

STL ControlHub - User Guide

Version 2.0.0 For Mac & Windows

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INTRODUCTION STL ControlHub



An all-inclusive mixing plugin: load signal chain-based packs from top mixers and studios, capture your own chains and share with the world.

Our proprietary hybrid engine combines Tracing Technology and analog modeling to give you the most accurate recreation of an entire signal chain, from preamps to coloration, compressors, equalizers, and limiters, with the ability to tweak the settings maintaining an impressive degree of realism.

You now have the power to mix your individual tracks, mix bus, and master chains using complete signal chain emulations from world-class mixers. Each preset completely emulates the original hardware or software signal chain.

Accelerate your workflow, without compromising your creativity, all within one plugin.

SYSTEM REQUIREMENTS

STL ControlHub

ControlHub comes in 64-bit VST / AU / AAX / Standalone and is compatible with the latest OS for Windows & Mac. Minimum requirements Mac OS 10.9 or Windows 7 (64-bit).

STL ControlHub

SUPPORTED HOST SOFTWARE

To use STL Tones software you need audio software which can load "plugins". You can also run STL Tones software as a Standalone application. This plugin officially supports the following software host:

Pro Tools 2021.12.0: Mac & PC: AAX Native

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

Cubase 9 & 10: Mac & PC: VST

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

Reaper 5.x: Mac: AU & VST; Windows: VST

Installation and License Activation

STL Download Center

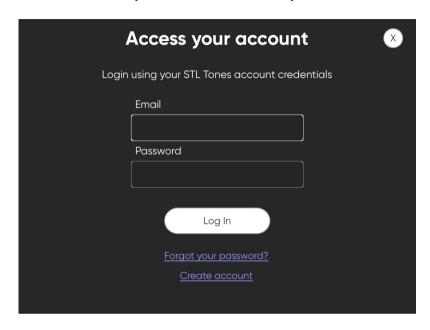
Please visit https://www.stltones.com/pages/file-downloads where you will find the latest installers for your product.

STL License System

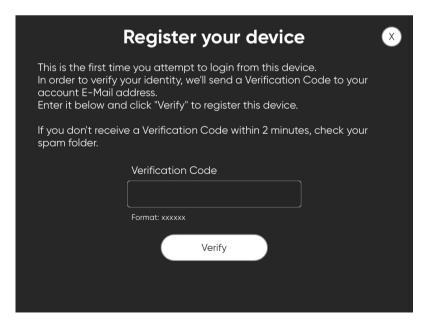
License Information

- 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.
- To trial ControlHub and all the expansion packs for a full 10 days, simply add a Control*Hub Pro All Access* subscription license to your cart on the website and then activate your trial subscription in the plugin by selecting the "Activate Subscription" account prompt.
- 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:

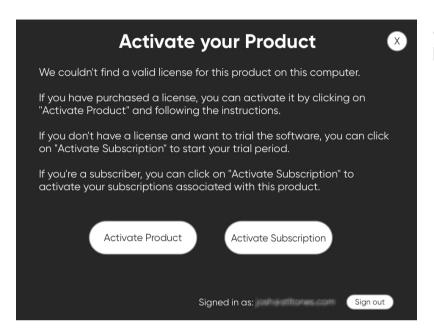
Full License (Online Activation)



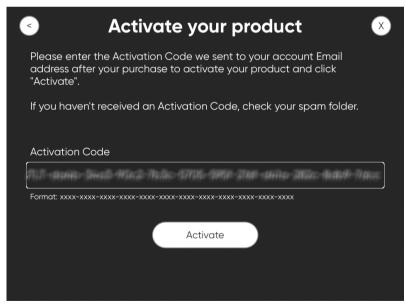
• When you first open the plugin, you will be prompted to log in to your STL Tones user account.



