STLTONES

Tonality - Josh Middleton Plugin Suite User's Guide

Version 1.0 For Mac & Windows

STL Tones is proud to present **Tonality: Josh Middleton.**

The exclusive guitar plug-in suite was developed using **Josh Middleton's** personal equipment; everything from his go-to pedals, amplifiers, and cabinet setups has been modeled for his Tonality plug-in, capturing the sonic complexity of what make's his guitar tones so distinctive.

Using the most advanced modeling algorithms, our software uses internal circuit simulations from the schematics of Josh Middleton's specific amplifiers, including any modifications the amps may have, allowing users to experience real-time simulations of **Josh Middleton's** guitar setup.

• Low Latency Audio Interface (ASIO / Core Audio compatible). • High-Z (high impedance) instrument input.
• Digital Audio Workstation (**DAW**) or a standalone plugin host.

Windows requirements:

• Windows 7 32/64 bit.
• Intel Core 2 Processor Family or better.

Mac requirements: • OS X 10.9.0 +

• Intel Core 2 Processor Family or better.

We recommend an Intel Core i5 processor or better for the best user experience.

During recording or monitoring, we recommend a buffer size of 128 samples or lower, this is to minimize latency and improve the play-through experience. This can be set in your audio interface setup utility or in your current DAW audio settings.

- To use STL Tones software you need an audio host which can load VST, VST3, Audio Unit (AU), or AAX plug-ins.

- You can also run STL Tones software as a Standalone application.

- This plugin officially supports the following software host:

    Pro Tools 12 +: Mac & PC: AAX Native

    Logic Pro 9 & 10 (X) 64 bit: Mac: Audio Units

    Cubase 9 & 10: Mac & PC: VST/VST3

    Ableton Live 9 & 10: Mac: Audio Units/VST/VST3; Windows: VST/VST3

    Reaper 5.x: Mac: AU/VST/VST3; Windows: VST/VST3.

Note: This plugin comes in **64-bit** format for both Mac and Windows, it needs **64-bit hosts** to function properly. 32-bit hosts and operating systems are not supported.

- Always use the high impedance (Hi-Z) input of your sound card. This will ensure less noise and signal loss. Most real (pre)amplifiers and stomp boxes have an input impedance of 1MegaOhm, so it would be a good idea to get a sound card with a 1MegaOhm input impedance to use this plugin.

- Always make sure to have the highest input signal before the AD conversion, avoiding clipping.

- Amp sims and stomp box simulators are not noisy, they do not add noise. In fact, they're a lot less noisy than real hardware. If you have noise issues, check your guitar's electronic circuit, cables, and sound-card settings.

- In almost all cases, amp sims and stomp box simulators don't introduce noticeable latency. STL Tonality doesn't introduce any noticeable latency. If you're experiencing latency issues, check your sound-card settings (specifically reduce the "Input Buffer Size to 128 samples").

STL Download Center

Please visit https://www.stltones.com/pages/file-downloads where you will find the latest installers for your product.

STL License System

License Information

• Your Activation License code will be in the confirmation email you received after your purchase.

• To login into your user account, go to www.stltones.com and click on the "Login" icon in the upper right-hand corner. If you don't have a user account, create one by clicking "Create Account" inside the same login window.

• Multiple Machines: Each activation code can be used on up to 3 different machines, however, the associated email will always be the email entered during your first activation. If you try to activate the same code on a 2nd machine with a separate email, the activation will fail.

• Trial Limitations: Only one trial can be requested per account or machine.

• The activation process is similar for trials and full licenses and is laid out below.

Full License (Online Activation)
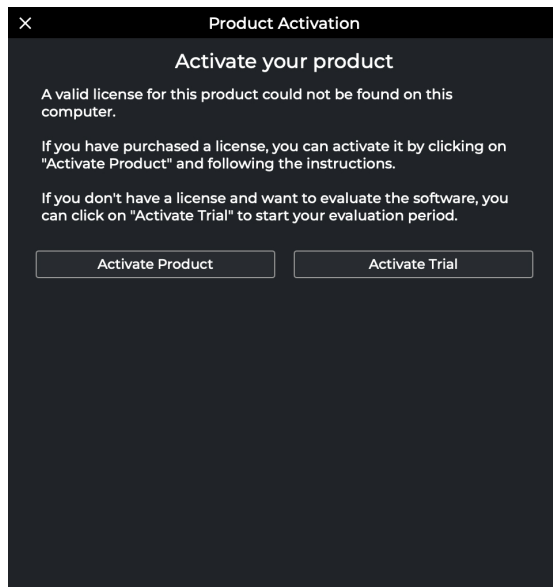
• When you first open the plugin, you will be prompted to activate a license. Select **"Activate Product"**.
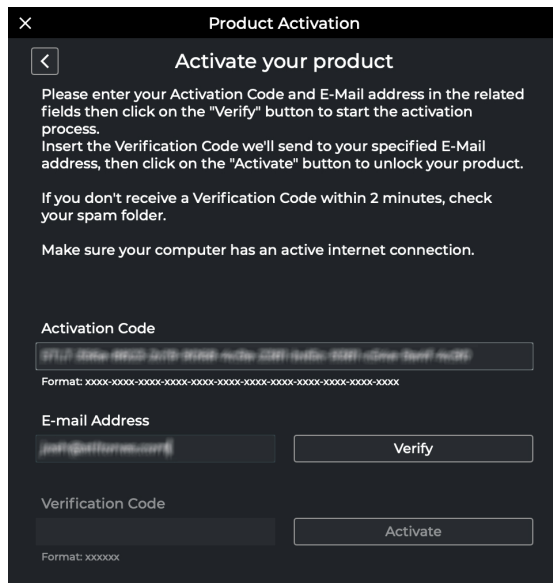
• This will take you to the activation screen. Enter your activation code and email address and click **"Verify"**.

Product Activation

Activate your product

Please enter your Activation Code and E-Mail address in the related fields then click on the "Verify" button to start the activation process.
Insert the Verification Code we'll send to your specified E-Mail address, then click on the "Activate" button to unlock your product.

If you don't receive a Verification Code within 2 minutes, check your spam folder.

Make sure your computer has an active internet connection.

