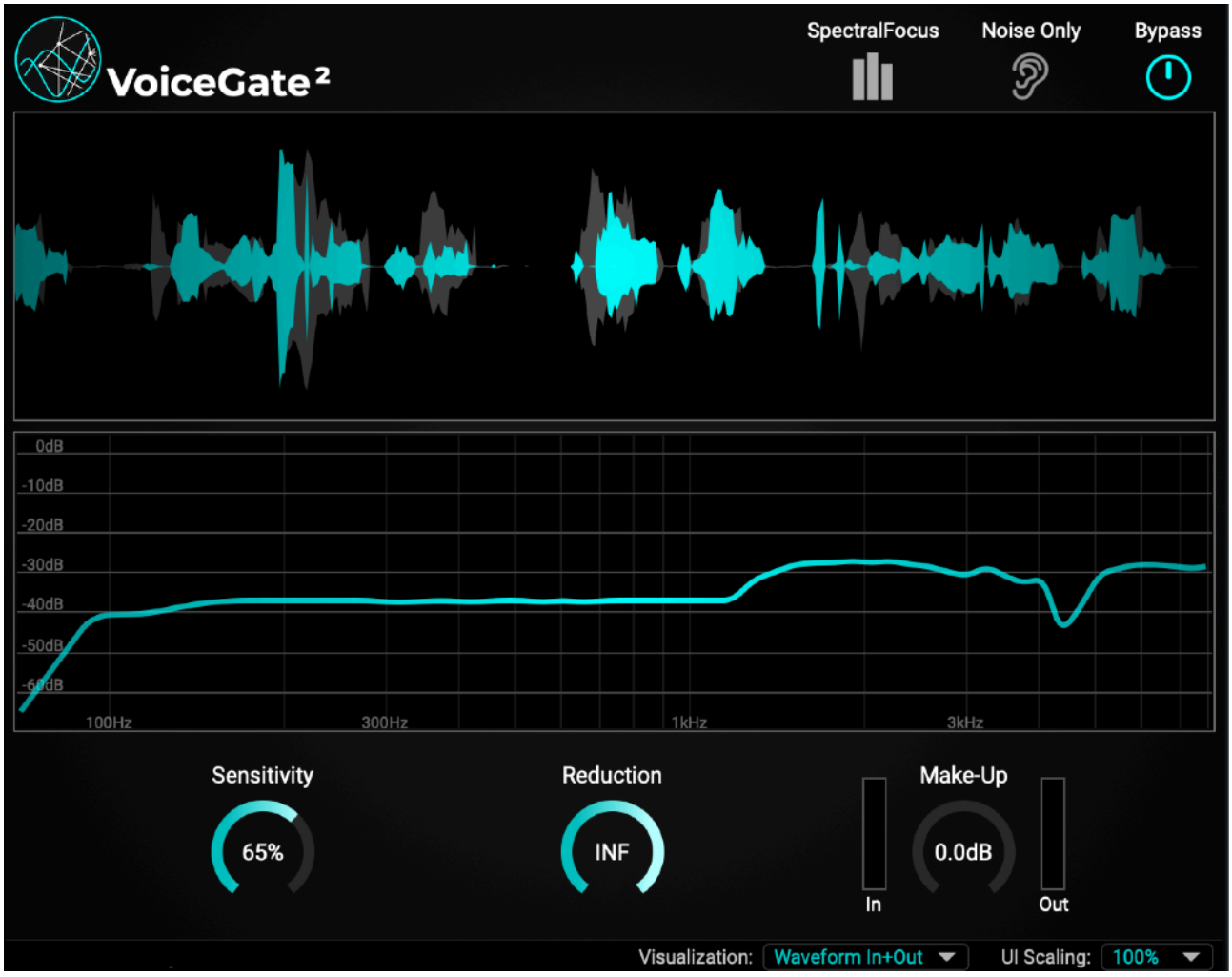
VoiceGate

NOISE REDUCTION

VoiceGate helps you to clean up your speech and vocal recordings in an easy, automated fashion. With the help of machine learning techniques like artificial neural networks the algorithm can differentiate between desired signal components and unwanted noise which can be easily suppressed.