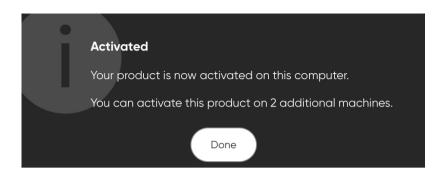
- You will receive an email to the address you provided from activations@stltones.com This email contains your 6-digit verification code. *Note: Check your spam folder if you didn't receive a verification code.*
- Copy this 6-digit code from your email and paste it into the Verification Code field in the menu, then click "Verify".



 You then will be prompted to activate a license. Select "Activate Product".

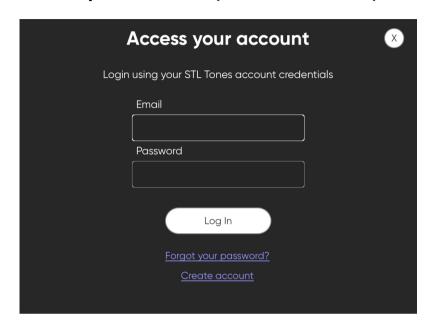


• This will take you to the activation screen. Enter your activation code and click "**Activate**".

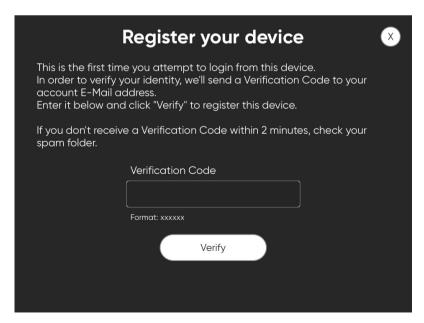


• You have now unlocked your full license!

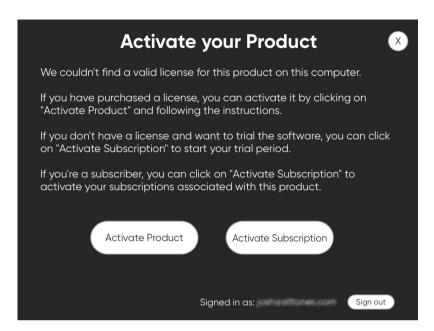
Subscription License (Online Activation)



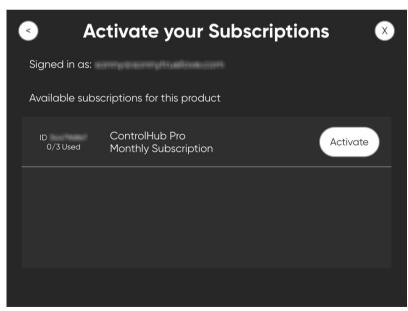
• When you first open the plugin, you will be prompted to log in to your STL Tones user account.



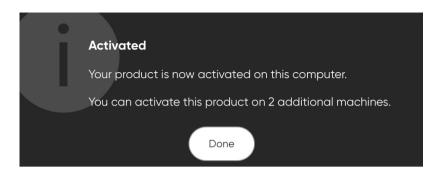
- You will receive an email to the address you provided from activations@stltones.com This email contains your 6-digit verification code. *Note: Check your spam folder if you didn't receive a verification code.*
- Copy this 6-digit code from your email and paste it into the Verification Code field in the menu, then click "Verify".



• You then will be prompted to activate a license. Select "Activate Subscription".

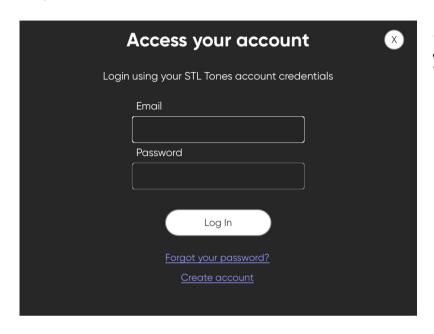


• You then will be prompted to activate the subscription license connected to your account. Select "Activate".