Activation Code

[▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓] ✓

Format: xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx-xxxx

E-mail Address

[▓▓▓▓▓▓▓]   [Verify]

Verification Code

[▓▓▓▓]   [Activate ⟳]

Format: xxxxxx

Activated

Your product is now activated on this computer.

You can activate this product on 2 additional machines.

[Done]

• You will receive an email to the address you provided from activations@stltones.com This email contains your 6-digit verification code. *Note: Check your spam folder if you didn't receive a verification code.*

• Copy this code from your email and paste it into its field in the Activation menu, then click **"Activate"**.

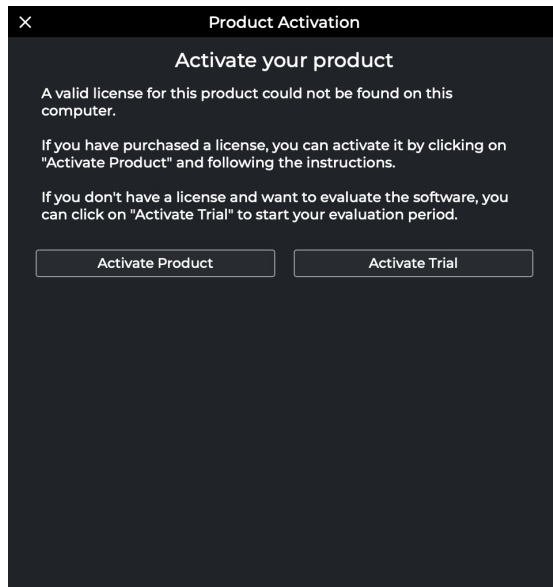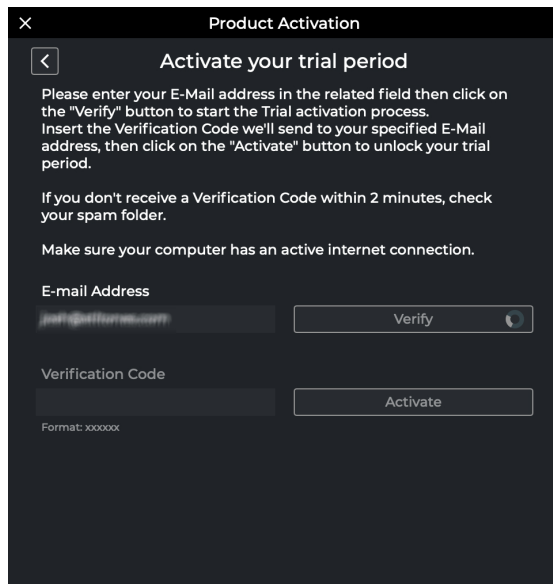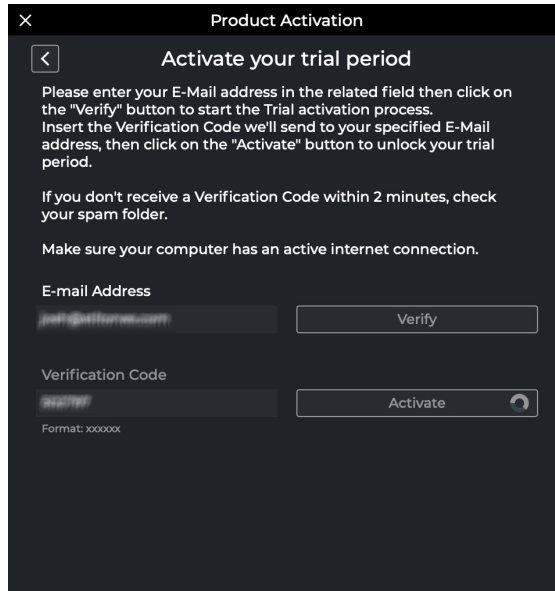• You have now unlocked your full license!

Trail License (Online Activation)

• When you open the plugin, you will be prompted to activate a license. Select **"Activate Trial"**.

• This will take you to the trial activation screen. Enter your email address and click **"Verify"**.

• You will receive an email to the address you provided from activations@stltones.com This email contains your 6-digit verification trial code. *Note: Check your spam folder if you didn't receive a verification code.*

• Copy this code from your email and paste it into its field in the Activation menu, then click **"Activate"**.
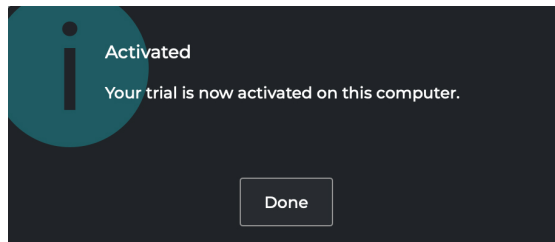
• You now have a 10-day trial license!

Footer Controls

Input and Output Controls & Input Level Listener:

Input will affect how much signal the plugin will receive. This will affect the amount of distortion range of the Gain pots in the Amplifier and Stomp Sections. Adjust according to your purposes and input signal levels. Output will affect how much signal the plugin will feed out to your DAW channel. Meters will show if input or output signals are clipping by appearing red.

Next to the Input control, you will see a 'bulb' button. Click on this button to open the **Input Level Listener**.
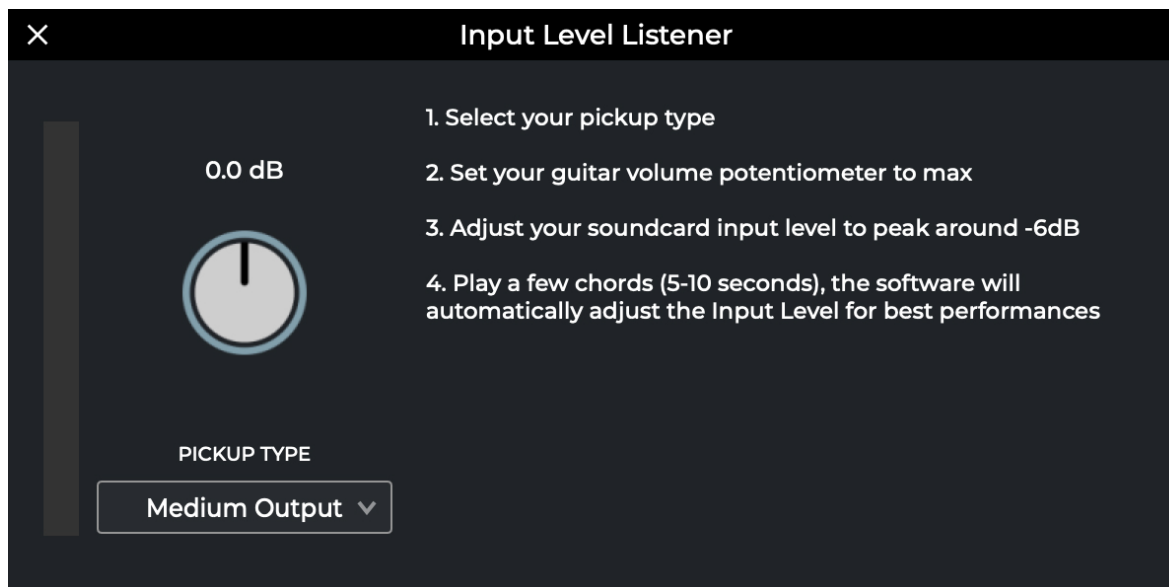
Input Level Listener:
When you are not sure how to set the plug-in input level correctly, the Input Level Listener will ease the process for you.
Once you open the panel, the plug-in will listen to your input signal and adjust the Input Level accordingly.
The first thing you need to do is make sure the preamp level on your sound card is set correctly.

