prime:vocal

Studio-quality, every time

primevocal is an AI-driven tool for professional vocal clean-up and enhancement, available both as a standalone application and as an ARA plug-in (BETA version) for seamless integration with compatible DAWs. Whether you're dealing with less-than-ideal recording conditions or simply striving for studio-quality sound, prime:vocal ensures that every vocal track sounds polished and pristine.

The application provides essential tools, such as noise and room reduction, which work together to eliminate unwanted elements like background noise, reverb or microphone bleed. prime:vocal also effectively enhances vocal or speech recordings by intelligently reducing over-emphasized sibilances and plosives.

For advanced audio refinement, an additional dynamics feature adjusts both average and peak levels to achieve professional levelling, while a balancing control enables you to refine the signal for optimal tonal quality.

System requirements

CPU
Intel Core i (8th generation)
Apple M1+

RAM
8GB

Operating systems
Windows 10+ (64 bit)
MacOS 11+

OpenGL Version 3.2+

> ⚠ You will need admin privileges to successfully install prime:vocal.

MacOS

To start the installation process, please open the disk image **sonible_primevocal_osx_x.x.x.dmg**. This will mount the image and open a finder window showing the content of the installation package.

To install prime:vocal on your system, run the installation file **primevocal.pkg**.

The installer will now guide you through the necessary steps to install prime:vocal on your computer. The standalone version will be installed in the Applications folder, while the plug-in version (ARA) will be placed in the default locations for audio plug-ins.

Audio Unit (ARA)
`/Library/Audio/Plug-Ins/Components/`

VST3 (ARA)
`/Library/Audio/Plug-Ins/VST3/`

Windows

To start the installation process, extract the downloaded file **sonible_primevocal_win_x.x.x.zip** onto your hard disk and run the installer.

The installer will now guide you through the necessary steps to install prime:vocal on your computer. The standalone version will be installed in the Program Files folder, while the plug-in version (ARA) will be placed in the default locations for audio plug-ins.

VST3 (ARA)
`C:\Program Files\Common Files\VST3\`

Licensing system

You can select between two licensing systems: machine-based or iLok.

By creating a user account on www.sonible.com and registering your products – if they are not already visible in your Dashboard – you can manage your activations.

Machine-based

Each license key allows you to install prime:vocal on two computers with unique system IDs. These system IDs are computed during license activation.

The same license can be used by multiple users, but each user has to individually unlock the full version of prime:vocal under their account.

In case a system-ID is changed (e.g. replacement of the hard drive), you can revoke/activate the product next to the respective system-ID in the Dashboard of your sonible user account.

iLok

If you want to transfer one activation to your iLok account (iLok USB dongle or iLok Cloud are supported), just make sure the product is registered in your sonible user account. Click on the button „transfer to iLok“ next to the product in your Dashboard (www.sonible.com/my-account) and follow the instructions.

Note: 1st gen iLok dongles are currently not supported.

Unlocking

If you purchased a license for prime:vocal online, you receive your license key via email.

Machine-based unlocking

When opening prime:vocal for the first time, a notification window will be displayed asking you to unlock prime:vocal with a valid license key.

Please make sure that your computer is connected to the internet before starting the registration process.
Enter your license key and click „register.“ The software will now communicate with our server to check if the license is valid. If it is – enjoy! :)

iLok

If you transferred your license to an iLok USB dongle, simply attach the dongle to your computer. If you transferred the license to the iLok Cloud, make sure to start a cloud session prior to opening the product.

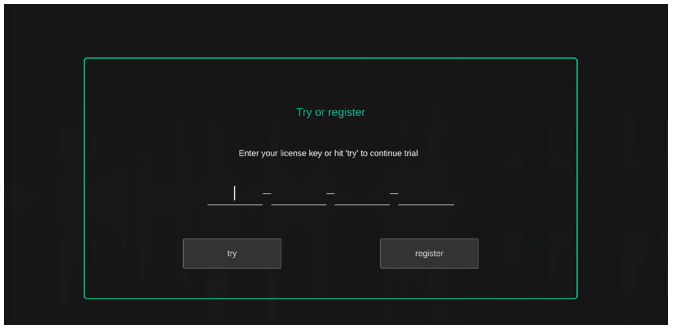
If you don’t receive the email within minutes please check your junk folder first before contacting our support (**support@sonible.com**).

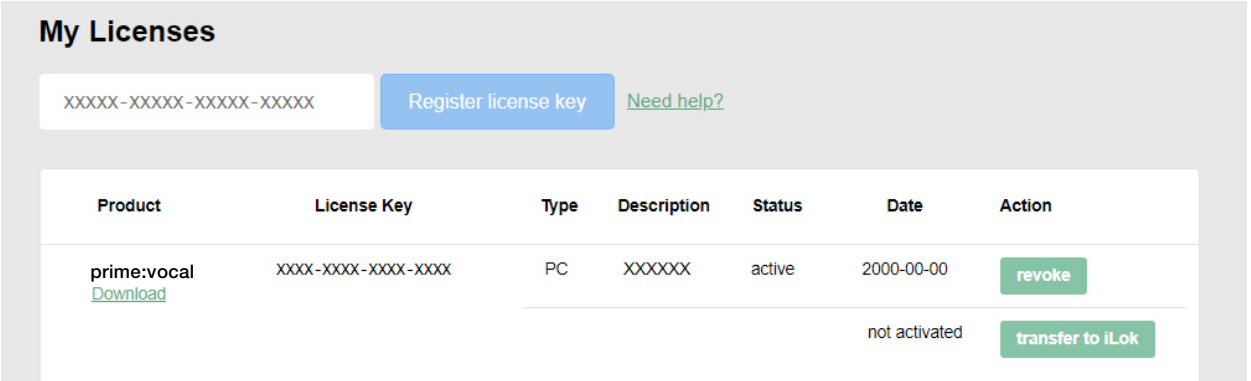
Trial version

To run prime:vocal in demo-mode, simply click ”try” and you will then be able to use prime:vocal for a couple of days without any limitations. (Please refer to our website to find out more about the current demo period).
When the demo period expires, you will need to purchase a full license in order to continue using the product.

Internet connection requirements

sonible products only need an internet connection during the trial period and for initial license activation. During the trial period, the product needs to go online every time it is used. Once the license of your product has successfully been activated, an internet connection is no longer needed.





Playback Controls & Timecode

Control the audio playback (jump to start, play/pause, stop, enable looping) and monitor the current playhead position.

A/B Comparison & Presets

Use the A/B option to compare two different parameter settings and store or load presets.

Tab Bar

Switch between different audio files of the current session (standalone application) or different tracks (ARA plug-in).

Track Overview Bar

The Track Overview Bar displays the whole audio file (standalone application) or track (ARA plug-in) and indicates the progress of the analysis process. Click anywhere into the Track Overview Bar to show the respective section.

Bypass & Diff

Bypass all processing or listen to the difference between the input and the processed output signal.

Waveform Display

Monitor the audio waveform. Zoom in to see additional signals showing the estimated noise and reverb as well as detected sibilant and plosive sections.

Zoom

Zoom in/out on the time (horizontal) axis and amplitude (vertical) axis. You can also use the mouse-wheel for horizontal zooming.

