

smart:gate

The content-aware gate

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smart:gate is an intelligent, content-aware gate. The plug-in automatically detects the presence of a chosen target source (e.g. vocals, keys, kick) and allows you to focus on this source when gating.

So, unlike conventional gates, smart:gate does not open or close depending on the overall level of the input signal, but it only reacts to signal components belonging to the target source. This content-awareness helps to make the gate much more stable and easier to parametrize than conventional gates and it even delivers reliable results if a background signal occasionally exceeds the level of the target source.

System requirements

CPU
Intel Core i5
Apple M1

RAM
4GB

Operating systems
Windows 10+ (64 bit)
Mac OS 10.12+

Graphics
OpenGL Version 3.2+

> ⚠ You will need admin privileges to successfully install the smart:gate plug-in.

Mac OSX

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

To install smart:gate on your system, run the installation file **smartgate.pkg**.

The installer will now guide you through the necessary steps to install smart:gate on your computer. smart:gate will automatically be installed in the default locations for audio plug-ins.

Default folders:

Audio Unit
`/Library/Audio/Plug-Ins/Components/`

VST
`/Library/Audio/Plug-Ins/VST/`

VST3
`/Library/Audio/Plug-Ins/VST3/`

AAX
`/Library/Application Support/Avid/Audio/Plug-Ins/`

Windows

To start the installation process, extract the downloaded zip-file **sonible_smartgate_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 smart:gate on your computer. smart:gate will automatically be installed in the default locations for audio plug-ins.

Default folders:

VST3
`C:\Program Files\Common Files\VST3\`

VST
`C:\Program Files\Common Files\VST\`

AAX
`C:\Program Files\Common Files\Avid\Audio\Plug-Ins`

Licensing system

You can select between two licensing systems: machine-based or iLok (USB dongle).

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 plug-in activations.

Machine-based

Each license key allows you to install smart:gate 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 smart:gate under their account.

In case a system-ID is changed (e.g. replacement of the hard drive), you can revoke/activate the plug-in 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, just make sure the plug-in is registered in your sonible user account. Click on the button „transfer to iLok“ next to the plug-in in your Dashboard and follow the instructions.

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

Unlocking

If you purchased a license for smart:gate online, you receive your license key via email.

Machine-based unlocking

When opening smart:gate for the first time, a notification window will be displayed asking you to unlock smart:gate 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 plug-in 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, simply attach the iLok to your computer. The plug-in will then be automatically registered – enjoy!

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

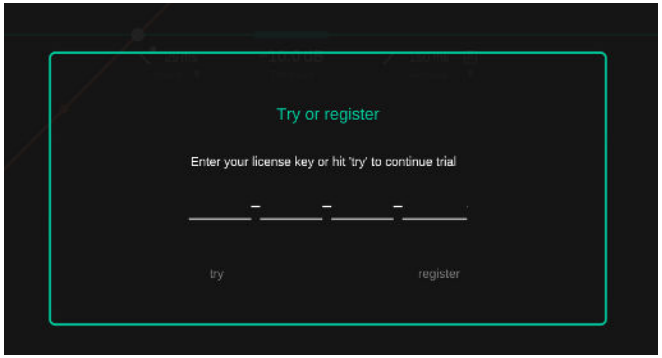
Trial version

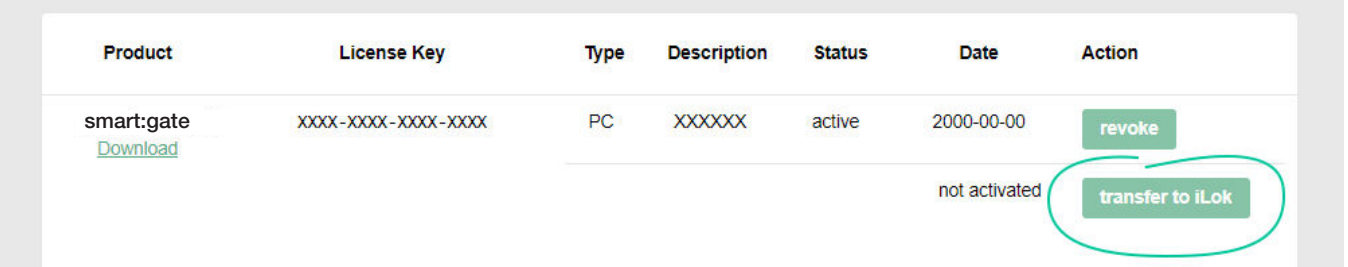
To run smart:gate in demo-mode, simply click ”try” and you will then be able to use smart:gate for a couple of days without any limitations. (Please refer to our website to find out more about the current demo period of smart:gate)

When the demo period expires, you will need to purchase a full license in order to continue using the plug-in.