For the **Input Level Listener** to work properly, it is advised to leave around 6dB of headroom on the A/D converter, which usually means having the sound-card input meter peaking below the "yellow" zone while playing normally. If the meter LEDs are yellow or red, turn the preamp level down until you're in the "green" zone.

Once your input signal is set correctly, select the Pickup Type from the menu:

- Low Output is for single coil or vintage pickups with low sensitivity
- Medium Output is for passive humbuckers with balanced output
- High Output is for active or hot passive humbuckers

Now start playing some riffs and the software will adjust the input level according to your guitar signal and the selected Pickup Category.

Here are some reference values you should see in the Input Level Listener if you've set everything correctly:

- Low Output pickup: Input Level in the -6dB to -3dB range
- Medium Output pickup: Input Level in the 0dB to +3dB range
- High Output pickup: Input Level in the +6dB to +9dB range

If you're seeing values that are clearly different from the reference level, adjust the sound card preamp and repeat the process.

Gate: Cuts unwanted noise spill, hiss, or hum by setting a threshold at which the input signal needs to be above for processing.

Tuner: Click to open the Tuner. The tuning indicator light will span from left to right and turn green when the note is in tune (middle position). When using the Tuner, you can switch off the output sound of the plug-in for convenience by clicking the speaker icon button on the bottom left side of the window. If you're wanting to change the master tuning frequency to something other than 440Hz, you can do so by clicking on the reference text box on the bottom right side of the window. Keep in mind that the Tuner runs in a modal window, so all the other controls in Tonality are disabled until you close the Tuner window.
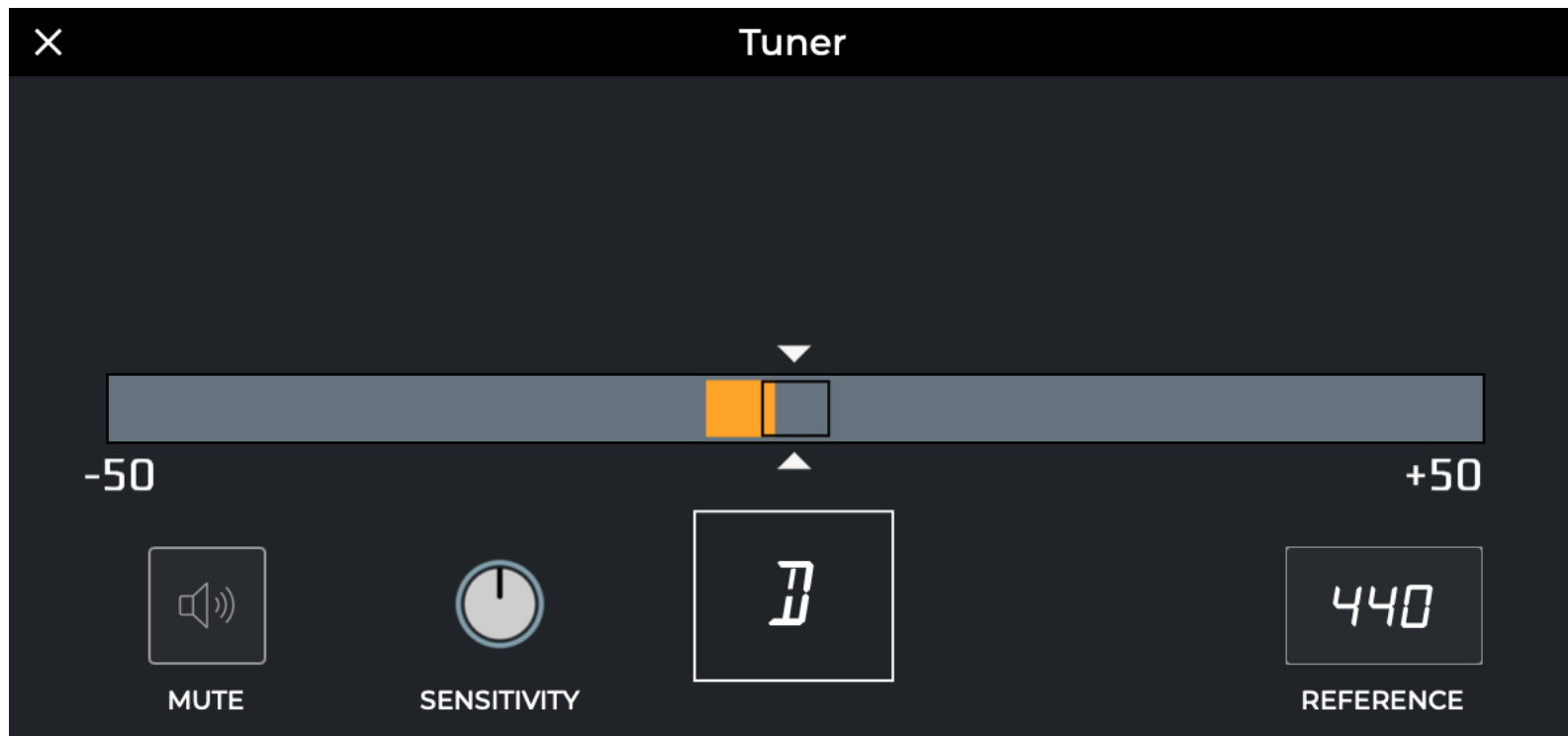
Stomp Boxes

1. **Compressor:** A versatile compressor for dynamic control. *Ratio* 1:1 to 4:1. *Attack:* 1ms to 20ms. *Release:* 50ms to 500ms. *Level:* 18dB +/- of make-up gain.