Fine-Tuning Section

Fine-tune the processing modules by applying a frequency weighting for Noise and Reverb Reduction. The Vocal Clean-up, Spectral Balance, and Dynamics modules also come with additional parameters for tweaking.

Main Control Parameters

Control the main processing modules: Noise Reduction, Room Reduction, Vocal Clean-up (sibilants, plosives), Dynamics (level riding and compression) and Spectral Balance.

Automation Panel

Monitor and control the automation of parameters.

Output Gain & Metering

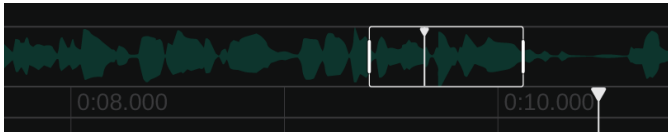
Set an output gain and monitor the RMS and peak level of the output signal.

1.Loading Audio Files

There are two ways to load audio files:

- **Loading via the File Menu:** You can load one or more audio files through the menu option “File > Import Audio File”. (For more information on the File Menu, see page 20)

- **Loading via Drag and Drop:** You can drag and drop one or more audio files directly onto the application window of prime:vocal. After loading a file, a new tab with the filename is created, and the analysis of the file starts automatically.



2. Analysis Process

The progress of the analysis process is displayed in the Track Overview Bar. Once a certain section of the file has been analyzed, you can begin working on that section. Parts that have not yet been analyzed cannot be played back until analysis is completed.

INFO: Offline Analysis Process
prime:vocal uses highly specialized neural networks to detect and correct issues in the audio file. These networks require relatively high computational resources, which means that the complete analysis of an audio file (depending on the target system’s hardware) takes approximately the length of the analyzed file (for example, analyzing a 1-minute file will take about 1 minute).

3. Start Tweaking

After the analysis is complete, you can adjust prime:vocal’s settings as needed. Any changes you make will be reflected instantly visually and in the audio playback.

4. Export Audio File(s)

Once you’re satisfied with the results, you can easily export the processed file. For more information about the export process, refer to page 19.

Sessions

As soon as one or more audio files are imported into prime:vocal, a temporary session is created.

If you want to continue working on a session at a later time, you can save the session as a prime:vocal session file (*.pvocproj) under “File > Save Session.” The session file saves the parameter settings of all currently opened audio files. Besides, all analysis data will be saved to a separate folder called “analysis” next to the session file. If you’re not planning any further editing steps after exporting the files, you can simply close prime:vocal and the temporary session will be deleted.

Note: The file size of prime:vocal analysis folders stored with a session can become quite large due to the amount of analysis data. Approximately 90 MB of analyisis data is required for 1 minute of audio material.

In addition to its standalone version, prime:vocal is also available as an ARA (Audio Random Access) plug-in BETA version. This advanced plug-in format enables deeper integration with compatible DAWs* by streamlining the workflow and eliminating the need for exporting and re-importing audio.

Note: prime:vocal can only be loaded as an ARA plug-in and not as a standard plug-in.

1. Loading prime:vocal

Load primevocal as an ARA plug-in. The process varies depending on the DAW—please refer to your DAW manufacturer for details on how ARA integration is implemented in your specific DAW.

2. Analysis Process

Once the plug-in is loaded, prime:vocal will analyze all audio clips in the track. The analysis process can take some time depending on the length of the clips. If new audio clips are added to a track, the analysis process for the new clips is automatically started.

The analyzed sections of a clip are highlighted in green in the Track Overview Bar and the overall analysis progress of all clips is displayed in a progress bar. Unanalyzed parts of the clip will remain unavailable for playback until the process is finished.

3. Start Tweaking

After the analysis is complete, you can adjust prime:vocal's settings as needed. Any changes you make will be reflected instantly visually and in the audio playback.

4. Export Audio

Once you're satisfied with the results, you can simply bounce your track or project. The rendering process (bouncing) is identical to the rendering process when using standard plug-ins.

What is ARA (Audio Random Access)?

ARA technology enhances communication between a plug-in and the DAW, allowing the plug-in to access entire audio files or clips at once, rather than working on real-time audio data.

Offline Analysis Process & Analysis Data

prime:vocal uses neural networks to detect and correct issues in the audio file. These networks require relatively high computational resources, which means that the complete analysis of an audio file (depending on the target system's hardware) takes approximately the length of the analyzed file (for example, analyzing a 1-minute file will take about 1 minute). Also note that even if a clip is cropped at the beginning or end, prime:vocal will analyze the entire underlying audio file.

The analysis data generated by prime:vocal is either stored inside the media folder of your DAW project file (if supprted by your DAW) or at a customizable folder (see General Preferences on page 22) to ensure all processing remains intact when reopening the session.

The analysis data can be quite large—approximately 90 MB per minute of audio. For this reason, it can be helpful to export a track that has been fully processed with prime:vocal, import the optimized file, and then remove prime:vocal from the project.

* The ARA version of prime:vocal (BETA) is compatible with DAWs that support the ARA protocol, such as:

- Steinberg Cubase/Nuendo
- Presonus Studio One
- Cockos REAPER
- Apple Logic Pro**

** On Apple Silicon, Logic Pro has to be run in Rosetta mode to support ARA.

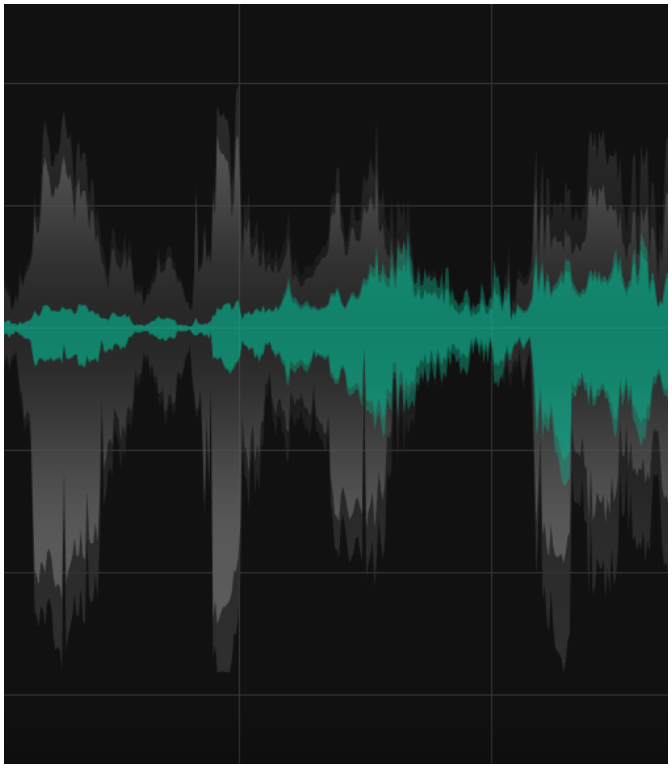
Refer to your DAW's manual to ensure ARA is enabled and properly configured.

The Main Display shows a section of the waveform of the loaded audio file (standalone application) or track (ARA plug-in).