Internet connection requirements

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





Detection & Gating Mode

Choose whether the gate should open (mode: gating) or close (mode: ducking) if the activity function exceeds the threshold.

Profile Drop-down

Select a target source for the gating process. smart:gate will only react to signal components belonging to this target source, while other signal components are ignored.

States

Use up to 8 different states to easily compare settings.

Level Bias

Use the level bias slider to control the level dependency of the activity function.

Activity Function

The activity function shows the current activity of the target source or, if no target was selected, of the whole input signal. The gate only opens, if the activity exceeds the chosen activity threshold.



Gating Function

The gating function displays the gate's processing state between open and closed. The function helps you to monitor your parameter changes.

Gating Parameters

Control the main parameters for the gating process (activity threshold, attack, release).

Input & Output Signal

The dark grey input signal shows the original, unprocessed input signal. The light grey output signal shows the processed signal after gating.

Impact Control

Control the overall impact of the gate and fine-tune the gating in three different frequency ranges (low, mid, high).

Metering Section

Monitor the activity of the input or target signal (green meter), the opening and closing of the gate (red meter) and the output level (RMS & peak meter).

Gating can be a tricky task. Typically, a gate is analyzing the overall level of an input signal and opens when the level exceeds a certain threshold. This can lead to problems, as the signal that should open the gate (target source) as well as unwanted background signals are often varying in level, making the setting of an appropriate level threshold difficult or even impossible.

While loud parts of the target signal may open the gate correctly, quiet parts may fall below the chosen threshold, leaving the gate closed. On the other hand, the level of background signals (noise or crosstalk from other sources) may sometimes exceed the threshold, leading to an unwanted opening of the gate.

To avoid these problems, smart:gate focusses the gating on the activity of a selected target source. The plug-in analyzes the input signal in real-time and only reacts to signal components of the target source. That way, the content-aware gate only opens when a certain source (e.g. a vocal) is actually present and stays closed otherwise.

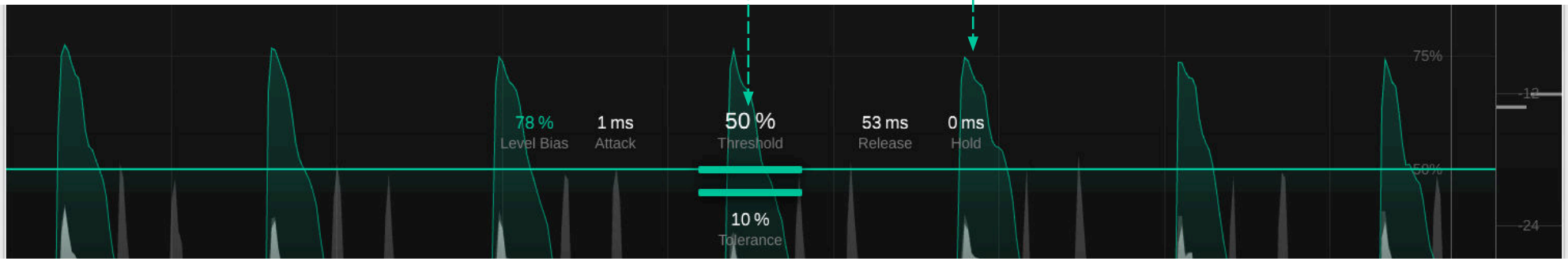
Activity Threshold

The activity threshold defines when the gate should open or close. When the activity function exceeds the threshold, the gate is activated (opened). You can set the activity threshold by dragging the line up or down or by entering an exact value. The activity threshold line is white if ”No Target” is selected and turns green, as soon as a target source has been chosen.

