selecting them), which allows you to freely adjust a note's pitch.

#### **Double-click to Fix**

You may simply double-click any Note Region to lock it to the nearest note lane. Double-click the same Note Region again to return it to its original pitch.

# **Split Tool**



The Split Tool allows you to divide a single detected note into two individual Note Regions that you may then edit independently. Simply click the Split Tool icon, then you may click anywhere in a Note Region to split it at that location into separate Note Regions.

# Merge Tool



The Merge Tool allows you to heal a separation between two detected notes making them one unified Note Region. Simply select two or more neighboring Note Regions then click the Merge Tool icon to unify the individual selected notes into one new Note Region.

## **Zoom Controls**

### **Zoom to Selection**



The Zoom to Selection control allows you to easily zoom to a specific location in the Piano Roll/Timeline. Simply click the Zoom to Selection icon, then click and drag across a specific location in the Note Workspace to zoom to fit that selection.

### **Zoom to Show All Captured Notes**



The Zoom to Show All Captured Notes control allows you to instantly zoom in or out to show all the detected Note Regions within the audio you have captured.

# **Resetting/Deleting Notes**

### **Resetting Note Values**



After selecting one or more Note Regions within the Note Workspace, you may click the Reset button to return those notes to their original pitch location and to reset their associated Note Controls at the bottom of the interface.

### **Deleting Notes**



After selecting one or more Note Regions within the Note Workspace, you may click the Trash icon to remove that note from the Note Workspace and it will no longer be pitch corrected.

**Tip**: You may right-click within the workspace to reveal an option to delete all Note Regions on the workspace.

### **Note Controls**

Click on any detected Note Region with the cursor tool in order to select that particular note for editing. Shift-click multiple Note Regions in order to select many at a time.

# **Setting Your Vocal Range**



Vocal Range is an important parameter to set correctly. The specified Vocal Range will control how the Pitch Editor processes audio. Start with the Middle setting for most performers, but if you notice any undesirable behavior or artifacts in the detected notes, experiment with the Low and High options to achieve the best results.

### **Formant Controls**



#### **Formant Preservation**

Enabled by default, this option preserves the original formants of your captured vocals, allowing pitch to be corrected while retaining the original character of the performer's timbre. When this option is enabled, you also have the ability to fine-tune formants using the Formant Shift and Global Formant Scaling controls for each Note Region.

### Formant Shift (semitones)

This control allows you to adjust the vocal formants of your captured vocal audio. While in many cases this can be left at 0 in order to preserve the formants as they were originally recorded, adjusting this parameter can aid in finding more natural results when performing larger pitch shifts beyond a few notes in a given direction.

### **Global Formant Scaling**

Nectar's Pitch Correction algorithm will preserve the formants of your incoming vocal takes exactly as they were recorded. These formants are what give the voice its timbre and are very important in keeping your vocals sounding as natural as possible when pitch shifting.

However, it can be desirable to shift the formants slightly in the direction of the desired pitch shift, as this corresponds to what humans naturally do. When singers sing a higher note, our vocal formants also shift slightly higher. Global Formant Scaling can sometimes help achieve more natural results when necessary.

#### **Vibrato**

This control allows you to enhance and reduce available vibrato in captured notes by accentuating or smoothing out the variations of the pitch contour for a given Note Region. Notice the changes in pitch contours when adjusting Vibrato.



### **Correction Speed (ms)**

This controls how quickly the selected regions will be snapped to their specified pitches. This control can be used to adjust Nectar's note transitions and can control how transparent or processed the pitch correction will sound.

### **Correction Strength**

Use this parameter to define how much the incoming vocal will be corrected to the specified pitch. At %100, the incoming vocal will be snapped entirely to the desired pitch, whereas at %50, the incoming vocal will only be corrected half of the way from the original pitch to the desired pitch. Notice as you adjust Correction Strength how a Note Region's pitch contours are affected.

# Snapping Notes to a Set Key/Scale

After capture, you may set the Key/Scale of your vocals to force them into specific note lanes.



### **Snap To Scale**

After setting the Root and Scale settings described below, clicking Snap To Scale forces all note regions into note lanes available in the specified Key/Scale.

### **Root**

Here you can define the root note or key that your vocal takes are in. It is important to set an accurate Root Note as this can help the pitch correction algorithm determine the best possible pitches for your vocals to correct to.

# **Type**

### **Chromatic**

A scale in which every note of every octave will be available as a pitch your vocals could be corrected to. If you are not sure of the scale that your vocal takes are in, be sure to set your scale type to Chromatic in order to get the best results.

**Note**: When in chromatic mode, as every pitched note is available for pitch correction, the defined root note has no effect.

### Major / Minor / Custom

Here you can select to snap your incoming vocal pitches to either a Major, Minor or Custom scale of your choosing based upon your specified Root Note. When

defining a Custom scale, click upon the notes of the popup keyboard that you wish to enable as options for pitch correction. When the individual notes are enabled, they will turn gold or dark gold for black keys. White and black notes will be disabled and not used in pitch correction.

# **Input/Output Meters and Toolbar**

In the bottom right of the Pitch Editor plug-in's interface are I/O meters and a tool-bar with global menu buttons.



### **Input/Out Meters**

The Input/Output Meters allow you to monitor the levels of your audio both while capturing and playing back.

### **Bypass Button**

Clicking the Bypass button will bypass the Pitch Editor's processing in your DAW, allowing you to compare your original vocal track to the processing of Nectar's Pitch Editor.

### **History Button**

Clicking the History button opens the History menu, which allows you to recall and compare settings and adjustments. Learn more about the History menu here.

### **Options Button**

Clicking the Options button loads the Options Menu from which you can authorize your copy of Nectar, access additional resources for working with Nectar, adjust visual settings, and more. Learn more about Nectar's Options <a href="here">here</a>.

### **Help Button**

You may click the Help button at any time to launch this Help Documentation.

# **Breath Control Plug-in**

The Breath Control plug-in will automatically detect breaths in your vocal takes and suppress them. This can be an essential tool when editing a vocal track by streamlining a task that can be time-consuming when performed manually.