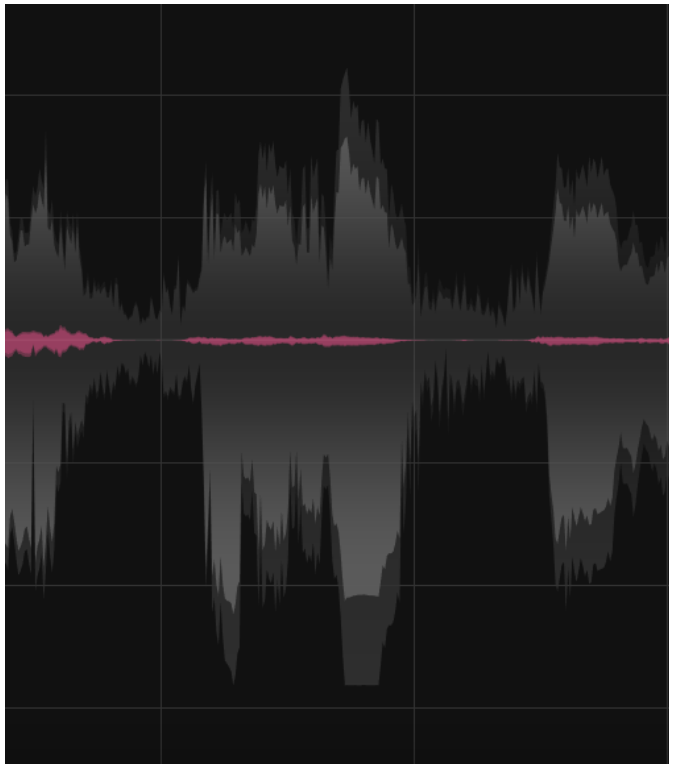
Displayed Signals

The Main Display initially only shows the input signal. As soon as the analysis for a section is completed, additional signal components (see below) as well as the output signal that change in real-time with parameter adjustments will be displayed. When zooming out, if the displayed range exceeds 120 seconds, only the input signal will be shown.

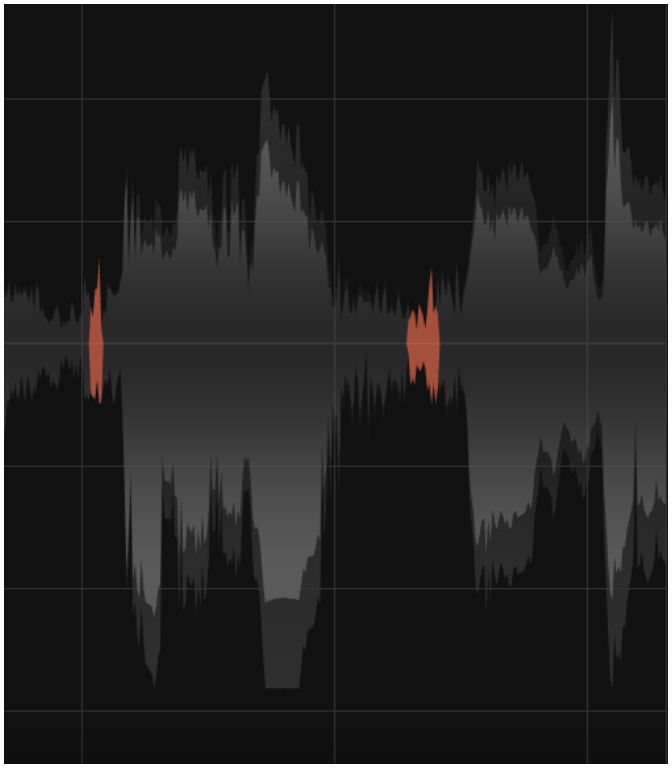
The section of the signal to be displayed can be selected through the View Window in the Track Overview Bar (see page 17). The zoom level of the displayed signal can be adjusted both horizontally (time axis) and vertically (amplitude axis).



green: Noise component



pink: Reverb component



orange: Sections with sibilants or plosives

The Noise Reduction module allows to remove all signal components or interferences from the signal that are not vocal or speech. A separate frequency weighting (see page 12) allows for fine-tuning of the clean-up process.

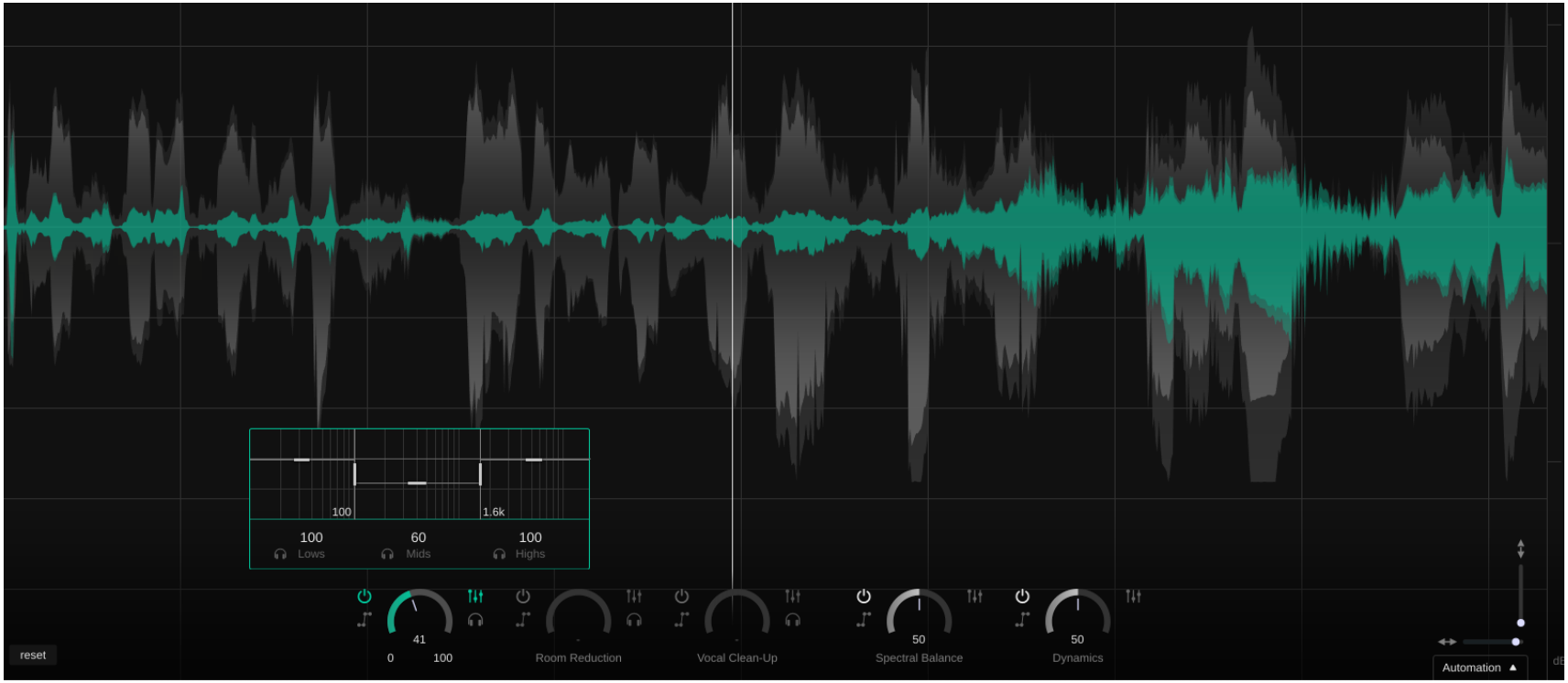
Removal of Background Noise

Typical noise components include static background noise such as fan noise, air conditioning, electrical hum, or short-term disruptive noises like door slams, unintended microphone touches, traffic noise or footstep sounds.