Content

Specifications and system requirements

Supported sample rates: 44.1kHz,48kHz,88.2khz,96kHz,192kHz
Supported channel layout: Mono/Stereo
Plugin formats: AAX, VST3, AU

Generally, the plugin should work with most plugin host softwares. It has been tested and is officially compatible with: Reaper, ProTools 11 or higher, Nuendo, Cubase, Ableton Live.

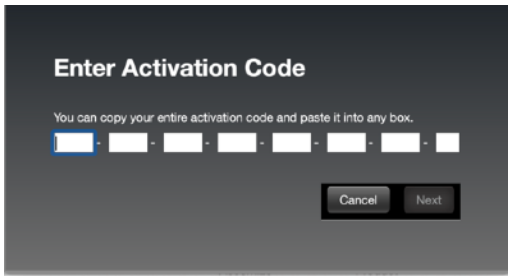
MINIMUM SYSTEM REQUIREMENTS
Windows 7 (64-bit), 4 GB RAM, Dual-Core CPU 2GHz
Max OS X 10.12, 4 GB RAM, Dual-Core CPU 2GHz

Installation and activation

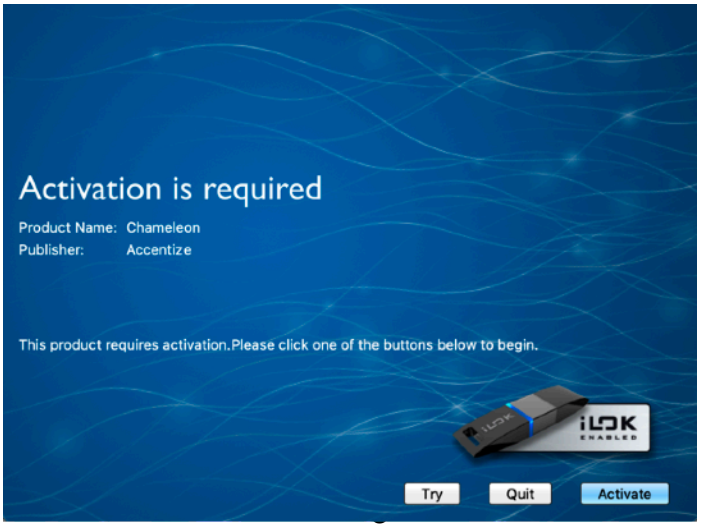
The plugin is distributed with an easy to use installer. In the installation process the usual audio plugin paths are set as a default. If you aren't using any custom path for your plugins you can leave everything as it is and just let the installer do its job. After the installation Chameleon should appear in the list of available plugins in your DAW.

To use Chameleon you will need to have a free iLok account and install the iLok license manager.

After opening the iLok license manager app login to your account. Navigate to licenses and click "Redeem Activation Code". There you need to enter the code you received after purchasing the accentize plugin.