2. **Pitch:** Classic +1 and -1 voiced octave-style stomp box for real-time pitched effects. Both *Octave -/+* controls are processed in parallel, from 0-100% wet allowing for creative blends of both up/down pitch effects and the original dry signal. *Dry:* controls the amount of original signal being blended into processed pitch effect from 0-100%.

3. **Overdrive 1:** This is based on the Fortin© TEMPEST™ Architects Signature Overdrive Pedal.

4. **Overdrive 2:** This is based on the Maxon© OD808 pedal.
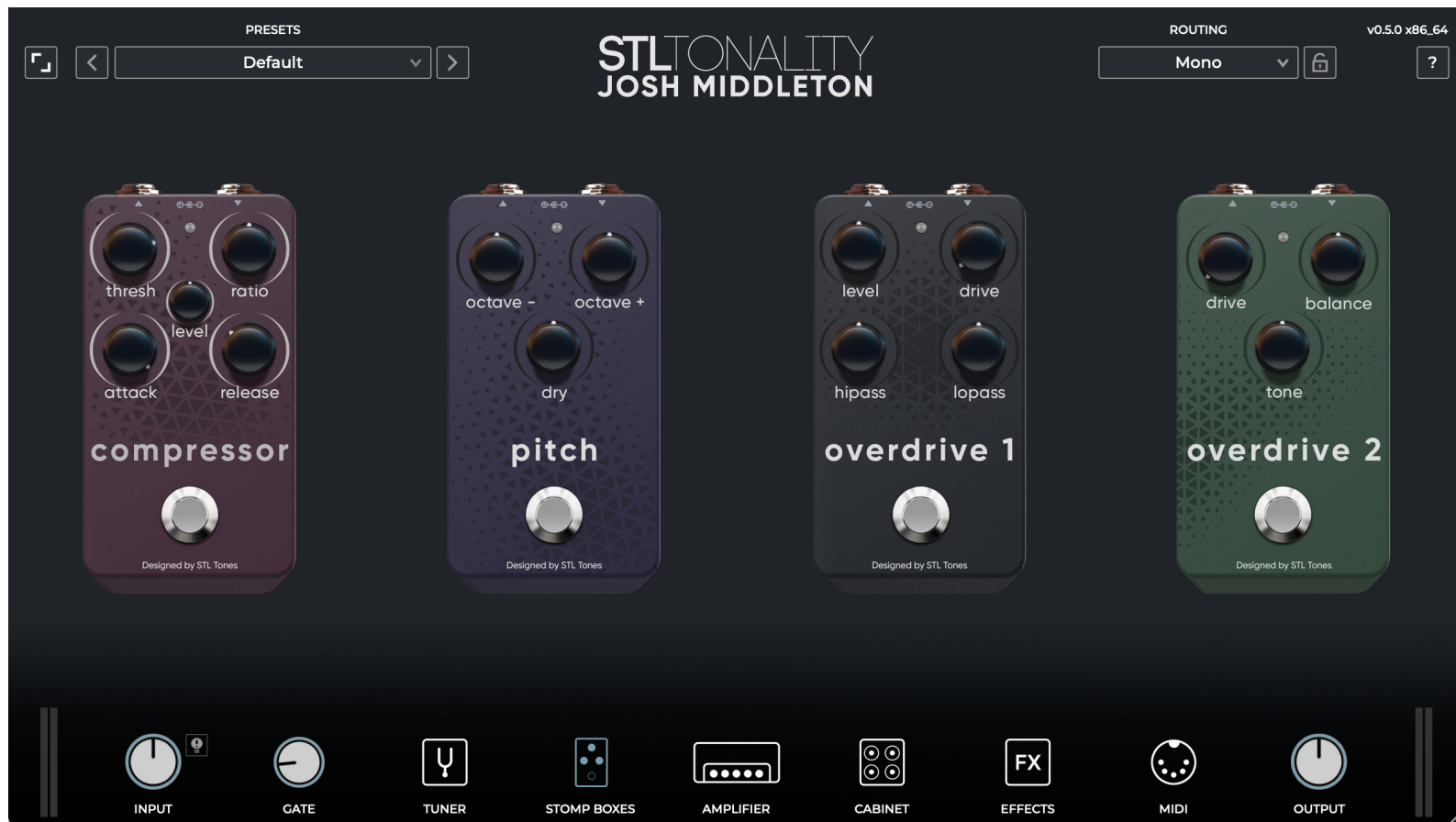
Amp Select: Select which of the 3 amp models you wish to use.
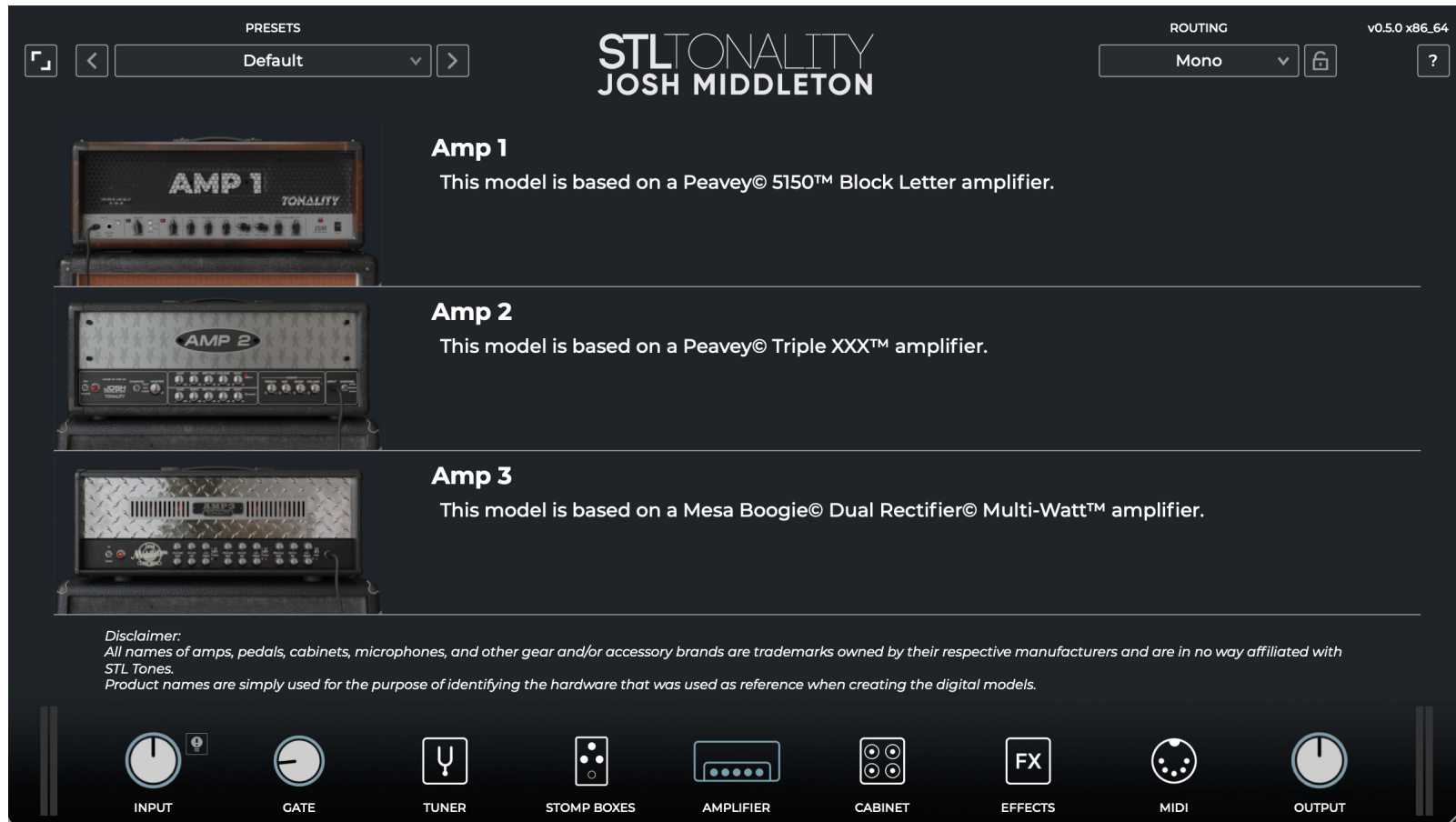
Cabinet Section: Click to open the Cabinet view. Here you can change cabinet, speaker, and microphone models.