Removal of Crosstalk

In addition to removing typical noise, prime:vocal also allows for the removal of unwanted signal components from other instruments – so-called microphone bleed or crosstalk. This feature is particularly useful when recording multiple sources (e.g. voice and guitar) where it is challenging to acoustically separate them adequately.

Note: prime:vocal is trained to detect and remove crosstalk. While the software can also be used to extract vocal tracks from an audio mix, it was not specifically optimized for this task—therefore, results can vary significantly.



Room Reduction

The Room Reduction parameter allows you to reduce unwanted influences from the room (reflections and reverberation). A separate frequency weighting (see page 12) allows for fine-tuning of the effect.

prime:vocal has been specifically trained to detect and remove room sound as cleanly as possible in typical, suboptimal recording environments (e.g., living rooms, rehearsal spaces, live venues). While the tool can also be used to reduce very long reverberation (e.g., artificial reverb or reverberation in a church), it is possible that stronger processing in such situations may introduce unwanted artifacts.

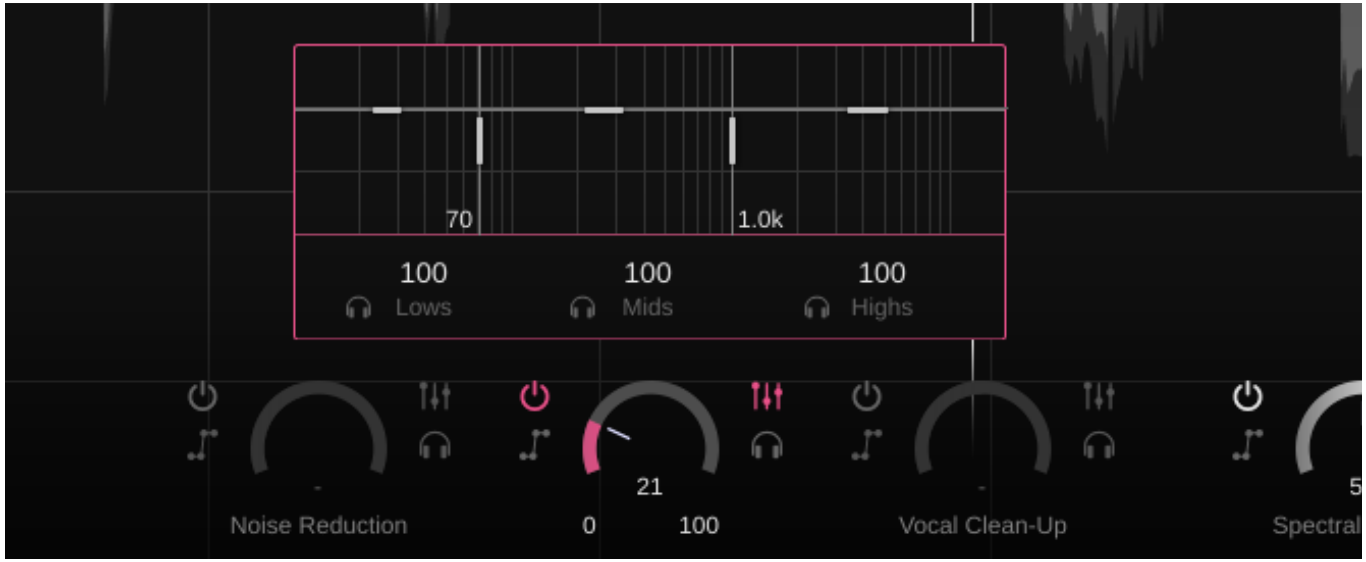
Frequency Weighting

Frequency weighting allows you to adjust the strength of the noise reduction and room reduction modules separately across different frequency ranges. For example, if a signal only contains a low-frequency noise component (e.g. the hum of a transformer), you can reduce the impact of noise reduction in higher frequency ranges. Although prime:vocal operates extremely cleanly, this additional fine-tuning option provides the advantage of avoiding potential unwanted artifacts from excessive processing in specific areas.

The horizontal lines allow for increased (>100) or decreased (<100) band impact in the corresponding frequency range. If the global noise reduction parameter is already at its maximum value (100), a band impact >100 will not have any effect, as the maximum reduction for that band is already applied.

The transition frequencies of the three frequency bands can be adjusted using the vertical lines.

The headphone symbol allows you to listen to the selected frequency range in isolation.



The Vocal Clean-up module allows you to address typical issues in vocal and speech recordings, such as overemphasized sibilants or plosives.

prime:vocal automatically detects these different signal components and allows you to adjust the strength of the reduction for each signal type separately.

De-Essing

The De-Essing module detects both the type and nature of sibilants, making it easy to manage disruptive “s,” “z,” or “sh” sounds.

- **none:** The De-Essing module is deactivated.
- **soft:** Light reduction of disruptive sibilants.
- **medium:** Moderate reduction of disruptive sibilants.
- **strong:** Strong reduction of sibilants. In some cases, this may lead to unwanted tonal colorations.

De-Plosive

The De-Plosive module detects both the type and nature of plosives, making it easy to manage disruptive “p,” “t,” or “k” sounds.

- **none:** The De-Plosive module is deactivated.
- **soft:** Light reduction of disruptive plosives.
- **medium:** Moderate reduction of disruptive plosives.
- **strong:** Strong reduction of plosives. In some cases, this may lead to unwanted tonal colorations.

The Dynamics module combines two key audio processing techniques—Level Riding and Compression—to achieve a well-balanced dynamic range in your signal. This helps ensure that your recording maintains a consistent level and corrects unwanted fluctuations.

Level Riding

Level Riding adjusts the average level of the audio signal, automatically boosting or attenuating it to keep the volume steady throughout the recording. This technique helps in managing the overall loudness and ensuring that the vocal or speech maintains a consistent presence.

- **Soft:** Provides gentle adjustments to the level, offering minimal changes. This is suitable for recordings with only slight variations in volume where a subtle enhancement is needed.
- **Medium:** Applies moderate adjustments to the level, addressing more noticeable variations in volume. Ideal for recordings with moderate fluctuations that need a bit more control.
- **Strong:** Enforces significant adjustments to the level, effectively controlling larger volume variations. This is useful for recordings with pronounced level changes or for achieving a highly consistent loudness.

Compression

The Compression reduces the dynamic range of the signal. This helps in making the audio more even and controlled, preventing peaks from being too high and softer sections from being too low. Level changes induced by the compression are automatically compensated.

- **Soft:** Provides light compression, offering minimal reduction in dynamic range. This setting is suitable for recordings where only slight control over peaks and troughs is needed.
- **Medium:** Applies moderate compression, effectively managing the dynamic range for a more balanced output. Use this setting for recordings with moderate dynamics that need a bit more control.
- **Strong:** Applies heavy compression to significantly reduce the dynamic range. Ideal for recordings with wide dynamic variations or for achieving a very controlled and uniform sound.

The Spectral Balance module aims to balance the vocal signal, removing any spectral issues or tonal coloration to ensure the signal sounds clean and present.