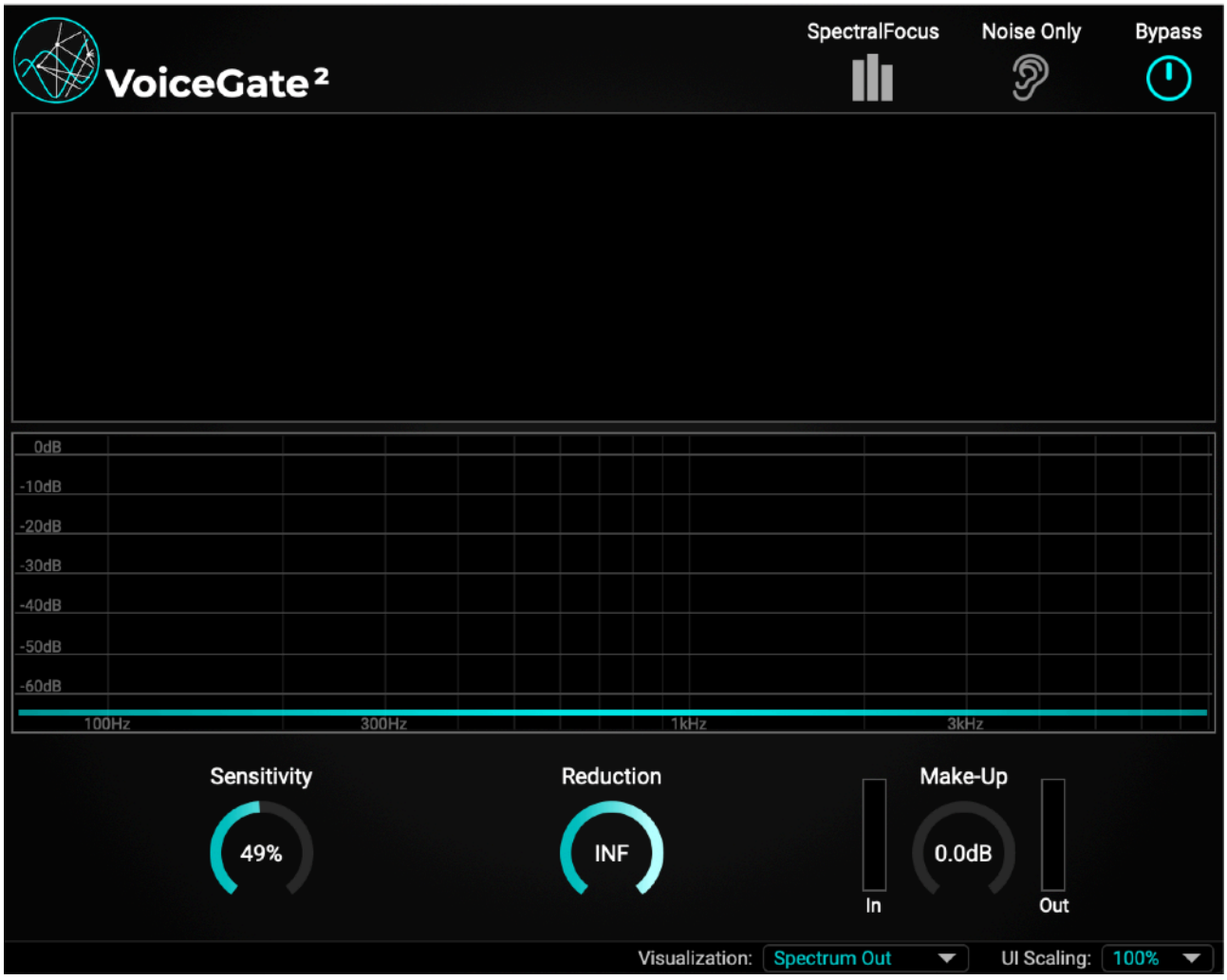


If you launch the plugin without activating it you will also see the option to use a 7-days free trial. The plugin license can either be placed on a physical iLok dongle (2nd generation or higher) or directly on a machine.