**Note**: The component Breath Control plug-in is only available in Nectar 2: Vocal Production Suite.

### **How Breath Control Works**

The Breath Control plug-in automatically analyzes the incoming vocal take and distinguishes breaths from sung vocals based on their harmonic structure. If any piece of the incoming audio matches a harmonic profile similar to a breath, the module will suppress that portion of the audio until sung vocals are detected. Different from a 'Threshold' based process in which the module is only engaged once the audio has risen to a certain volume, Breath Control will perform its analysis regardless of level. This allows for accurate breath recognition with a multitude of quiet or loud vocal styles with minimal adjustment of the module's controls.

### **Controls**



### Modes

#### Gain

In Gain mode, the Breath Control plug-in will reduce the gain of breaths by an absolute amount, regardless of the level of the breath. In some cases, this is desirable when trying to handle egregious breathing or as a way of removing all breaths from a particular spoken or sung vocal take. Depending on your settings however, this can result in unnatural sounding results as the very quiet breaths may be inaudible, while the loud breaths will be reduced to a normal level.

#### **Target**

When in Target mode, the reduction amount of the 'Target' slider represents the desired level that you wish all detected breaths to be reduced to. This can result in much more natural sounding breath reduction as the detected breaths in your audio are only reduced when necessary. Loud and abrasive breaths will be reduced heavily while quiet, natural sounding breaths will be left at the same volume.

Note: By default, the Breath Control plug-in will be in Target mode.

#### Sensitivity

This controls how sensitive the breath control plug-in is when detecting the harmonic structure of breaths in your incoming audio.

#### Gain (dB)

Sets the desired amount of gain reduction applied to all detected breaths, regardless of level.

#### Target (dB)

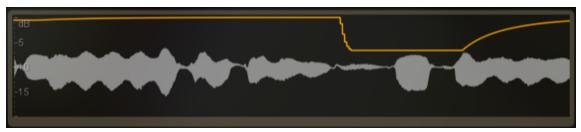
Sets the resulting desired level of all detected breaths above the set target.

#### **Breaths Only**

When enabled, only the audio of the detected breaths will be passed to the output of the module. This can help when setting the Sensitivity control in order to make sure that only the breathing in your audio is being processed.

### **Visuals**

#### **Gain Reduction Trace**



The Gain Reduction Trace is a scrolling meter that displays the incoming signal's waveform with a superimposed tracing that illustrates the amount of gain reduction taking place in real-time.

## Latency

In order for the Breath Control plug-in to have time to perform its analysis, it must incur a good deal of latency. The result of this latency is that the incoming audio is delayed in time with respect to the other tracks in your session. Modern audio applications have a feature called 'Delay Compensation' which will recognize the latency (delay) that Nectar requires and will adjust the tracks in your session accordingly - making sure that all of your tracks are aligned and in time with each other. This 'Delay Compensation' can only occur once the audio has been recorded into your digital audio workstation however. When tracking (recording) your incoming audio the latency of the Breath Control module will cause a delay between when the audio comes in to your computer, and when it passes through Nectar.

**Note**: If your host has a limited number of samples of latency compensation, Breath Control may still cause tracks to be played back out of sync with each other. In these cases, we recommend processing your vocal takes with Breath Control as a separate offline process.

## **Preset System**

Nectar has over 100 Presets designed by professional engineers, composers, musicians and sound designers. These presets are designed to help with common mixing techniques and tools for applications like Drums, Guitar, Bass, Vocal, Utility, Special Effects and Orchestral recordings.

To access the Preset Manager, click the Global button under Presets in the lower right corner of Nectar's faceplate or press Ctrl+P.

#### **Folders**

Nectar 2 presets have been sorted and organized into separate categories or preset folders. This makes finding a good starting point for your mixing session quicker and easier. The default preset folders that are included with Nectar 2 are listed below:

- Alternative & Indie
- Classical, Folk, & Jazz
- Country
- Dance & Electronic
- Hip Hop & Rap
- Pop
- Rock
- Soul & RnB
- Special FX
- Utility
- Voice Over & Dialogue

## **Dock and Undock**

Clicking the Undock button at the bottom of the Preset Manager opens a floating window. This lets you work with the Preset Manager while still being able to view the edit windows for the individual Nectar modules. To have the Preset Manager return to the Nectar interface click the Dock button.

## **Selecting Presets**

To access the Preset Manager, click the Global button under Presets in the lower right corner of the Nectar faceplate or press Ctrl+P.

## **Loading Presets in Nectar**

You can select and audition any preset by simply clicking on the name in the list. This will activate selected Nectar modules and you will hear the effect of the preset when you playback your audio. You can easily compare several different presets just by picking a different name on the list.

## Working with Presets in Nectar

Once you have selected a preset from the list, you may choose to change the original settings within a specific module. When you change any of the original settings within a preset you will see an asterisk\* added to the beginning of the preset's name. This means that the preset has been altered. If you want to keep these settings you need to Add a new preset or Update the existing preset.

## **Working Settings**

If you modify a preset's settings, then these modified settings become your "Working Settings". Your Working Settings will always be at the top of the preset list within the preset manager. This allows you to freely preview and compare different preset options. When you are done, you can return to your Working Settings by selecting the item at the top of the Preset Manager labeled <Working Settings>. To select a preset and have it replace your Working Settings, just select the name of the new preset and click the Close button.

## Sort by Name, Last Used, or Last Modified

As a convenience you can sort presets by name, by the time/date last used, or the time/date last modified.

## Last Used

A preset is considered "used" when you select it and you close the preset system dialog. The last used time/date stamp is not updated when you are selecting and auditioning presets from the list.

### **Last Modified**

A preset is considered "modified" when you either create one or you make changes to one and update it with the Update button. Preset System

## **Adding and Removing Presets**

**Add**: Clicking this button adds the current Nectar settings as a new preset. You can type a name and optionally add comments for the preset. Note that a few keys such as \* or / cannot be used as preset names. If you try to type these characters in the name they will be ignored.

**Note**: This is because presets are stored as xml files (for easy backup and transferring).

Their file names are the same as the name you give the preset (for easy reference) and therefore characters that are not allowed in Windows file names are not allowed in preset names.