In the advanced settings, you can select a suitable Profile (Vocal Low, Vocal High, Speech Low, Speech High) and the Colour parameter allows you to additionally set a desired timbral character to tailor the processing to your preferences.

Profile

The Profile setting determines how the spectrum is adjusted based on the type of recording. “Vocal Low” and “Vocal High” are optimized for vocal recordings, while “Speech Low” and “Speech High” are intended for speech signals. The terms Low and High refer to the pitch of the recording, with Low suited for deeper voices and High for higher ones.

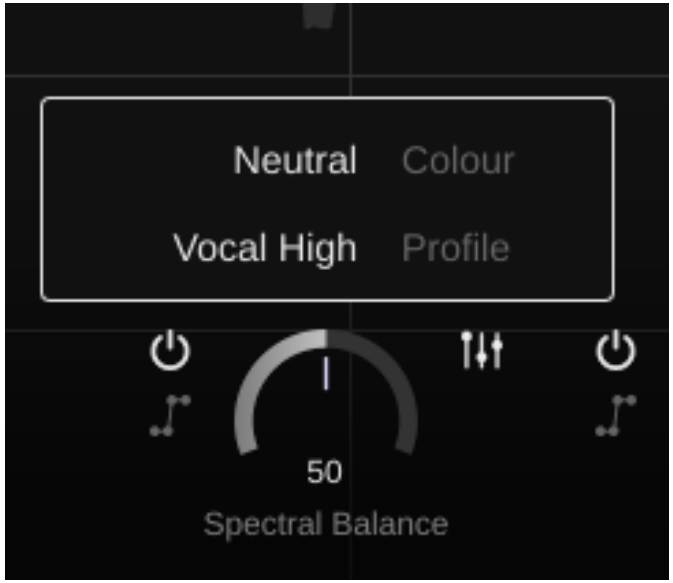
Colour

The Colour parameter allows you to tailor the tonal character of your recording. By adjusting this parameter, you can influence how the overall sound of the vocal or speech recording is shaped. The parameter offers different options (Warm, Neutral, and Bright), each of which affects the frequency balance and tonal quality as follows:

- **Warm:** The Warm setting is designed to provide a rich, full-bodied sound with a focus on enhancing the mid frequencies. This setting adds a pleasant warmth to the vocal or speech track, making it sound more intimate and smooth. The high frequencies are slightly softened to ensure a comfortable listening experience, avoiding any harshness.

- **Neutral:** The Neutral setting maintains a well-balanced sound across the entire frequency spectrum. It serves as the default setting for all profiles, aiming to preserve the original character of the recording without adding extra tonal coloration. This style is ideal for achieving a natural, uncolored sound that is suitable for a wide range of applications.

- **Bright:** The Bright setting introduces an element of airiness and brilliance to your recording by accentuating the high and high-mid frequencies. This setting is designed to make the vocal or speech sound more vibrant and present, adding clarity and definition. It’s especially useful for emphasizing details and making the recording stand out in a mix.



With automation, you can control the processing intensity of individual modules over time. Note that only the main parameters of each module can be automated. While automation is active for a module, the parameter cannot be manually adjusted using the control knob.

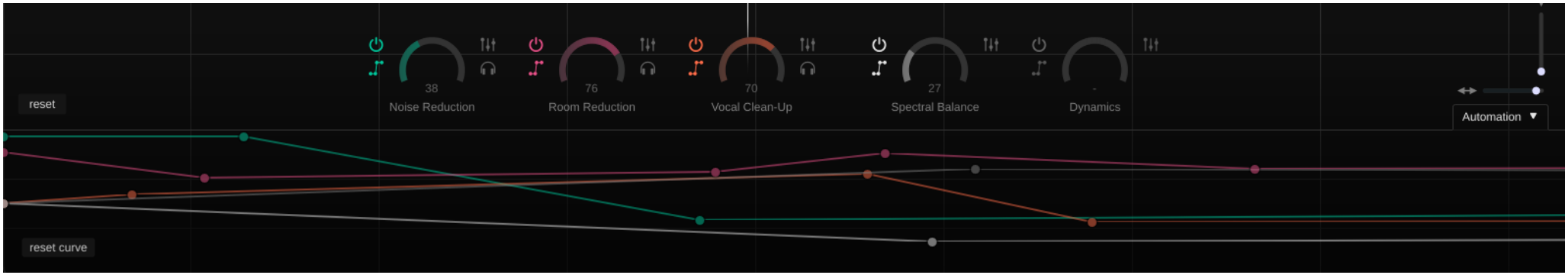
The automation window can be shown or hidden by clicking on “Automation.” The automation window displays an automation curve for each module with activated automation.

Automation Curve Interactions

- Activate the automation for a module to display the corresponding automation curve.
- A double-click on the automation curve creates a new automation point.
- A double-click on an existing automation point deletes that point.
- Move the Automation points and the line between two points with the mouse.
- Clicking “Reset All” will delete all automation points for the currently selected curve.

Automation can be used to apply specific adjustments (e.g., noise removal) only to certain sections. This could be useful, for example, if a recording contains applause that should not be filtered out.

NOTE: When using the ARA version of prime:vocal, standard DAW automation cannot be applied. Unlike traditional plug-ins, ARA plug-ins do not use classical parameters for automation. Instead, any adjustments to prime:vocal’s settings must be made directly within the plug-in interface.



Transport Controls

- **jump to start:** jump to beginning of audio file
- **play/pause:** start and pause audio playback
- **stop:** stop audio playback
- **loop mode:** enable to playback a selected region in a loop.

Tab Bar (Standalone Application)

Each tab represents a track with an instance of prime:vocal. By selecting a tab you can switch between prime:vocal on different tracks.

Track Overview Bar

The Track Overview Bar shows the entire waveform of the loaded audio file (app) or track (plug-in). The grey progress bar shows the overall analysis progress, the green audio waveform indicates that a certain section has already been analyzed.

Tab Bar (ARA Plug-in)

Each tab represents a track with an instance of prime:vocal. By selecting a tab you can switch between prime:vocal on different tracks.

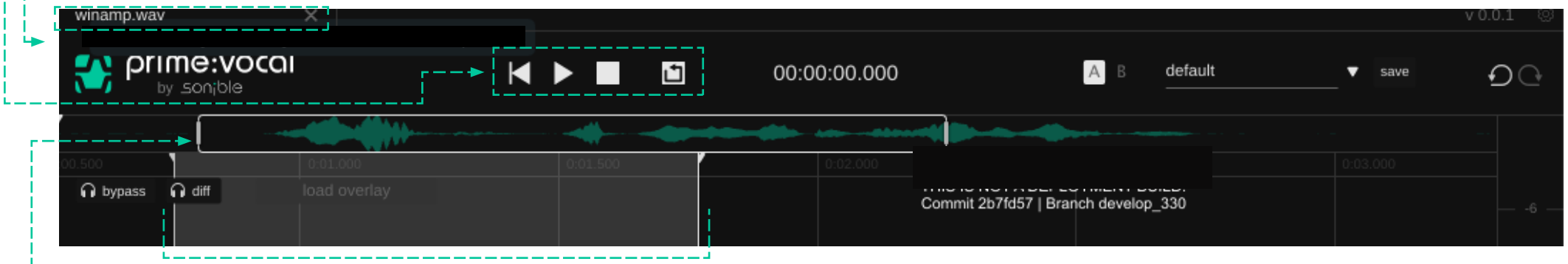
A/B & Presets

Use the A/B option to compare two different parameter settings and save or load presets.