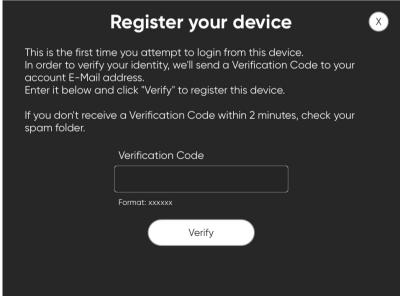


• You have now unlocked your subscription license!

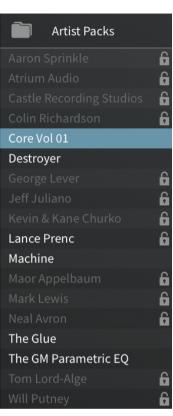
Expansion Pack Full License (Online Activation)



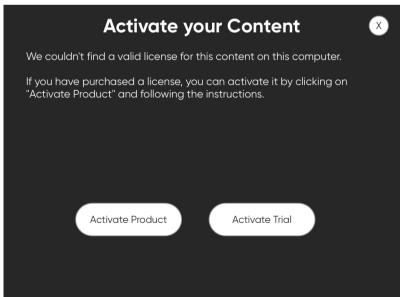
• When you first open the plugin, you will be prompted to log in to your STL Tones user account.



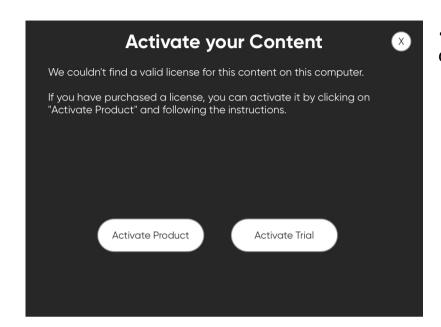
- You will receive an email to the address you provided from activations@stltones.com This email contains your 6-digit verification code. *Note: Check your spam folder if you didn't receive a verification code.*
- Copy this 6-digit code from your email and paste it into the Verification Code field in the menu, then click "Verify".



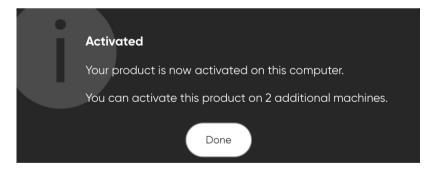
• Activate your expansion pack license by either clicking on the artist's name or clicking on the "lock" icon to bring up the activation window. *Note: The lock icon will disappear once your license has been activated.*



 You then will be prompted to activate a license. Select "Activate Product".

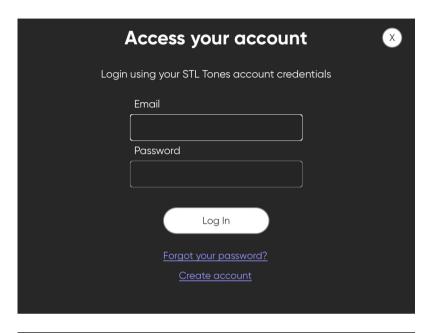


• This will take you to the activation screen. Enter your activation code and click "Activate".

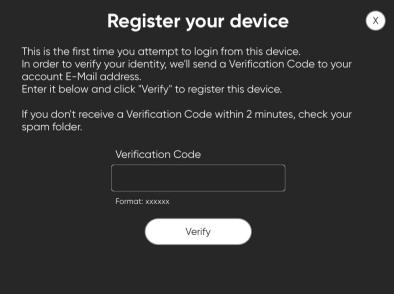


• You have now unlocked your full expansion pack license!