**Delete**: To permanently delete a preset, select the preset from the list and click the Remove button.

**Update**: When you click the Update button your current settings are assigned to the selected preset (highlighted). This is useful of course for selecting a preset, tweaking it, then coming back to the preset system and clicking Update to save your changes to the existing preset.

**Compare**: The Compare button is a great way to quickly hear the difference between the default settings of the most recent preset that you've selected, and the result of any changes that you have made to this preset (Working Settings). This lets you start your mixing session based on one of Nectar's default presets and then continue to tweak the settings, always comparing to where you started.

**New Folder**: The New Folder option allows you to easily add custom named folders to the Nectar preset manager.

**Show at Startup**: This allows you to set whether or not the preset manager will open automatically when starting Nectar.

**Close**: Closes the preset manager loading the last preset you selected from the preset list.

**Renaming Presets**: You can double click on the name of a preset to enter the "edit" mode and then type a new name for that preset.

## **Changing Where Presets Are Stored**

#### **Change Folder**

You don't need to store all of your presets in the default folder(s). You can create custom folders of presets for different projects, archive presets, etc. To change the folder that Nectar looks to for presets, click the Change Folder button and browse to the folder that contains the presets you want to use.

#### **Backing up Presets**

Backing up presets is as simple as copying files. Just browse to the location of your preset files. The XML files in this folder are your presets with one XML file for each preset. You can reference the preset files by their file names because the name you give the preset in Nectar becomes the name of the XML file.

#### Windows Users

Documents and Settings\<your username>\My Documents\iZotope\Nectar 2\Presets

## **Mac Users**

<username>\Documents\iZotope\Nectar 2\Presets

## **Transferring Presets**

Similar to Nectar's Styles, Presets are stored as '.XML' files inside of your Preset directory. These '.XML' files will be named and categorized as they appear inside of your Nectar Preset window.

Backing up these presets is as simple as copying files. Just browse to the location of your presets, select the directory or individual '.XML' files you would like to backup, and copy them onto your backup drive or location.

To restore any presets that have already been backed up, simply copy the desired presets back into your Nectar Preset directory, and on the next instantiation, Nectar will recognize their presence and display them in the internal Preset window.

### **Preset Directories**

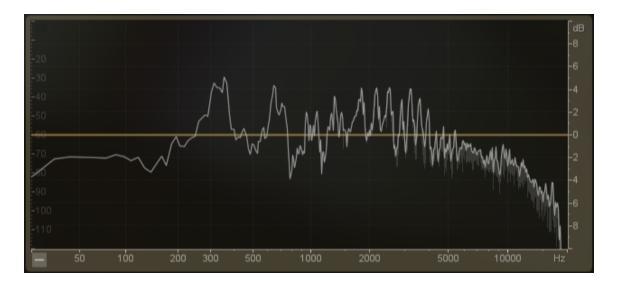
## **Windows Users**

Documents and Settings\<your username>\My Documents\iZotope\Nectar 2\Presets

### **Mac Users**

<username>\Documents\iZotope\Nectar 2\Presets

# **Spectrum**

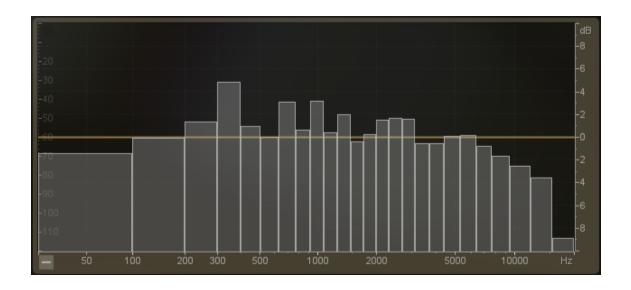


The spectrum provides a real time display of the frequencies of the mix. Nectar can show both peak hold and real-time spectra, so users can see both a peak and running spectrum simultaneously in the display.

By default, only a real-time averaging spectrum will be shown in the Equalizer.

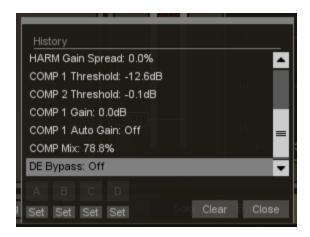
#### **Options**

You can set options for the spectrum by accessing the Visuals Option tab or right-clicking (under OS X you can also Ctrl-click) the spectrum and selecting "Spectrum Options" from the context menu.



# **History Menu**

The History menu is a powerful feature for comparing settings in Nectar. To access the History list, click on the History button in the menu bar.



As you tweak controls, each movement is captured and displayed in the History list. To go back and listen to a previous setting, simply click on the list at the point you want to audition. The changes that you've undone will show up in a lighter color.

#### Clear

You can also press the Clear button to clear the History list at any time.

#### Close

If you close the History window, processing resumes from the point you had last selected, so you can continue building on the History list from a earlier point.

#### A,B,C,D

You can assign up to four points in the History list to A, B, C and D buttons. To do this, select the point in the list you want to capture, and click on the 'Set' button below the A, B, C or D button. Clicking on the appropriate button will then recall the setting assigned to that button.

#### History

When you exit Nectar, the History list and any settings assigned to the A, B, C or D buttons will be saved so that the next time you start Nectar, the list will be remembered so you can pick up where you left off.

## **CPU Optimization**

Unlike many single task plug-ins, Nectar harnesses the power of 10 DSP processors in one plug-in. Nectar performs a significant number of calculations when running.

The combination of 64-bit processing, multiple DSP processors and real time meters dictates that it requires more CPU processing than some plug-ins.

#### **Optimizing your CPU**

If you're not using modules for processing, you should be sure to bypass them to conserve CPU power.

Try changing the buffer size and/or latency setting in your host application. When buffers are too high (latencies are too large), meters may update slowly however less stress will be placed on your CPU. As buffers become very small (latencies are very low), Nectar will consume more CPU.

You can also disable meters in their option screens. Right click on any meter to bring up the options screen for that meter.

## **Buffer Size Viewer**

The Buffer Size Viewer dialog lets you inspect the buffer sizes which your host application is using.