Timeline

The timeline shows the current playback position in hours, minutes, and seconds:

- Use the mouse wheel to zoom in/out.
- Click and drag the cursor left or right on the timeline to create a loop region.



View Window

With the View Window, you can select the portion of the audio file that will be shown in the Main Display.

- Move the window left or right to jump to a different section of the audio file.
- Drag the left or right edge to enlarge or reduce the section of the audio file displayed in the Main Display.

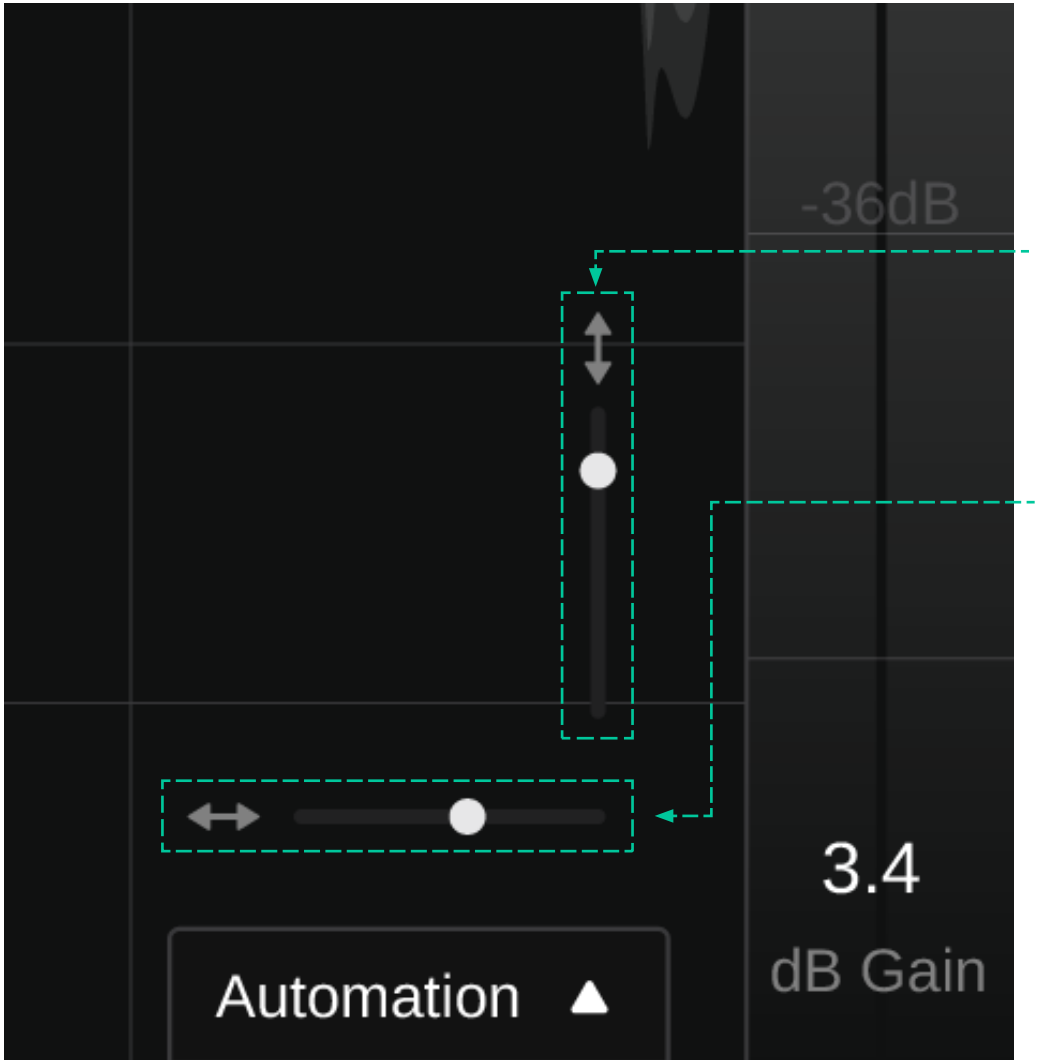
Loop Region

To play back a specific section of the signal in a loop, a Loop Region can be defined. When the loop mode is active, the playback always starts at the beginning of the loop. At the end of the loop, the playhead automatically jumps back to the beginning of the loop region without any pause.

To create a loop region, select the corresponding signal section in the Main Display or the Timeline by marking it from left to right.

Once a loop region is created, loop mode is automatically activated. You can toggle loop mode on and off by clicking the loop icon in the Transport Controls section.

- The size of the loop region can be adjusted by moving the two loop boundaries.
- The entire loop region can be shifted left or right by dragging the selected region.
- For the ARA plug-in, the loop region is synced to the loop settings of the DAW (if supported).



The section of the signal to be displayed can be selected through the View Window in the Track Overview Bar (see page 12). The zoom level of the displayed signal can be adjusted both horizontally (time axis) and vertically (amplitude axis).

Zoom Amplitude Axis

- Use the vertical zoom slider.

Note that zooming on the amplitude axis is purely visual and has no effect on the actual level of the output signal.

Zoom Time Axis

There are three ways to zoom in on the time axis:

- Use the mouse wheel while the cursor is in the Main Display Window, the Timeline, or the Track Overview Bar
- Move the edges of the View Window left or right
- Use the horizontal zoom slider

Once you're happy with the result of the processing, the edited audio file can be exported.

Export via the File Menu

Individual audio files be exported via the menu option "File > Export Audio File".

All files in a session can be exported via "File > Export All Audio Files".

A selected Loop Region of a file can be exported via "File > Export Selection".

Export Settings

When exporting audio files, the following parameters can be configured. Most parameters are available for every type of export—some parameters (e.g., specific naming schemes) are only available when exporting multiple files.