Activity Function

The activity function shows the current activity of the target source (green line) or, if no target was selected, of the whole input signal (white line). The level-dependency of the activity function can be controlled via the level bias parameter.

A value close to 100% means that there is a lot of activity in the analyzed (target) signal, while a value close to 0% indicates that no activity of the (target) signal could be detected.



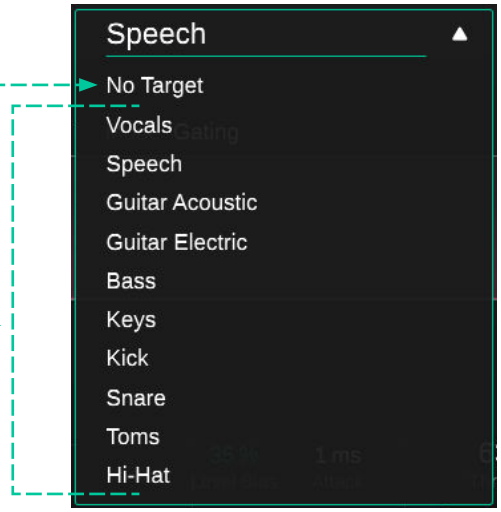
Conventional Gating

When opening smart:gate, no target source is selected in the drop-down. Without a selected target source, smart:gate will simply react to the activity of any input signal – similar to a conventional gate. This non content-aware processing mode is also indicated by a white activity function and threshold line (once a profile is selected, these elements turn green).

HINT: For conventional gating, the level-bias parameter should be set to a relatively high value to make sure that the activity function follows the overall signal level.

Target Profiles & Content-aware Gating

To use smart:gate as a content-aware gate, you have to select a target source from the profile drop-down. This profile tells smart:gate which signal to focus on. Once a taget source is selected, the activity function turns green and only shows the activity of the source signal, while all other signal components are ignored.



Initialize Content-aware Processing

Select a profile. The plug-in will now let you know that it is looking for the chosen target source to initialize the content-aware processing.

Go to some representative section of your signal (where the target source is present) and start the audio playback.

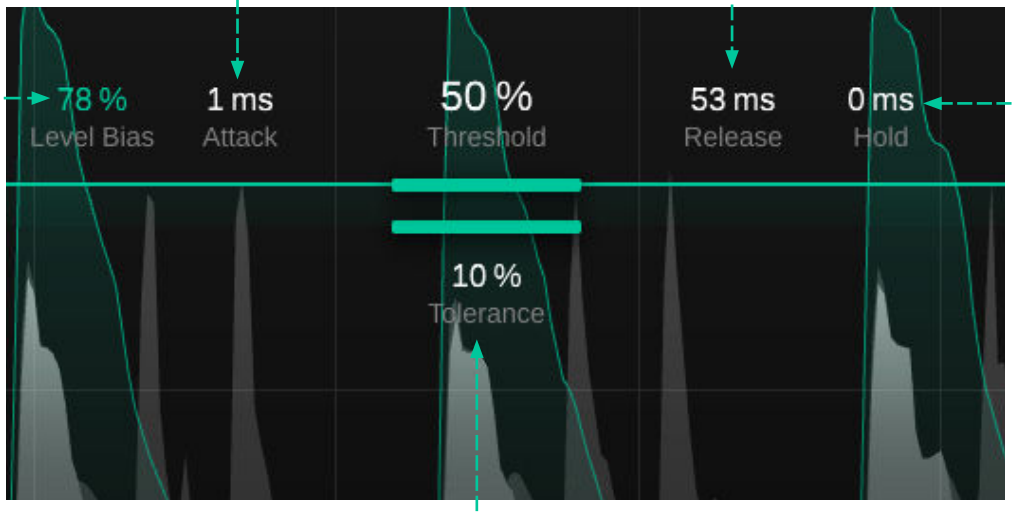
smart:gate will now try to detect the target source. Once a target source is detected, the plug-in operates in content-aware mode.

Once a profile has been initialized, you can switch back to this profile without another initialization process. If you want to re-initialize a profile, you can reset the initialized state by clicking the small icon next to the profile drop-down.