If you are using Nectar at low buffer sizes, you may experience unusually high CPU usage. Some host applications make it very easy to see what your buffer sizes are, but it can be more difficult to determine in others. For that reason, Nectar provides this dialog to let you find out exactly what buffer sizes are being sent to the plug-in.

To use this dialog, simply launch it by clicking the View Buffers button in the 'Host' tab of the Options screen. Then use the following controls:

#### Captured buffer sizes

This list-box shows the buffers you have captured thus far. The number on the left is the input buffer size (the host applications buffer size), and the number on the right is the output buffer size.

Push Start to begin capturing buffer sizes. Now each time a buffer is sent to the plugin, it will be added to the list of captured buffer sizes for you to see.

Push Stop to stop capturing buffer sizes. Note that buffers are sent in very rapid succession to the plug-in, and after 100 buffer sizes are captured, the capturing will automatically be stopped.

#### Clear

Clears the list of captured buffer sizes.

#### Copy

Copies the list of gathered buffer sizes to the clipboard, useful for pasting into a support e-mail if necessary.

## **Automation**

Automation allows you to specify changes to sliders over the duration of a mix. You can automate any Nectar parameter using host applications which support effects automation.

#### **Using Automation in Nectar**

The implementation and specifics of automation are dependent on the host application, so please refer to the documentation of the host app for setting up an automated mix. In general, though, you insert Nectar as an ordinary effect on a track, then in the track view of the host app, assign automation envelopes to it.

These envelopes control how Nectar parameters are changed over the course of the mix. In this case, most of your "tweaking" is done in the track view of the host app, dragging curves and envelopes as opposed to changing controls in Nectar.

When you automate a control from the track view, you can see the control on the Nectar interface move under the control of the host application. We purposely don't update the position of the control as often as we could. It takes CPU to redraw controls and it takes CPU to process audio. So we update the drawing of the control less frequently. Therefore, it may look like the control is moving in steps, but rest assured that the audio is being processed smoothly.

When automating in a track view with envelopes, but working mainly with the Nectar interface, we found it helpful to be able to "see through" Nectar so you can monitor the meters and controls but also see the track view and automation curves behind Nectar UI. So we provide an Opacity slider in the 'Visual' tab of the Options menu. This allows you to see through Nectar to monitor both what Nectar is doing and what is happening with the automation curves.

**Note**: The Opacity option is not available in all host applications, and it does require more CPU than a standard "opaque" plug-in if you set the Opacity to less than 100%.

# **Setting up MIDI Control**

Nectar's Harmony Module allows you to trigger accompanying voices in real time with a MIDI controller. In order to use the feature you must first route a MIDI signal from your controller to Nectar 2 in your DAW. The instructions to set this up vary, depending on your DAW, but the principle is the same; route a MIDI track's output to the input of the Nectar 2 plug-in. Below is a list of popular hosts with steps to setup MIDI Control:

#### **Pro Tools**

- 1. Create a new Audio Track.
- 2. Find and choose "iZotope Nectar 2" as an insert effect on the track.
- 3. In the Advanced View of Nectar, engage the Harmony module and engage the MIDI Control button.
- 4. Create a new MIDI Track.
- 5. In the MIDI Track's I/O section, assign the Input to your desired MIDI Input Device.
- 6. In the MIDI Track's I/O section, assign the Output to "iZotope Nectar 2 1 A > channel-1".
- 7. Record arm the MIDI track.
- 8. Playback audio, and use your MIDI Input Device to play and record harmonies.

## **Cubase / Nuendo**

- 1. Add a new Audio Track.
- 2. Find and choose "iZotope Nectar 2" as an insert effect on the track.
- 3. In the Advanced View of Nectar, engage the Harmony module and engage the MIDI Control button.

- 4. Add a new MIDI Track.
- 5. In the MIDI Track's I/O settings, change the Output to "iZotope Nectar 2 Midi in".
- 6. In the MIDI Track's I/O settings, change the Input to your desired MIDI Input Device.
- 7. Record arm the MIDI track, if it is not already.
- 8. Playback audio, and use your MIDI Input Device to play and record harmonies.

## Logic

- 1. Create a new Software Instrument track.
- 2. Choose Nectar 2 by clicking and holding on the Input for this new Software Instrument track. Nectar 2 will be available under "AU MIDI-Controlled Effects" from the Input effect menu.
- 3. In the Advanced View of Nectar, engage the Harmony module and engage the MIDI Control button. You will also want to engage the Solo Voices control, so that you don't experience a doubling of the input signal.
- 4. In the upper right-hand corner of the effect window (in Logic's plug-in UI container), click in the Side Chain drop-down menu, and choose the audio track that you'd like to add harmonies to.
- 5. Make sure the Software Instrument track is selected in order to route any incoming MIDI information to the Nectar 2 plug-in or click the "R" record-arm button on the Software Instrument track.
- 6. Playback audio, and use your MIDI Input Device to play and record harmonies.

## **Ableton Live**

1. Create a new Audio Track.

- 2. From the VST Plug-Ins category, choose Nectar 2 as an insert on the Audio Track
- 3. In the Advanced View of Nectar, engage the Harmony module and engage the MIDI Control button.
- 4. Create a new MIDI Track.
- 5. Show the MIDI Tracks I/O settings by clicking the I-O button in Live.
- 6. Set the "MIDI From" setting of that track to your desired MIDI Input Device.
- 7. Set the "MIDI To" setting of that track to the original Audio Track with Nectar on it.
- 8. Record arm the MIDI track and set the Monitor selector on the MIDI track to "In" instead of "Auto".
- 9. Playback audio, and use your MIDI Input Device to play and record harmonies.

### Sonar

In order to use MIDI Control in the Harmony module in SONAR and other Cakewalk hosts, you must load the VST version as a Synth. If you do not do this, you will not be able to control the Harmony module from a MIDI track or controller.

SONAR can only send MIDI information to VST plug-ins it classifies as an "Instrument" - so you need to tell SONAR to use Nectar 2 as an "Instrument" before you can use MIDI Control. After taking these steps, you'll be able to find Nectar 2 listed under your "Soft Synths" rather than "Effects," but you'll be able to add it as an insert effect to any track or bus.