You are able to move the microphone around the speaker with 4 degrees of freedom: X (horizontal axis), Y (vertical axis), Z (distance), and W (angle). Each of Josh Middleton's six go-to speakers has been measured with four different microphones in more than 156 positions, totaling 3744 IRs captured to achieve the ultimate realism and accuracy. You can further tweak your tone by using the featured Hi/Lo pass filters, Resonance control, change the volume of each microphone by using the related volume slider, flip the phase with the related button, link options for Distance, HPF, LPF controls and set the mix of the 2 mics to find the perfect balance.

It is also worth noting that changing the microphone distance introduces a slight delay in the output signal, resulting in phase cancellation that may help remove unwanted frequencies, so feel free to experiment.

You can even switch off the cabinet by setting it to "Disconnected". By doing so, the amplifier sound will pass through the cabinet section unprocessed. Clicking on the Cabinet button while the Cabinet view is open will bypass the cabinet section.

Tip 1: Even if you can change the microphone distance and angle using the related knobs, all 4 degrees of freedom are conveniently accessible directly via the crosshair by using key modifiers: left-clicking your mouse and dragging will move the microphone in the X/Y axis, left-clicking+ctrl and dragging will move the microphone on the Z axis, right-clicking and dragging will angle the microphone.

Tip 2: As pointed out in the Amplifier section, each cabinet has its own impedance curve which is connected to the amplifier power section, but in Tonality, you're free to use 2 different cabinets at the same time. In such a case, the impedance seen by the power amp will be the combination of the 2 impedances, so using the mix slider can help you achieve some very unique tones.

Tip 3: In the cabinet menu you can also find a "Disconnected" option, what does it mean in terms of the impedance seen by the power amplifier? Setting the cabinet to "Disconnected" will achieve the same result as connecting the amplifier to a purely resistive load, with the result of flattening the poweramp in terms of frequency response and reducing the power amp controls (ex. Presence) excursion.

Tip 4: Setting the cabinet as "Disconnected" is not the same as bypassing the cabinet section entirely! This is extremely important to know when using Tonality with external IRs! If you bypass the cabinet section, the amplifier will keep seeing the load related to the selected cabinet(s) even if the cabinet and microphone are not processing the signal. If you change the cabinet when the cabinet section is bypassed you'll still notice some differences in how the amp sounds and reacts, because you're still changing the load connected to its poweramp. For the most transparent poweramp sound when using external IRs, you should set the cabinet as "Disconnected" and switch off the cabinet section. Feel free to experiment with various combinations to find some secret tones!

Equalizer: Features three bands of parametric EQ controls with adjustable gain (P Gain) and bandwidth (Q), as well as classic HP/LP filters making it an indispensable tool for shaping your tone. Also included are Low and High shelving filters (LS/HS) with a +/- of 18dB allowing for further control of your guitar tones' low-end response whilst letting you add air and sheen, making it perfectly fit into your mix with ease.

Delay: There are 12 controls for the Delay Pedal.

Wet/Dry controls the balance of the dry and wet signal. **F.back** controls the feedback and repeats of the Delay. **Time** sets the delay time note. This value can be synced to the DAW by clicking the **BPM Sync** switch. You can also use the **'Tap'** button to Tap a specific delay time of your choice. **LoPass** controls the eq of the delay repeats from 1000Hz to 22050Hz. **HiPass** controls the eq of the delay repeats from 20Hz to 1000Hz. **Depth** controls the modulation depth of the delay repeats from 0-100%. **Rate** controls the modulation rate of the delay repeats from 0Hz to 10Hz. **Ping Pong Switch** turns the "ping pong" delay effect On/Off. **On/Off** button engages or bypasses the effect.