HINT: If there is no suitable target profile for your sound source or if smart:gate is not able to find your target source, you can stay in conventional gating mode and use smart:gate as a level-dependent gate.

Attack

The attack time defines how quickly the gate opens when the activity function exceeds the threshold. Make sure to use short attack times for transient signals like drums or plucked guitars. You can set the attack time by dragging the label or by entering an exact value.



Release

The release time defines how quickly the gate closes when the activity function falls below the threshold. The longer the release time, the longer the gate is kept open after the activity function has fallen below the threshold.

A long release time can help to avoid short closings of the gate in-between short pauses of a signal, while a short release time helps to make sure that the gate immediately closes once a signal is no longer present. Set the release time by dragging the label or by entering an exact value.

Release Hold

The release hold time defines how long the gate stays fully open before the release kicks in after the gate has fallen below the threshold. Set the release hold time by dragging the label or by entering an exact value.

Level Bias

The level bias controls the level-dependency of the activity function:

- A low level bias leads to a more or less level-independent activity function with very high values as soon as any (target) signal is present. This can be great for vocals or non-transient instruments, where variations in signal level should be ignored.
- A high level bias leads to an activity function that follows more or less the signal level. Increasing the level bias can be helpful if you are working with transient signals like drums, where you want to control the decay of individual drum hits.

Tolerance

The tolerance defines a transition area between the closed and open state of the gate. The tolerance is defined relative to the activity threshold. If set to 10%, the gate starts to open once 90% of the chosen threshold value have been reached. A higher tolerance leads to a smoother opening and closing of the gate, but may reduce the overall reaction time of the gate. You can define a tolerance range by dragging the line up or down or by entering an exact value.

Impact

The global impact parameter controls the overall impact of smart:gate:

- **100:** The gate fully closes in closed state.
- **<100:** The gate never fully closes, even if in closed state.
- **0:** The gate does not close at all.

Band Suppression

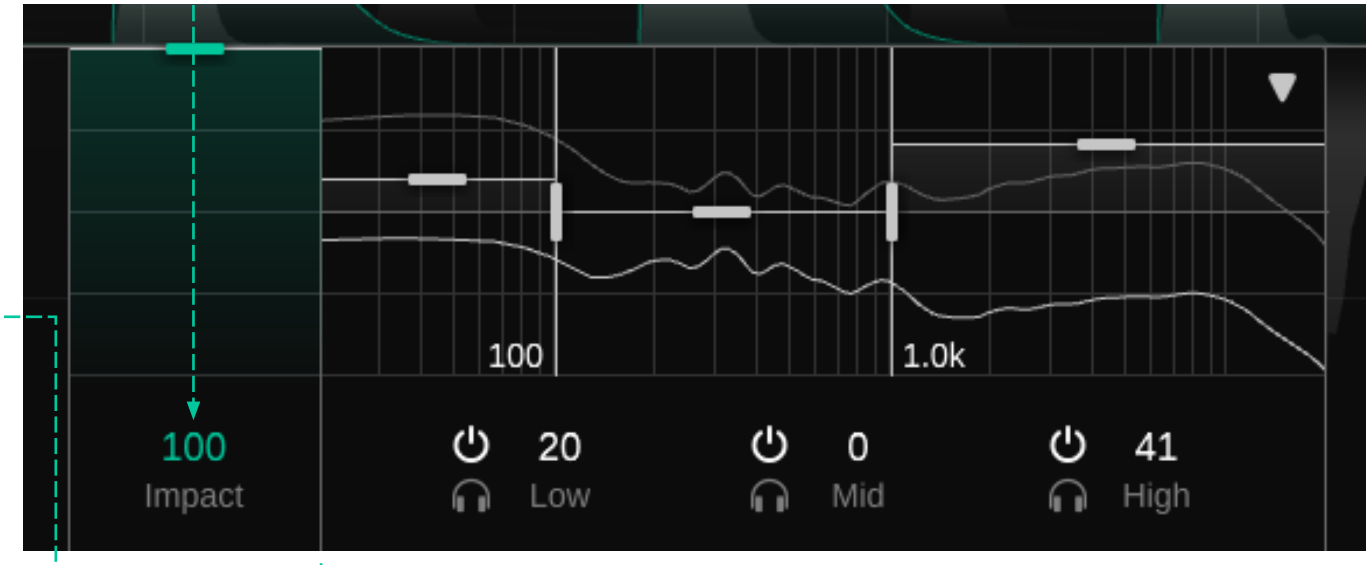
The three band suppression values for the lows, mids and highs allow to fine-tune the gating behavior for these three different frequency regions. Using different suppression values can help to shape the sound of the gated signal:

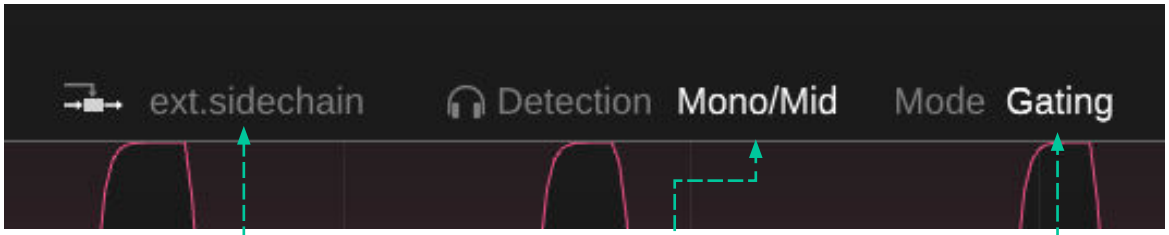
- A positive value increases the suppression strength inside the respective band. This is similar to reducing the release time for the band. If increased to its maximum value, the band stays always suppressed.
- A negative value reduces the suppression strength inside the respective band. This is similar to increasing the release time inside the respective band.

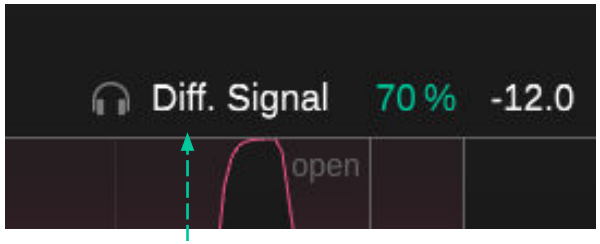
The crossover frequencies between the 3 bands can be modified by dragging the frequency lines left or right.

The processing of each band can be enable/disabled. If a band is disabled, the band will not be processed. Disabling a band is identical to settings the suppression value of the band to -100%.

The solo function allows to listen to what's happening in a specific band.







Sidechain externo & Ducking inteligente

You can use an external sidechain signal to feed the gate. The external sidechain can be used to implement “intelligent ducking”. If the detection mode is set to “ducking” (see Gating Mode), the target signal is detected in the sidechain signal (e.g. kick) and the resulting activity function can be used to duck the signal you are processing with smart:gate (e.g. bass).

Make sure to route a signal to the sidechain input of the plug-in in your DAW when using external sidechain mode.

Detection Mode

The detection mode allows to define how the signal is analyzed and processed:

- **Mono:** Analyze mono mixdown for stereo input.
- **Side:** Analyze and process only the Side signal.

Gating Mode

The gating mode defines what is happening when the activity function exceeds the threshold:

- **Gating:** Gate closes below threshold and opens above threshold
- **Ducking:** Gate closes above threshold and opens below threshold (target source is removed)

Diff. Signal

Listen to the difference between the input and the output signal. When the Diff. Signal mode is active, the signal history will highlight the delta signal.

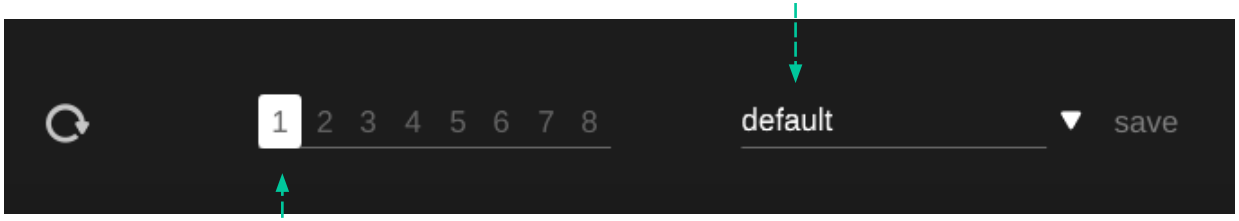
Preset

A preset saves the settings of the plug-in, including all currently loaded reference tracks. This means that a preset can be used to compare multiple different tracks (e.g. of an album) against the same custom references.