Configure Nectar 2 as a "Synth"

- 1. After installing Nectar 2, go to Cakewalk's Plug-in Manager (Tools | Cakewalk Plug-in Manager).
- 2. Next, find Nectar 2 in the directory of VST plug-ins that are displayed and select it in the list. (if you don't find it here, you may need to hit Scan VST Plugins first.

- 3. Under the "VST Configuration" controls, press the "Plug-in Properties" button.
- 4. Make sure the "Configure as Synth" checkbox is selected.

Add Nectar to a Track or Bus

- 5. Right click on the Effects Bin for the track or bus you want to add harmonies to.
- 6. Go to the Soft Synths category and select Nectar 2. If Nectar 2 is not present, restart Sonar.
- 7. In the Advanced View of Nectar, engage the Harmony module and engage the MIDI Control button.
- 8. Create a new MIDI track in your SONAR project.
- 9. On the MIDI track's output dropdown menu, choose Nectar 2 from the list.
- 10. Playback audio, and use your MIDI Input Device to play and record harmonies.

## Reaper

- 1. Create a new Track
- 2. Go to the FX button for the newly created Track, and choose "iZotope Nectar 2" from your plug-ins folder.
- In the Advanced View of Nectar, engage the Harmony module and engage the MIDI Control button.
- 4. Create a new Track
- 5. Change the input of that Track to your desired MIDI Input Device.
- 6. Record arm the MIDI Track and turn Record Monitoring on so that you can hear the Harmony effect in real-time.
- 7. In the I/O settings for the original Audio Track with Nectar on it, choose the MIDI Track from the "Add new receive..." dropdown.

8. Playback audio, and use your MIDI Input Device to play and record harmonies.

## Studio One

- 1. Add a new Audio Track.
- 2. Find and choose "iZotope Nectar 2" VST as an insert effect on the track.
- 3. In the Advanced View of Nectar, engage the Harmony module and engage the MIDI Control button.
- 4. Add a new Instrument Track.
- 5. In the Instrument Track's I/O settings, change the Output from "None" to "Nectar 2".
- 6. In the Instrument Track's I/O settings, change the Input to your desired MIDI Input Device.
- 7. Record arm the Instrument track, if it is not already.
- 8. Playback audio, and use your MIDI Input Device to play and record harmonies.

## **Digital Performer**

- 1. Add a new Audio Track.
- 2. Find and choose Nectar VST as an insert effect on the track.
- 3. In the Advanced View of Nectar, engage the Harmony module and engage the MIDI Control button.
- 4. Add a new MIDI Track.
- 5. In the MIDI Track's I/O section, assign the Input to your desired MIDI Input Device.

- 6. In the MIDI Track's I/O section, assign the Output to the appropriate "Nectar 2" insert.
- 7. Record arm the MIDI track.
- 8. Playback audio, and use your MIDI Input Device to play and record harmonies.

### **FL Studio**

- 1. Go to The Mixer View.
- 2. Add Nectar 2 (VST) to the Effects section of the track.
- 3. In the Advanced View of Nectar, engage the Harmony module and engage the MIDI Control button.
- 4. Open the plug-in Settings Menu (the gear icon in the upper left hand corner of the Nectar 2 plug-in window).
- 5. In the MIDI section, choose any MIDI port that is not assigned to another device in FL Studio.
- 6. Now go to the menu (Channels | Add One) and select MIDI Out.
- 7. Open the Channel Settings for the MIDI Out you just created and assign its port to the same one you've chosen for Nectar 2.
- 8. Playback audio, and use your MIDI Input Device to play and record harmonies.

# Setting up ReWire Control

Nectar's Pitch Editor can be connected to the transport control of your DAW through ReWire technology. This allows you to use the transport controls within the Pitch Editor plugin to control playback and playhead position. In order to use this feature, you must first instantiate the "iZotope Nectar 2 Pitch Editor" ReWire Device on an empty track in your session. Once you instantiate the ReWire Device, you can feel free to hide the active track. In some DAWs, ReWire connectivity happens automatically and doesn't require anything more than simply instantiating the Nectar 2 Pitch Editor. Below is a list of popular hosts with steps to setup ReWire connectivity:

#### **Pro Tools**

Create a new Aux Track. In the Instrument plug-in category, choose "iZotope Nectar 2 Pitch Editor".

**Note**: Pro Tools 10 requires that you enable the "Enable ReWire Host Position" option in the General Options tab.

## Logic

ReWire is automatically active upon instantiating Pitch Editor.

## **Cubase / Nuendo**

Go to the "Devices" menu and select "iZotope Nectar 2 Pitch Editor ReWire". In the Device window, hit the power button to enable the ReWire device

## **Ableton Live**

ReWire is automatically active upon instantiating Pitch Editor. To have playback start at the chosen playhead position within the Pitch Editor, hold Shift when starting playback.

## Reaper

On an audio track, open the FX window and add "ReWire: iZotope Nectar 2 Pitch Editor" as an insert.

### Studio One

In the Browser, open the Instruments folder and add "iZotope Nectar 2 Pitch Editor" to a new track by dragging the device to the arrange window.

## Sonar

In the Browser, click the ReWire button, then drag "iZotope Nectar 2 Pitch Editor" into the arrange window.

Note: To use the Pitch Editor in Sonar X2 you must have ReWire set up.

## **Digital Performer**

Add "iZotope Nectar 2 Pitch Editor" as an Instrument Bundle and assign it as an input to a record armed stereo Audio or Aux track.

## GarageBand

ReWire is automatically active upon instantiating Pitch Editor.

# **Delay Compensation**

Some plug-in configurations, especially those using pitch correction, require high latencies from your host application. During playback, this can result in a delay or offset to a single track's output, and can sometimes put a track out of sync with the rest of a mix. During mix-downs and edits, this can cause a gap or silence to appear and displace the beginning of the output.

There are a couple of ways to fix this problem:

1. Try enabling the "Delay Compensation" feature in the plug-in Options screen, under the General tab. You can access the Options screen by pressing the "Options" button at the lower-right corner of the plug-in's touchscreen.