Format

*.wav
*.aiff
*.ogg
*.flac

Sample Rate

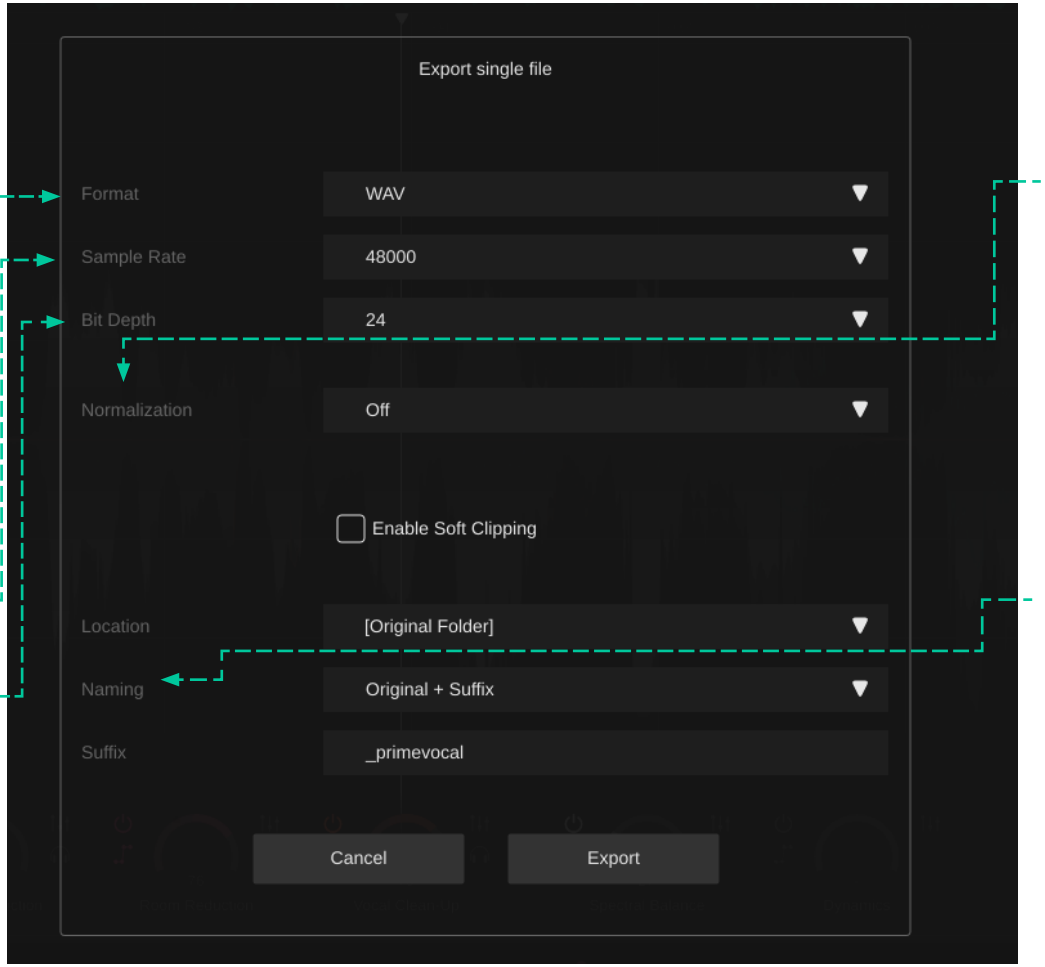
22.05kHz, 44.1kHz, 48kHz, 88,2kHz, 96kHz

Bit Depth (lossless formats only)

16, 24, 32

Bitrate (lossy formats only)

128, 192, 256, 320

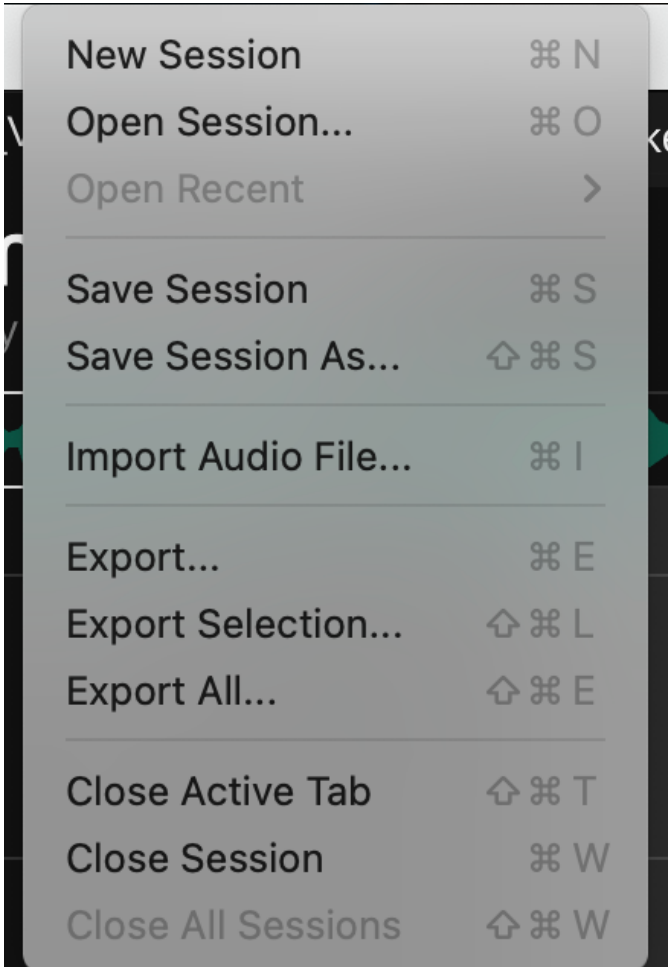


Normalization

- **off:** do not apply any normalization
- **Loudness [LUFS]:** normalize to an average loudness level
- **Peak [dB]:** normalize to a certain maximum peak level
- **Target Level:** Set a target level (LUFS or dB) for the normalization.

Naming

- **Custom:** export with custom name
- **Original:** export with original name
- **Original + Suffix:** export with original name + chosen suffix
- **Custom + Number:** custom name + sequential numbering (for multi-file export only)



File Menu

Import Audio File
Import a new audio file into the current session.

New Session
Create a new, empty session in a new application window.

Open Session
Open an existing prime:vocal session.

Save Session
Save the current session as a PVXX file.

Save Session as
Save the current session under a new name.

Remove Audio File
Remove the audio file associated with the currently active tab from the session.

Export
Export the edited audio file associated with the currently active tab.

Export all
Export all edited audio files associated with the current session.

Export Selection
Export the edited Loop Region of the currently active tab.

Close Session
Close the current session. Note that unsaved changes will be lost.

Close all Sessions
Close all currently open sessions (application windows). Note that unsaved changes will be lost.

A preset saves the settings applied to the current file.

To save a preset, click “save” next to the preset drop-down.

To load a saved preset, choose the respective preset name from the dropdown.

To delete a preset or change its name, go to the preset folder in your local file explorer.

You can easily share your presets among different workstations. All presets are saved with the file extension “.spr” in the following folders:

Preset Folders

`macOS: ~/Library/Audio/Presets/sonible/primevocal`

`Windows: My Documents\Presets\sonible\primevocal Presets`

To visit the settings page, click the cogwheel in the upper right corner or visit the menu entry “Edit > Preferences” (standalone application).

General Preferences

Size of Control Elements
Define a default size for all control elements (e.g. sliders).

Use OpenGL
OpenGL might cause rendering issues on certain computer hardware. Use this option to disable OpenGL.

Share anonymous user data with sonible
Enable to share fully anonymous user data with sonible and help us improve the application.

Store Analysis Data With Project
Enable to store the analysis data inside the media folder of your DAW project. Please note that not all DAWs are supporting this option. If the option is not supported, the Analysis Data folder (see below) will be used.

Analysis Data (Folder)
If you DAW does not support the storage in the media data folder, or if you disabled the optoin (see above), this folder will be used for your analysis data.