Reverb: There are 8 controls for the Reverb Pedal. **Wet/Dry** controls the balance of the dry and wet signal. **Delay** controls the delay time before the reverberated signal appears. **Length** which sets the time of the Reverb, from 0-10seconds without temporal reference. **LoPass** controls the eq of the delay repeats from 1000Hz to 22050Hz. **HiPass** controls the eq of the delay repeats from 20Hz to 1000Hz. **Depth** controls the modulation depth of the delay repeats from 0-100%. **Rate** controls the modulation rate of the delay repeats from 0Hz to 10Hz.

MIDI Setup

Standalone application
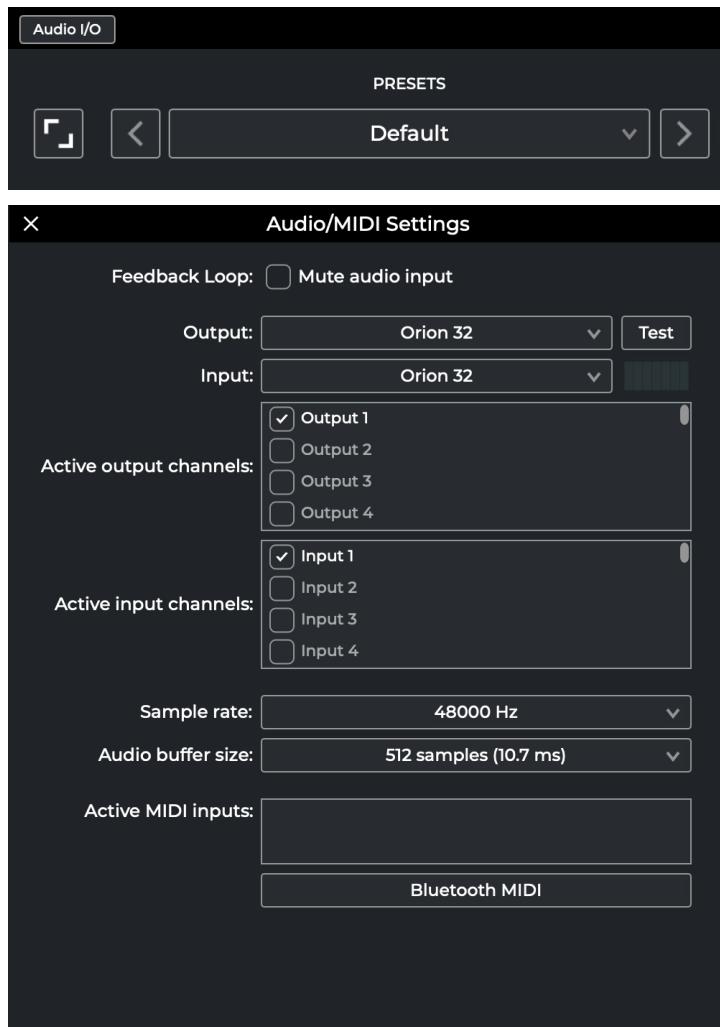
• Open the standalone version and click on the **Audio I/O** button.

• Select the MIDI inputs (device) connected to the computer you want to use.

• Enable the MIDI Learn functionality by right-clicking on one of the Tonality plugin model's learnable controls, a popup menu will appear with two MIDI binding options:

1. MIDI Learn - Preset: this will store the MIDI bindings at the Preset level. Preset-level bindings have priority over Global Bindings, meaning that assigning a MIDI PC or CC message at the preset level will override existing bindings of the same messages at the Global level if any. Preset-level bindings are saved within the active preset and recalled when the preset becomes active. Remember to save the preset using the Preset Manager (check the Header Controls section) if you want to persist the MIDI bindings.

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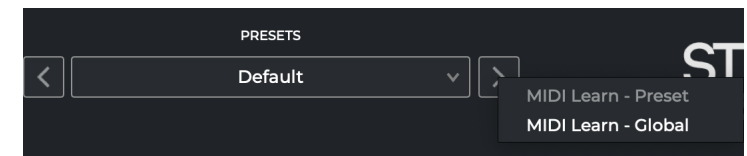
2. MIDI Learn - Global: this feature will store the MIDI bindings globally for the application/plug-in. Global bindings are shared among presets, meaning the registered MIDI assignments will remain active even when changing presets (unless overridden by a Preset level assignment as described above).
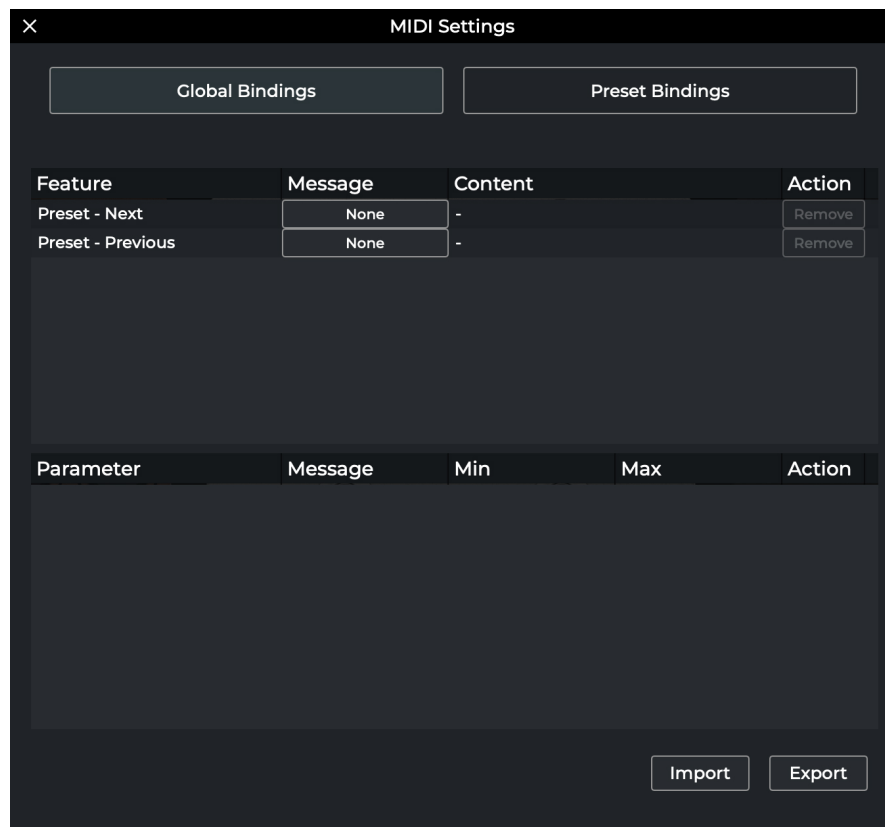
• Once you select the binding type, the application will notify you that it's ready to perform the assignment: simply press the MIDI control you want to assign to the selected parameter/functionality on the MIDI controller and the binding will be stored, making the MIDI Learn popup menu disappear. You can now adjust that plug-in parameter value using the connected MIDI controller.