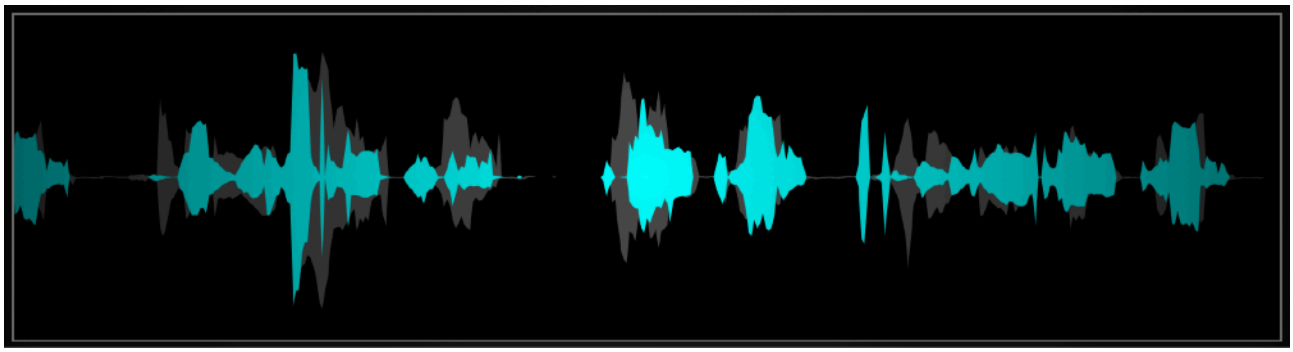


User Interface

After installation and activation the plugin will be ready to use. By using machine learning approaches the available control parameters could be kept to a minimum in order to make the usability as comfortable as possible.

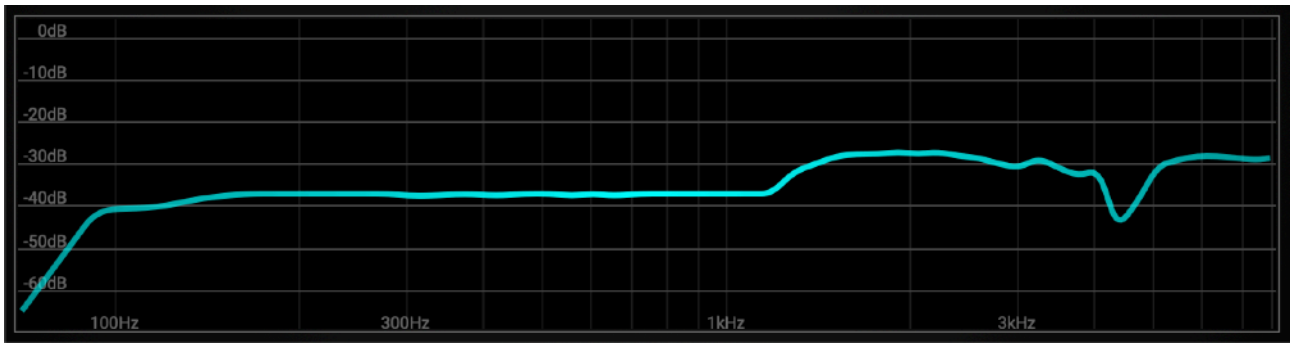


Signal View



The upper visualisation shows the signal which is passing through the plugin either as waveform or spectrogram view. In waveform view the grey signal is the input signal while the coloured part is the signal after removing noise.

Gain View



The second visualisation shows the applied gain across the frequency spectrum. While playing audio it will be shown at which time which frequency gets reduced by which amount in order to suppress noise.

Main Controls

The two main parameters are **Reduction** and **Sensitivity**:

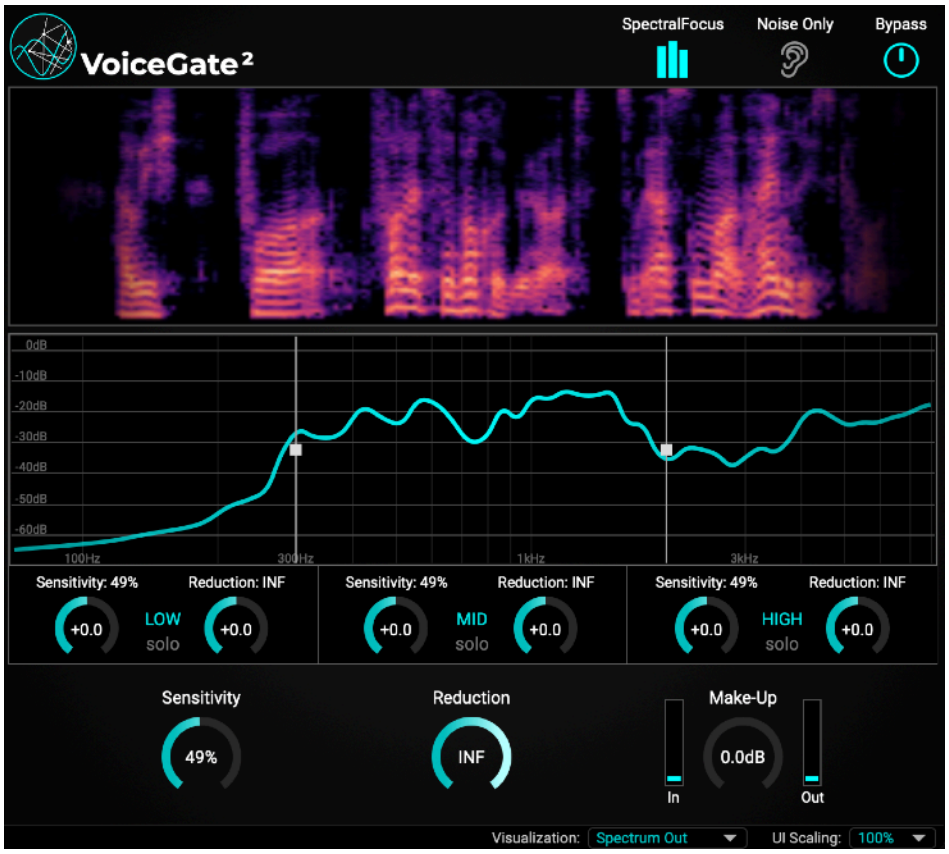
Reduction defines the limit of allowed gain reduction per frequency. If it is set to zero the signal will pass through unaffected. The default allows 15dB of maximum noise reduction for each frequency. While processing an audio signal based on the estimation, the effective gain will always lie between 0dB (no noise present) and the defined limit by this parameter.

Sensitivity controls how aggressively the algorithm differentiates between noise and speech components. With a low sensitivity the plugin will detect less noise but will preserve as much as speech as possible. Turning the parameter to higher values will result in more aggressive noise reduction. You can use this parameter to find the best trade-off between suppressing as much noise as possible while having minimum artefacts in the speech signal.

The third parameter is **Make-Up** which applies a broadband gain to the signal to adjust for a possible volume loss.

Header Bar Controls

Toggles between **Broadband** and **Spectral Focus** Mode. In Spectral Focus Mode all main parameters can be adjusted in three different bands.



The crossover frequencies of the bands can be set by dragging the white squares of the band limit lines across the spectrum:
By clicking on a solo button of a band you can solo listen to only this frequency region.

When **Difference** listening mode is activated only the suppressed noise will be audible. This mode can be useful to double-check that no speech components are removed from the signal.

The Bypass button completely bypasses all processing and the signal passed through unaffected.

How-to

In this section you get a short set of instructions how you should start if you want to de-noise a voice recording:

1. Switch VoiceGate to Broadband mode (SpectralFocus turned off)

2. For the noise reduction start with a sensitivity of 50% and slowly turn up the max reduction knob until you achieve the amount of noise reduction you are looking for.

3. If voice signal parts are corrupted by VoiceGate turn down the sensitivity. This will increase the focus on keeping the voice as good as possible (with probably less noise reduction). Alternatively, if you want a more aggressive noise reduction turn the sensitivity up.

4. If there is a narrow band noise which you want to focus on, switch to Spectral Focus Mode. Here, you can try to tackle this specific noise by adjusting the frequency bands accordingly and then increasing the reduction in this band. Note that Spectral Focus will require more computational resources!

5. You can toggle bypass on/off to further compare the processed signal with the original. The make-up gain may be useful to math the volume of the original input signal to the noise-reduced one.

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