In compatible host applications, this will allow you to use a plug-in's more latency-intensive settings and DSP without delaying or offsetting your tracks. It corrects, or compensates for, the offset created by latency in both playback and mix-down.

**2.** The delay compensation freeze is designed to help in certain hosts that don't completely support delay compensation. In general, some hosts only check a plug-in's latency when the plug-in first starts up or opens.

The freeze feature will allow you to freeze the delay that Nectar is reporting to the host. This way, you can close and reopen Nectar, and the host will have the correct reading.

To find out how much delay has been imposed by your plug-in, enter your plug-in's Options screen, and under the Host tab, click on Delay Compensation. The delay contributed by your plug-in will be listed under "Total System Delay," and will be given in both samples and milliseconds.

**Note**: Delay Compensation will have no effect in some host applications, and enabling it may cause output problems in others. If you begin to hear regular "clicks" or "pops" in your output immediately after enabling this feature, it may be incompatible with your current host application.

# **Keyboard and Mouse Support**

#### Turn Keyboard Support On or Off

You can turn Keyboard Shortcuts On or Off from the General Options menu. Keyboard support must be set to Full for all Keyboard shortcuts to be available. Available options include Full (full keyboard support), Minimal (only TAB, arrow keys, and ENTER), or None (Keyboard shortcuts turned off).

#### Alt/Opt+click

If you Alt/Opt+click on the ON of a module on the faceplate, that module is made active (on) and all other modules are bypassed.

If you Alt/Opt+click on a module in the preset system that module is made active and the rest inactive.

Alt/Opt+clicking on most other controls will reset them to their default value.

#### Wheel Mouse Notes

If you have a wheel mouse, you can adjust most controls (I/O gain, sliders, etc.) by simply positioning the mouse cursor over the control and rolling the wheel. Hold CTRL to move in smaller increments and SHIFT to move in larger increments. If the wheel has no effect, try clicking on the plugin to make sure Nectar has the keyboard focus.

In the Equalizer, you can adjust the Q of a selected band or bands with the wheel.

In the History screen, you can use the wheel to scroll through the History list.

#### **Copy/Paste Support**

Right-click (under OS X you can also Ctrl-click) on any slider to bring up a context menu allowing you to copy and paste its value. You can copy/paste between sliders, even if the sliders are in different instances of the plugin. You can also copy/paste between a slider and a text editor such as Notepad or TextEdit in order to see the slider's value to a much higher precision than the plugin displays.

#### **Meters**

You can reset the peaks or averaging of the spectrum by clicking on the spectrum.

You can reset a level meter's clipping indicator by clicking on the clipping indicator (the red "over" light at the top).

# **Available Shortcut Keys (PC/MAC)**

Main	
Ctrl/Cmd + Shift + 1 through 4	Displays options dialogs:
	1: General Options
	2: Spectrum Options
	3: I/O Meter Options
	4: EQ Options
	<b>Note</b> : Under Mac OS X, 'Cmd+Shift+3' and 'Cmd+Shift+4' are taken by the operating system and cannot be used to open Nectar's Meter and EQ Options windows.
Ctrl/Cmd + P	Toggles Preset Manager
Ctrl/Cmd + B	Toggles bypass for all Nectar processing.
EQ	
Alt/Opt + click	Apply a bandpass filter at the mouse cursor to "solo" the frequencies under the cursor
Ctrl/Cmd + click (Windows)	
Command + click (OS X)	Selects multiple EQ bands to adjust them as one group
Shift + click	Constrain mouse movements (dragging an EQ band) in either the vertical or horizontal direction.
Double click	Double click on a band to reset it to its default position.
Left/Right arrow keys	Adjust the frequency of a selected band or bands. Use with Shift key for larger increments.

Up/Down arrow keys	Adjust the gain of a selected band or bands. Use with Shift key for larger increments.
Alt/Opt + up/- down arrow keys	Changes the filter type (bell, lowpass, highpass, etc.) for the selected band.
Alt/Opt + left/right arrow keys	Select the next or previous EQ band.
Ctrl/Cmd + left/right arrow keys	Adjust the Q of a selected band or bands. Use with Shift key for larger increments.
Misc	
Ctrl/Cmd + Z	Undo the last change made to a control.
Ctrl/Cmd + Y	Redo the last change made to a control.
Esc	Cancels dialog boxes.
F1	Launch help
F3	Toggle options dialog visibility
F5	Toggle History visibility
F6	Resets active panel

# **Options Menu**

# **General Options**

Graphics	
Enable Meters	Allows you to quickly turn on/off all meters
Show Tooltips	When enabled this allows informational notes to appear when the cursor/pointer is hovering on top of the features' controls
Frame Rate Lim- iter	Allows you to set the speed (frames per second) used to display and update meters. You can increase the frame rate for smoother animation. If you notice graphics performance problems in your host application, you can set the FPS value lower to limit the amount of CPU used fordrawing.
Opacity	Allows you to control the opacity or transparency of the interface. The slider will be disabled in host applications that do not support this feature.
Dim Controls When Bypassed	When this option is enabled, modules will be dimmed when bypassed. This feature helps to remind you when a module is bypassed, so that you don't make adjustments to a bypassed module unintentionally.
Solo/Bypass Indic- ators	Allows you to set the behavior of the Solo/bypass indicators. Options are Blinking or Solid.
Host	
Delay Com- pensation	Using some of Nectar's more CPU intensive settings and algorithms may result in a delay of the signal. This causes a delay when listening or mixing down. Fortunately, many applications provide "delay compensation" which is a means for Nectar to tell the application it has delayed the signal, and the host application should automatically "undo" the delay on the track. If your host application supports delay compensation, enable this option. If your application doesn't support Nectar's delay compensation feature, or skips/stutters with this option turned on, you can manually correct the delay offset in the host application (i.e. manually edit out the short delay of silence).  See Delay Compensation documentation for more info.