- 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
OSX: ~/Library/Audio/Presets/sonible/smartgate
Windows: My Documents\Presets\sonible\smartgate



States

You can use states to store multiple parameter settings. States allow for easy comparing between different settings (similar to the A/B feature of most plug-ins)

Working with states

1. Each state is initially empty (default parameters settings of smart:gate).

2. Select a state by clicking the respective state button.

3. You can easily copy one state to another state via drag and drop. This may be useful if you want to compare different changes to a certain setting.

4. To clear a state, hover over the number and click the trash can icon that will appear below.

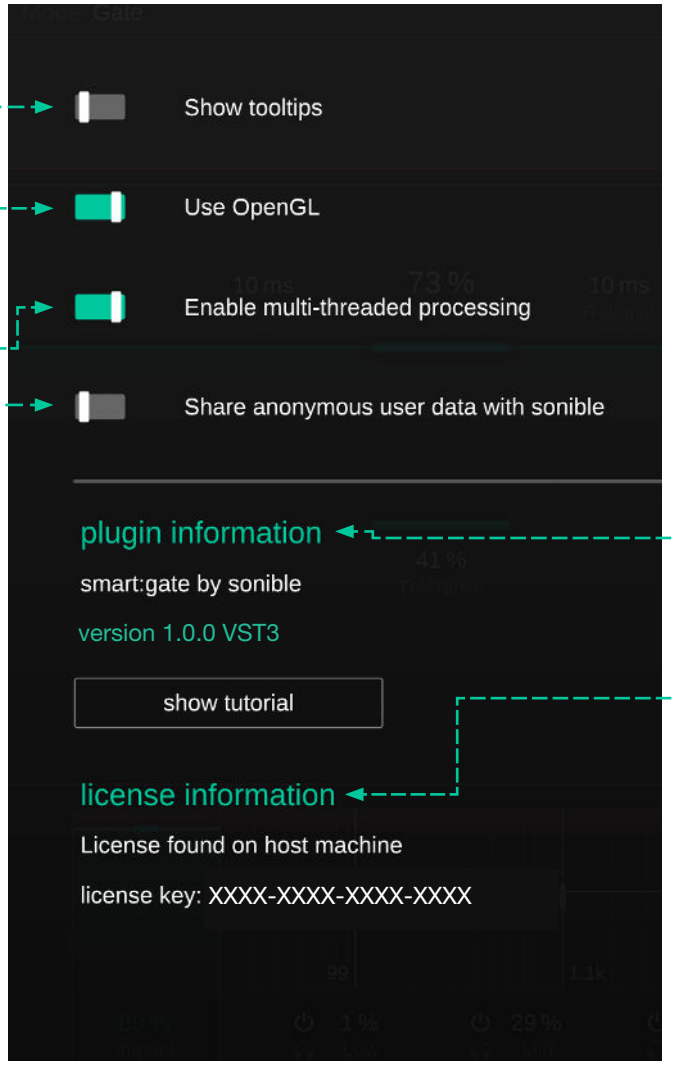
To visit the settings page, click the cogwheel in the upper right corner.

Show tooltips
Enable/Disable tooltips on hover.

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

Enable multi-threaded processing
Multi-threaded processing typically improves the CPU performance, but can lead to issues on certain systems. Use this option to disable multi-threaded processing if you are experiencing frequent “AI processing” errors.

Share anonymous user data with sonible
Enable to share fully anonymous user data with sonible and help us improve our plug-ins.



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”.

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 here and it’s also indicated by a little dot on the cogwheel in the main view of smart:gate. Click on the green text to download the latest version.

www.sonible.com/smartgate

All specifications are subject to change without notice.

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