	MIDI Settings			
	Global Bindings		Preset Bindings	

Feature	Message	Content		Action
Preset - Next	None	-		Remove
Preset - Previous	None	-		Remove

Parameter	Message	Min	Max	Action

Import Export

Using a MIDI message to change a preset

• If you want to recall a specific preset using your MIDI controller, all you need to do is load the preset you want to assign the MIDI message to, right-click on the preset menu located in the left section of the header and select **MIDI Learn - Global.** This will trigger the previously described **MIDI Learn** functionality and the provided MIDI message will be bound to recall that preset. This is very useful in a live-playing situation.

• The same can be done with the **Previous/Next** Preset buttons placed on the sides of the preset menu if you want to use your MIDI controller to switch from a preset to the next or previous one without the need to reach your computer. These types of bindings can only be stored at the **Learn Global** level.

• All stored MIDI assignments can be reviewed and modified in the MIDI settings panel, accessed by clicking on the MIDI icon in the GUI's footer section.

AMP 1: Based on a Peavey© 5150™ Block Letter, this two-channel, 120W all-tube amplifier is well known for its high-gain overdrive channel and has been the undisputed go-to guitar amp for heavy rock and metal guitarists since its release in 1992.

AMP 2: Based on a Peavey© XXX™ amplifier, this three-channel 120W high-gain amp specializes in its versatility. Including independent volume controls on each of the three channels (Ultra, Crunch, and Clean), this amp also features the three-position "Damping" switch that allows adjustment of the amp's ability to control the speaker cone motion after a signal disappears. A high damping factor (TIGHT) reduces cone vibration quicker than a low (LOOSE) damping factor. This model also includes the mod where the noise gate has been shorted (bypassed) in Josh's XXX™.

AMP 3: Based on a Mesa Boogie© Dual Rectifier© Multi-Watt™ this three-channel 100W amp is capable of achieving any tone and music style with its unique CLEAN and PUSHED modes in Channel One, RAW, VINTAGE, and MODERN voicing styles for Channel's Two and Three. Touted as the best Dual Rectifier© this amplifier is a heavy music icon.
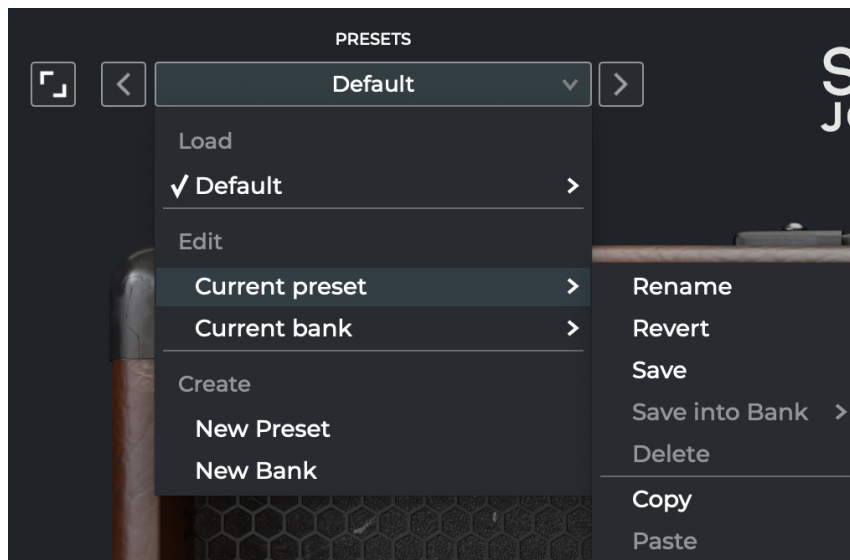
Resize: Click to resize the plug-in interface. 3 possible values are available: 50%, 75%, and 100%. In addition to these 3 modes, you can fine-tune the size using the resize function in the bottom right corner.

Presets: Click to manage the Tonality default and user settings. The Preset manager is divided into 3 sections: Load, Edit, and Create. Under the Load section you'll find all the available banks where each bank entry has a submenu featuring all the presets it contains. Under the Create section, you can either add a Preset to the current Bank or create a new Bank entirely. When creating a new Bank, the currently loaded Preset will be copied into it, you can tweak it later using the Edit options. **Tip:** if you want to rapidly copy settings from one instance to another track in a DAW project, you can use the Edit > Current Preset > Copy function. This will store the settings in the clipboard, so you can move into your second instance and select Edit > Current Preset > Paste to paste the stored settings.

Keep in mind that settings in the clipboard are preserved until there is at least 1 instance of Tonality available. If you close all the instances and open a new one later, the clipboard will be cleared out and you won't be able to paste. Copy/Paste only works between plug-ins of the same format: you can Copy/Paste from a VST3 to another VST3 or from an AU to another AU, but you can't from a VST3 to AU, etc.

Tempo (BPM): Tempo change feature in standalone mode only. *Note: Tempo is saved at the preset level.*

Routing: Click to change the routing of your virtual rig. Tonality supports 3 different routing modes: Mono, Mono/Stereo, and Stereo. Mono: all the rig sections will process the signal in Mono mode (this is the most CPU-efficient routing) Mono/Stereo: all the rig sections will process the signal in Mono mode until an element supporting the "Mono-To-Stereo-Split" is encountered. When this happens, the signal is split and the remaining elements in the chain will automatically switch to Stereo processing. Delay and Reverb are typical models supporting the "Mono-To-Stereo-Split", so when using those pedals in Mono/Stereo routing mode, the signal will be split and the subsequent effects will work in Stereo mode until the signal reaches the output. Stereo: all the rig sections are internally doubled and will process the signal in Stereo mode (this is the most CPU-intensive routing)

Tip 1: In the plug-in versions of Tonality, if the Routing menu only features the "Mono" option you've probably loaded it into a Mono track. Use a Stereo track if you want to unlock the other modes.