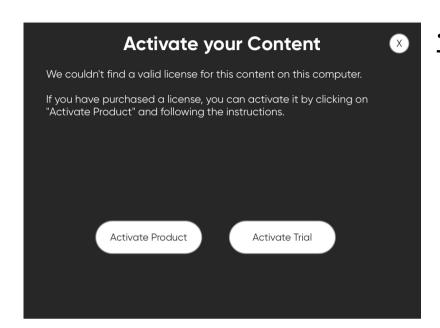
Trial License for Expansion Packs (Online Activation)



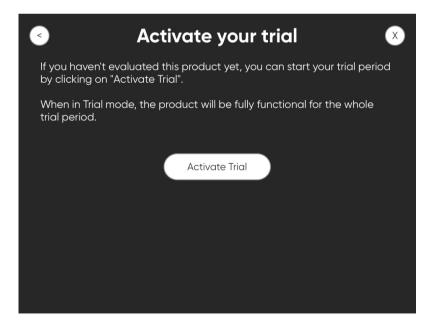
• When you first open the plugin, you will be prompted to log in to your STL Tones user account.



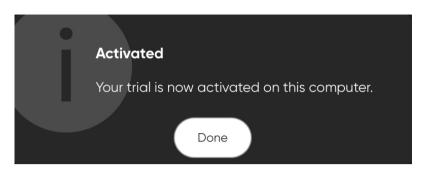
- You will receive an email to the address you provided from activations@stltones.com This email contains your 6-digit verification code. *Note: Check your spam folder if you didn't receive a verification code.*
- Copy this 6-digit code from your email and paste it into the Verification Code field in the menu, then click "Verify".



• You then will be prompted to activate a license. Select "Activate Trial".

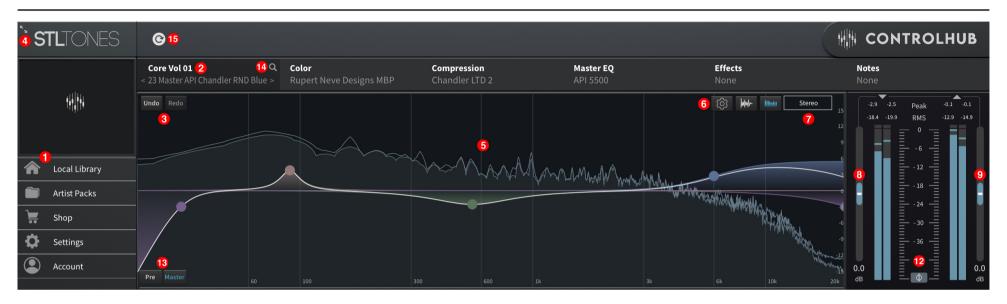


· Select "Activate Trial".



• You now have a 5-day trial expansion pack license!

USER INTERFACE STL ControlHub



- 1. ControlHub menu: Access the Artist Expansion Packs, saved user banks in the Local Library tab, and the STL Shop where you can browse the latest expansion packs. The Settings tab has customizable user options for the plugin and the Account tab to manage your ControlHub licenses.
- 2. Preset browser displaying the hardware/software used in the selected preset's signal chain.
- 3. Undo & Redo: Located in the left corner of the Analyzer window are the Undo/Redo buttons, allowing for quick recall of previous settings or redoing a move.
- 4. Resize: Located in the top left corner are the resize arrows for the plugin interface. This lets you quickly change the size to three possible values: 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 of the plugin by clicking and dragging.

- 5. Graphical EQ/Spectrum Mode & Waveform/Gain Reduction Window: Spectrum mode displays the spectral content of the audio being processed by ControlHub, allowing you to visually analyze what's happening in your mix whilst in EQ mode, you have both precise feedback on the processing and control of the EQ modules. The waveform view represents the processed audio in a more familiar DAW-style waveform with the gain reduction applied by the Limiter module within ControlHub shown with a blue gain reduction line.
- 6. Analyzer Settings: The gear button allows you to manage options related to the linear spectrum analyzer. The two buttons to the right allow you to toggle between the spectrum and waveform views.
- 7. Routing: Selects the processing mode of the plugin (Mono, Mono/Stereo, or Stereo). Stereo Mode will double the CPU load of the plugin, as the two audio channels are being processed by two separate instances of the plugin.
- 8. Input Slider: Adjusts the input level of the plugin. Changing the input will affect the gain staging of the individual modules, so you may have to readjust the Compressor threshold settings for example based on the audio you are processing.
- 9. Output Slider: Adjusts the output level of the plugin. This slider is placed after the Limiter allowing it to be used for level matching or make-up gain.