The default analysis data folder is the “Music” folder in the user directory:

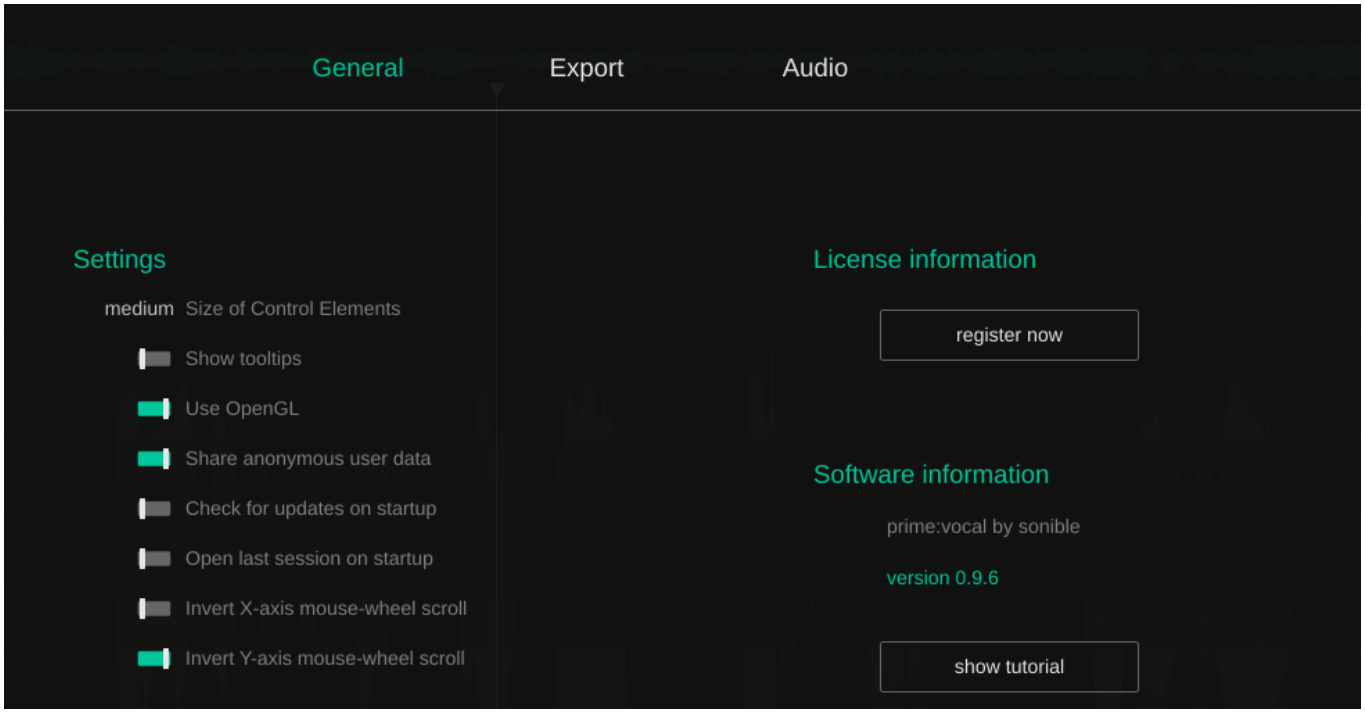
```
Mac: ~/Music/sonible/primevocal

Windows:    C:\Users\<user>\Music\sonible\
primevocal
```

License Information
This will display your license state and number (when not licensed via iLok).

Update Notice
When a new version of the plug-in is available, you’ll receive a notification.

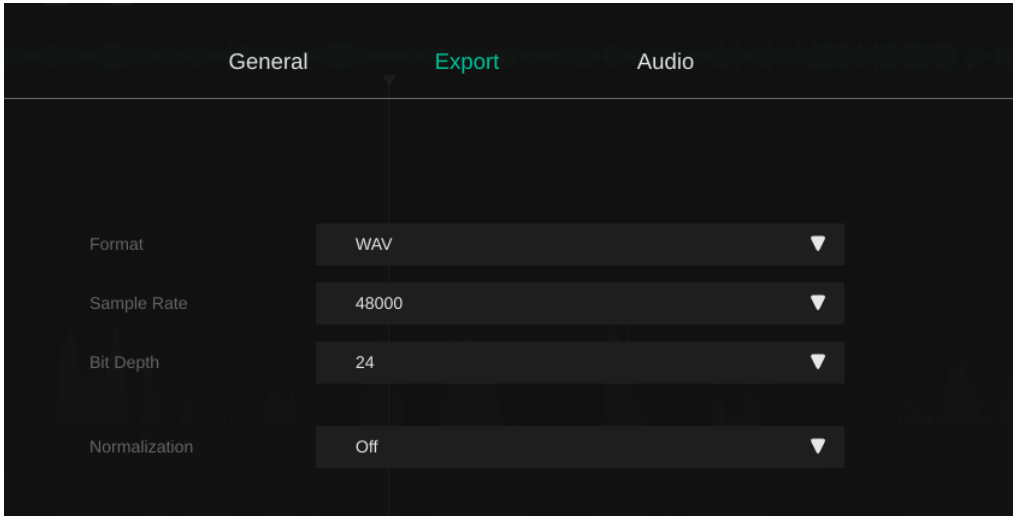
Plug-in Information
Here you can find the name and version of your plug-in. Start the welcome tour – a quick overview of the plug-in – features by clicking on “show tutorial”.



Default Export Preferences (Standalone Application)

The export section allows you to define the default export format. The settings defined here will also be used when exporting an audio file via drag and drop e.g. into a DAW.

For more details on the specific export settings, please refer to page 19.



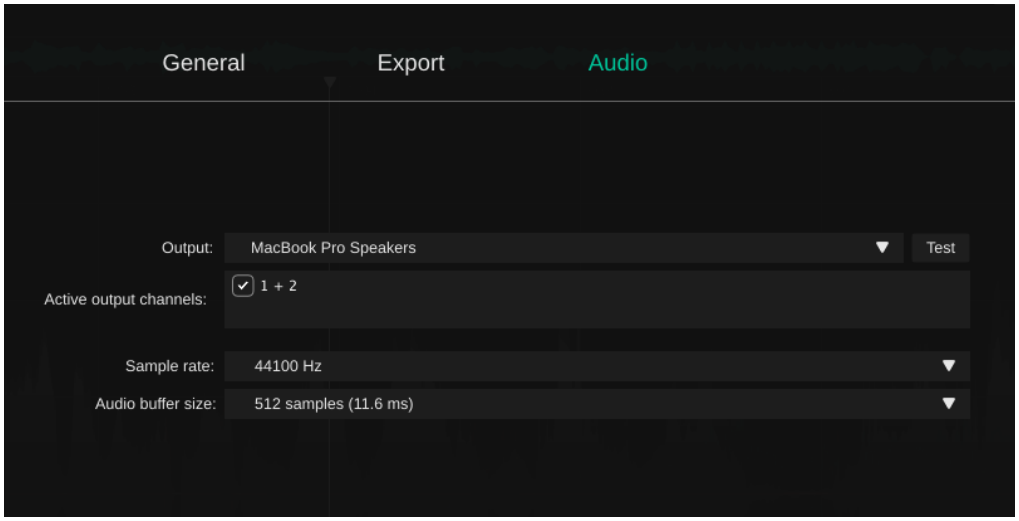
Audio Preferences (Standalone Application)

Output device
Select the audio playback device.

Active output channels
Select channels to be used for playback.

Sample Rate
Define a playback sample rate.

Buffer Size
Define a Buffer Size for your audio playback.



www.sonible.com/primevocal

ASIO COMPATIBLE

ASIO is a registered trademark of Steinberg Media Technologies GmbH

VST COMPATIBLE

VST is a registered trademark of Steinberg Media Technologies GmbH

All specifications are subject to change without notice.

Engineered & designed by sonible in Austria.

sonible GmbH
Haydngasse 10/1
8010 Graz
Austria
contact@sonible.com

www.sonible.com