Tip 2: In the standalone versions of Tonality, if the Routing menu only features the "Mono" option you've probably only set a single output in the Audio I/O settings. Enable at least 2 outputs from the Audio I/O menu, close the application, and re-open it: you should now see all the Routing options available. 21 of 31 Routing Lock: click to lock the current Routing Mode. This control is useful when you want to audition different presets maintaining the routing untouched. Since the Routing Mode is saved in the Preset itself, loading a Preset may change it. If you want to avoid it, just activate the lock and it will be kept fixed until you unlock it, avoiding overrides.

For technical issues or any problems experienced with our software contact us via the contact page at www.stltones.com. Before doing so, follow our *Troubleshooting* questions below to see if these fix your issue.

Support Information to be provided

- To help us assist you the best way possible, please attach the following information to our support team: Product Version Number (e.g STL Tonality - Josh Middleton V1.0.0.)

- Version number of your audio system (e.g ProTools 11.2.2, Logic 10.2.4)

- Interface/hardware (e.g. Focusrite Scarlett 2i2, Universal Audio Apollo Twin, etc.)

- Computer and operating system info (e.g MacBook Pro OS X 10.9.6, Windows 10 ver 1709, etc.)

- Please include a detailed description of your problem.

Troubleshooting

Having issues with our software?
Uninstall / Reinstall

This will repair possible broken permissions, fix corrupted files, and remove old versions of our software

Steps:
1. Close out of all host software (Pro Tools, Logic, Cubase, etc.)
2. Uninstall your plug-in.
3. Open your host software and ensure that the plug-ins no longer showing up in the inserts list. If the plug-ins are still present, locate the files on your computer and remove them manually. Once they no longer show up in your DAW (after restarting it), move on to step 4.
4. Close out of all host software.
5. Follow the installation and licensing procedure outlined in the "Installation & License Activation" section of this manual making sure you have the latest installers for the plug-in.
6. Run the latest installers and start your host program.
7. Follow the STL licensing prompts, ensuring that your host program is reading the latest version of our software.

Repair your computer's hard drive:
Repair permissions on your computer.

Instructions: Mac & Windows

Run your host software as an administrator (Windows-only) :
This can fix a variety of issues that result in crashing or error messages on Windows DAWs that are loading our plug-ins for the first time.

Steps:
1. Exit your host program (Pro Tools, Cubase, etc.)
2. Right-click on the icon for that host program and select "Run as an Administrator." You will only have to do this once, meaning you can open up the host program normally the next time.

How do I find my plugin in Reaper?
If you cannot find your STL Tonality plugin in Reaper, follow these steps to make the plugin available.

Step 1: Follow the installation and licensing procedure outlined in the "Installation & License Activation" section of this manual making sure you have the latest installers for the plug-in.
Step 2: Now check if the plugin is installed on your computer in the default folder.

File Locations: MAC
VST: Macintosh HD/Library/Audio/Plug-ins/VST/STL Tonality Josh Middleton
File Locations: Windows
64-bit VST: C:\Program Files\VSTPlugins\STL Tonality Josh Middleton

If you don't find the respective files please reinstall your STL Tonality Product. If the relevant plugin files are in the above folder, perform a rescan:
In Reaper, press [Ctrl] + P (Windows) / [Cmd] + [,] (Mac) to access Preferences.
Go to Plug-ins > VST.
Under "VST Plugin Path," make sure that the following path is listed (if not, add it):

Windows:
64-bit VST: C:\ Program Files \ VSTPlugins \ STL Tonality Josh Middleton
Mac:
System HD > Library > Audio > Plugins > VST
Click on Clear Cache/Re-Scan. Create a new session with a supported sample rate, add a track and load your STL Tonality plugin. If the pop-up window tells you to activate please press follow the installation and licensing procedure outlined in the "Installation & License Activation" section of this manual.

How do I find my plugin in Pro Tools?
If you cannot find your STL Tonality plugin in Pro Tools, follow these steps to make the plugin available.
Step 1: Follow the installation and licensing procedure outlined in the "Installation & License Activation" section of this manual making sure you have the latest installers for the plug-in.
Step 2: Check if the plugin is installed on your computer in the default folder.

VST: Macintosh HD / Library / Audio / Plug-ins / VST / STL Tonality Josh Middleton
AAX: Macintosh HD / Library / Application Support / Avid / Audio / Plug-ins /STL Tonality Josh Middleton

File Locations: Windows
64-bit VST: C:\Program Files\VSTPlugins\STL Tonality
64-bit AAX: C:\Program Files\Common Files\Avid\Audio\Plug-Ins\STL Tonality
If you don't find the respective files please reinstall your STL Tonality Product. If the relevant plugin files are in the above folder, perform a rescan:
To do a Rescan you need to delete certain files on your computer depending on your Pro Tools version. Please follow the official Avid website to do this.

The plugin makes no sound at all, why is this happening?

You have most likely not activated the software yet, or the license file has moved to a different location and the software can't find it anymore. Follow the installation and licensing procedure outlined in the "Installation & License Activation" section of this manual, making sure you have the latest installers for the plug-in.

Where do I find the installers?

Visit https://www.stltones.com/pages/file-downloads where you will find the latest installers for your product.

Where is the STL Tonality Plugin located on my computer?

Mac:

AudioUnits: Macintosh HD / Library / Audio / Plug-ins / Components / STL Tonality - Josh Middleton

VST: Macintosh HD / Library / Audio / Plug-ins / VST / STL Tonality - Josh Middleton

AAX: Macintosh HD / Library / Application Support / Avid / Audio / Plug-ins / STL Tonality - Josh Middleton

Windows:

64-bit VST: C:\ Program Files \ VSTPlugins \ STL Tonality - Josh Middleton

64-bit AAX: C:\ Program Files \ Common Files \ Avid \ Audio \ Plug-Ins \ STL Tonality - Josh Middleton

Plugin Development - Federico Berti (Ignite Amps)

GUI Design - Sonny Truelove and Dan Dankmeyer.

Sincerely
STL Tones Team!