10. Global Stereo Controls: This allows the user to switch between Stereo (L/R) processing or Mid/Side (M/S) processing.

The *Balance* control function changes depending on the mode selected, with L/R adjusting the basic stereo balance and M/S allowing to you adjust the mono/ stereo information on your track.

The *Link* parameter controls the amount of gain reduction being applied to the compressor and limiter, with 100% = equal compression on both channels. 0% = L/R channels compression is independent of one another.

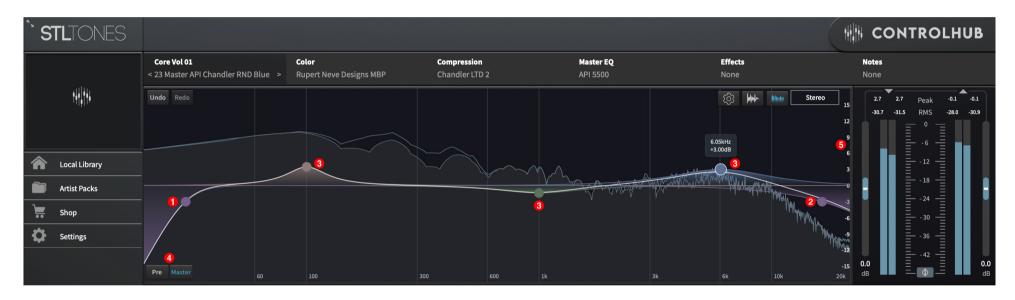
- 11. Mix: Controls the amount of unprocessed signal being blended with the processed signal, giving you the option of parallel processing. 100% = you're hearing the entire processed signal. 0% = you're hearing only the raw signal.
- 12. Phase Invert button inverts the polarity of the audio signal.
- 13. Pre & Master: Located in the bottom left corner of the Analyzer window are the Pre/Master EQ buttons, allowing for quick switching control between the Pre & Master EQ modules in graphical EQ mode.
- 14. Preset search icon: Allows for quick browsing and auditioning presets through all expansion packs.
- 15. Software update notifier. This will let you know if new expansions and plugin features are available.

PRE & MASTER EQUALIZER MODULES



- 1. High-Pass Filter: Turn on/off with a single click on the LED. Clicking the selectable slope button (dB/oct) shows the filter options in the dropdown menu.
- 2. Low-Pass Filter: Turn on with a single click on the LED. Clicking the selectable slope button (dB/oct) shows the filter options in the dropdown menu.
- 3. Both *Pre* and *Master EQ* modules have 3 full sweepable bands that range from 20Hz 22kHz. The Q bandwidth is selectable, ranging from a low shelf (far left) through to a high shelf (far right) allowing subtle tone shaping or surgical equalization. Tip: Double-click to reset the parameter. Right-click to manually enter a specific Hz value. Holding Command % whilst scrolling allows for precise tuning of the Hz control.
- 4. Power On/Off button for the Pre EQ module.

NOTE: All modules have a dedicated power on/off button in ControlHub. Engage the modules by clicking the on/off button (illuminated when engaged) and simply re-click to bypass the module entirely. NOTE: Engaging the power On/Off button on either Pre or Master EQ will enable the EQ mode functions. The EQ mode's graphical display is tied to the module that is being adjusted, instantly switching so you always know what module is being changed.



- 1. High-Pass Filter: Turn on/off with a double-click on the filter's circle. Right-click and holing whilst dragging up/down will change the selectable slope (dB/oct) filter.
- 2. Low-Pass Filter: Turn on/off with a double-click on the filter's circle. Right-click + hold whilst dragging up/down will change the selectable slope (dB/oct) filter.