View Buffers	This launches the View Buffers dialog, which lets you inspect the buffer sizes which your host application is using.  See Buffer Sizes documentation for more info.
Host Sync	This launches the Host Sync Viewer window which displays information about your current session/host application including Tempo, Transport State, Time signature, etc.
Low Latency RTAS/AAX Pro- cessing	This option only appears in the RTAS/AAS versions of Nectar and by default will be disabled. When selected this option will help reduce latency in Pro Tools, but will cause higher CPU usage.
Other	
History depth	Lets you set how many levels or steps are remembered in the History dialog to control the size of the history log file.
Keyboard Support	Keyboard support must be set to full for all Keyboard shortcuts to be available. Available options include Full (full keyboard support), Minimal (only TAB, arrow keys, and ENTER), or None (Keyboard shortcuts turned off).
Check for Updates	Selects the frequency with which Nectar checks for version updates. Choose between daily, weekly, monthly, and never.
Check Now	Instantly checks if your version is currently up to date.
Auth Help	Directs to the supporting documentation for authorization.

# **Spectrum Options**

Spectrum	
Fill Spectrum	Allows you to display the real-time spectrum as a solid graph as opposed to a line graph. This option can be used to differentiate the real-time spectrum from the peak hold spectrum.
Show Peak Hold	Toggles whether Nectar displays and holds the peaks of the spectrum analyzer
Spectrum Type	Lets you select between three types of spectrums:  Linear: a continuous line connecting the calculated points of the spectrum  1/3 octave: splits the spectrum into bars with a width of 1/3 of an octave. Although the spectrum is split into discrete bands, this option can provide excellent resolution at lower frequencies.
	Critical bands: splits the spectrum into bands that correspond to how we hear, or more specifically how we differentiate between sounds of different frequencies. Each band represents sounds that are considered "similar" in frequency.
Peak Hold Time (ms)	You can click on the Peak Hold time to select between specific hold times in milliseconds or Infinite, where the peak is held indefinitely. You can reset the peaks by clicking on the spectrum.
Window Size	Controls the trade off between frequency and time resolution in the spectrum. Higher values will let you see smaller peaks in the spectrum, but the spectrum will update more slowly.
Overlap	Controls how often the spectrum updates. More overlap will cause the spectrum to update more frequently, at the expense of increased CPU usage.
Window	Selects a window type for the spectrum. In most cases the default window type will work well, but you can choose from a variety of window types. Each window type has different amplitude and frequency resolution characteristics.

# **Input/Output Options**

Input/Output	
Show Peak Hold	Turns on or off the peak hold display for the level meters
Туре	Allows you to set the type of metering used for Nectar 's I/O meters. Options include RMS, Peak and RMS+Peak.
Scale	For RMS, Peak, and RMS+Peak you can choose between dB (linear) and dB (non-linear).
Peak Hold Time (ms)	If peak hold is on, this allows you to cycle through different peak hold times. The choices are 5 ms, 250 ms, 500 ms, 1000 ms, 5000 ms, and infinite. If set to infinite, the peak value(s) will be held until you single click on the peak value readout.
Integration Time	This setting only applies if the level meter is set to RMS. It lets you specify the integration time for the RMS calculation. In most RMS meters, the integration time is set to around 300 msec.
Readout	Allows you to control what is displayed by the numeric display on top of the meters: peak or actual (real time). If set to "Max Peak", the display will reflect the meter's highest peak value encountered during processing. If set to "Current", the display will reflect the meter's current value of the level. If there are two levels displayed (Peak+RMS), we read the RMS value.
Gain When Bypassed	When Nectar is on there are many modules such as the multi- band dynamics and limiter that can affect the overall or per- ceived level of the mix. This makes it very hard to compare "Nectar on" to "Nectar bypassed".
	"Gain when bypassed" solves this problem. You can bypass Alloy and set this gain so that when you A/B Nectar on and off the apparent volume is the same. This is the only processing that is applied when Nectar is bypassed, and it is of course only applied when Nectar is bypassed.

# **EQ/Harmony Options**

Equalizer	
Soft Saturation	Turns on an algorithm which will gradually rolloff the level through EQ bands if they start to saturate. Nectar can accurately process signals with extended dynamic ranges and you can leave this off in most cases. The exception would be if you had reordered the modules so that the Equalizer was the absolute last process in the chain, in which case this option can soften any clipping that occurs in the EQ before being sent to the output.
Show Hz/dB Readout	Allows you to display a continuous readout of the mouse position (in Hertz and decibels) when in the Equalizer module.
Alt-solo filter Q	Allows you to set the default Q or width of the filter that is activated when Alt-clicking on the Equalizer.
Harmony	
Range	An important control to set to correctly, the specified Vocal Range will control how Nectar detects and analyzes vocals coming into the Harmony module. The Middle setting is appropriate for most vocal tracks, but if you notice any undesirable behavior or artifacts in the added voices, experiment with the Low and High options to achieve the best results.

# **Pitch Editor General Options**

Graphics	
Enable Meters	Allows you to quickly turn on/off all meters
Show Tooltips	When enabled this allows informational notes to appear when the cursor/pointer is hovering on top of the features' controls
Frame Rate Limiter	Allows you to set the speed (frames per second) used to display and update meters. You can increase the frame rate for smoother animation. If you notice graphics performance problems in your host application, you can set the FPS value lower to limit the amount of CPU used fordrawing.
Opacity	Allows you to control the opacity or transparency of the interface. The slider will be disabled in host applications that do not support this feature.
Dim Controls When Bypassed	When this option is enabled, modules will be dimmed when bypassed. This feature helps to remind you when a module is bypassed, so that you don't make adjustments to a bypassed module unintentionally.
Host	
Delay Com- pensation	Using some of Nectar 's more CPU intensive settings and algorithms may result in a delay of the signal. This causes a delay when listening or mixing down. Fortunately, many applications provide "delay compensation" which is a means for Nectar to tell the application it has delayed the signal, and the host application should automatically "undo" the delay on the track. If your host application supports delay compensation, enable this option. If your application doesn't support Nectar 's delay compensation feature, or skips/stutters with this option turned on, you can manually correct the delay offset in the host application (i.e. manually edit out the short delay of silence).  See <u>Delay Compensation</u> documentation for more info.
View Buffers	This launches the View Buffers dialog, which lets you inspect the buffer sizes which your host application is using.

	See Buffer Sizes documentation for more info.
Host Sync	This launches the Host Sync Viewer window which displays information about your current session/host application including Tempo, Transport State, Time signature, etc.
Enable ReWire Host Position	This option can improve the Pitch Editor's ability to accurately set playhead position in some hosts. This is recommended for Pro Tools 10 and Sonar.
Low Latency RTAS/AAX Pro- cessing	This option only appears in the RTAS/AAS versions of Nectar and by default will be disabled. When selected this option will help reduce latency in Pro Tools, but will cause higher CPU usage.
Other	
Other  History depth	Lets you set how many levels or steps are remembered in the History dialog to control the size of the history log file.
	· · · · · · · · · · · · · · · · · · ·
History depth	History dialog to control the size of the history log file.  Keyboard support must be set to full for all Keyboard short- cuts to be available. Available options include Full (full key- board support), Minimal (only TAB, arrow keys, and ENTER),

# **Pitch Editor Pitch Options**

Pitch	
	Defines the directory in which all audio, layout and note data captured in Nectar's Pitch Editor will be stored. Use the dropdown arrow to change this to a new directory, reset to the default folder, or explore currently existing data.
Captured Data Folder	If you would like to change the Captured Data Folder after capturing audio, you must copy the folder where this data is stored to the new location you have specified. By default the Captured Data Folder exists in the following locations:
	Mac:
	/Users/username/Documents/iZotope/Nectar 2/Captured Pitch Data/
	Windows:
	\Users\Usemame\Documents\iZotope\Nectar 2\Captured Pitch Data\
Piano Key Labels	Controls what notes or octaves will be displayed in the Pitch Editor's piano roll display.
Label Octaves	Controls whether or not notes will be displayed with their octave numbering
Calibration A=	By default, all pitches will be based upon a standard A = 440Hz tuning reference. If your audio is not based on this standard reference pitch, or has been moved slightly due to analog tape recording, you can adjust Nectar's Reference Pitch here.
Note Sensitivity	Use this control to adjust Nectar's behavior when 'accepting' notes during capture. With a low note sensitivity, fewer note changes will be recorded while a high sensitivity will result in more notes being captured.

# **Breath Control General Options**

Graphics	
Enable Meters	Allows you to quickly turn on/off all meters
Show Tooltips	When enabled this allows informational notes to appear when the cursor/pointer is hovering on top of the features' controls
Frame Rate Limiter	Allows you to set the speed (frames per second) used to display and update meters. You can increase the frame rate for smoother animation. If you notice graphics performance problems in your host application, you can set the FPS value lower to limit the amount of CPU used fordrawing.
Opacity	Allows you to control the opacity or transparency of the interface. The slider will be disabled in host applications that do not support this feature.
Dim Controls When Bypassed	When this option is enabled, modules will be dimmed when bypassed. This feature helps to remind you when a module is bypassed, so that you don't make adjustments to a bypassed module unintentionally.
Host	
Delay Com- pensation	Using some of Nectar 's more CPU intensive settings and algorithms may result in a delay of the signal. This causes a delay when listening or mixing down. Fortunately, many applications provide "delay compensation" which is a means for Nectar to tell the application it has delayed the signal, and the host application should automatically "undo" the delay on the track. If your host application supports delay compensation, enable this option. If your application doesn't support Nectar 's delay compensation feature, or skips/stutters with this option turned on, you can manually correct the delay offset in the host application (i.e. manually edit out the short delay of silence).  See <u>Delay Compensation</u> documentation for more info.
View Buffers	This launches the View Buffers dialog, which lets you inspect the buffer sizes which your host application is using.

	See Buffer Sizes documentation for more info.
Host Sync	This launches the Host Sync Viewer window which displays information about your current session/host application including Tempo, Transport State, Time signature, etc.
Low Latency RTAS/AAX Pro- cessing	This option only appears in the RTAS/AAS versions of Nectar and by default will be disabled. When selected this option will help reduce latency in Pro Tools, but will cause higher CPU usage.
Other	
History depth	Lets you set how many levels or steps are remembered in the History dialog to control the size of the history log file.
Keyboard Support	Keyboard support must be set to full for all Keyboard short- cuts to be available. Available options include Full (full key- board support), Minimal (only TAB, arrow keys, and ENTER), or None (Keyboard shortcuts turned off).
Check for Updates	Selects the frequency with which Nectar checks for version updates. Choose between daily, weekly, monthly, and never.
Check Now	Instantly checks if your version is currently up to date.

# iZotope Customer Support

#### How to purchase the full version of Nectar

If you are using the demo version of Nectar and would like the full version, you can purchase Nectar direct from the iZotope online store: http://www.izotope.com/nectar

Once your purchase is complete you will be sent an e-mail confirmation and a full version serial number that can be used to fully authorize your current installation of Nectar.

#### iZotope Customer Support Policy

iZotope is happy to provide professional technical support to all registered users absolutely free of charge. We also offer valuable pre-sales technical support to customers who may be interested in purchasing an iZotope product. Before contacting iZotope support, you can search our Product Knowledgebase to see if the solution to your problem has already been published.

http://www.izotope.com/support/center

#### How to contact iZotope for Technical Support

For additional help with Nectar , please check out the support pages on our web site at <a href="http://www.izotope.com/support">http://www.izotope.com/support</a> or contact our customer support department at <a href="mailto:sup-port@izotope.com">sup-port@izotope.com</a>.

iZotope's highly trained support team is committed to responding to all requests within one (1) business day and frequently respond faster. Please try to explain your problem with as much detail and clarity as possible. This will ensure our ability to solve your problem accurately, the first time around. Please include all system specs and the build/version of Nectar that you are using.

Once your support request is submitted, you should automatically receive a confirmation email from iZotope support. If you do not receive this email within a few minutes please check your spam folder and make sure our responses are not getting blocked. To prevent this from happening please add support@izotope.com to your list of allowed email addresses.

#### **International Distribution**

Support is also available from our international distributors worldwide, for any customers who purchased their iZotope products through a certified iZotope distributor. Check with your local distributor for their availability. If you would like help locating your local distributor please contact iZotope support.

http://www.izotope.com/support

Thanks for using Nectar!

- the iZotope team

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