- 3. Frequency Bands: Both *Pre* and *Master EQ* modules have 3 full sweepable bands that range from 20Hz 22kHz. Turn each band on/off with a double-click on the frequency curve circle. Right-click + hold whilst dragging up/down will cycle through the selectable Q bandwidth for broad tone shaping or surgical precision. The Frequency being adjusted and the amount of boost/cut (dB) is displayed above the curve circle for a faster workflow.
- 4. Pre & Master: Selectable buttons for quick switching between the Pre & Master EQ modules from the spectrum view window. *Note: The text will be white when an EQ module is bypassed. When engaged, the text is blue, indicating which module is currently displayed.*
- 5. EQ dB meter: Displays the frequency bands' dB value (+/- 15dB).

COLOR MODULE STL ControlHub



- 1. VOLUME control for the preamp section of the color module. This will affect the amount of saturation the color section is providing as you will be driving more or less level into the *Drive*, *Tape*, and *Tube* circuits.
- 2. BASS shelving filter EQ with a center frequency at 100Hz allowing for subtle low-end control.
- 3. TREBLE shelving filter EQ with a center frequency starting at 5kHz to help shape a track's high-end.

Note: The preamp EQ works before the Color saturation circuits. The signal is split and goes through the Tube and the Tape effect in parallel allowing a mix of both saturation colors.

- 4. The DRIVE circuit is modeling preamp-style distortion.
- 5. The TAPE control features a sub to lower midrange EQ bump and is more aggressive in its distortion character when driven hard.
- 6. The TUBE control uses two cascaded stages, making for a very transparent saturation texture. Increase the Drive control to push more level into the Tube circuit for more deliberate creative distortion effects.
- 7. Power On/Off button for the Color module.

DYNAMICS MODULE STL ControlHub

The Dynamics module in ControlHub houses 3 powerful dynamic processes: Transient Designer, Compression, and DeEsser. These dynamic modules are re-arrangeable in expand mode, simply click + drag to change the order of the signal chain within the dynamics module to further tailor your sound.



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EXPAND CONTROLS

- 1. EXPAND the individual modules by clicking on any of the modules buttons TD, DS, COMP in the dynamics header.
- 2. Engage/Bypass the individual modules by clicking on the TD, DS, or COMP's LED lights.



COMPRESSION

- 1. Drop-down menu for compression options. You can now select from FET, VCA, Tracer and My Tracer Compressors *Note: Tracer compressor features are only available with an active license.*
- 2. THRESHOLD control sets the level at which the compressor begins to attenuate the signal. This level is related to the ratio setting.
- 3. MAKEUP gain allows you to manually match the input levels to the output levels once the signal is being attenuated.
- 4. AUTO MAKEUP GAIN LED will automatically compensate for the level reduction caused by the compressor. *NOTE: MAKEUP control greys out to indicate AUTO MAKEUP mode is engaged.*
- 5. ATTACK controls how fast the compressor reacts to the incoming signal.
- 6. RELEASE controls how long the compressor holds the signal before returning to an uncompressed state.
- 7. RATIO determines how much gain reduction the signal above the given Threshold will be compressed. *NOTE: The VCA style module ratio is displayed as a percentage.*
- 8. SIDECHAIN controls a high-pass filter for the Compressors input detection circuit.
- 9. INPUT controls the signal level going into the compressor.



- 10. MIX controls the amount of uncompressed signal being blended with the compressed signal, allowing the option of parallel processing. 100% = you're hearing the entire compressed signal. 0% = you're hearing only the uncompressed signal.
- 11. KNEE (VCA mode only) controls how the compressor transitions between the uncompressed and compressed audio signal. 0dB = soft knee style. 30dB = hard knee style.
- 12. AUTO (FET mode) changes the release time to be dependent upon the duration of the program peak.
- 13. Click to select automated release operations (VCA mode only).
- 14. Gain reduction meters show the amount of attenuation (measured in dB) being applied by the compressor.
- 15. Power On/Off button for the Compressor module.



TRANSIENT DESIGNER

- 1. SIDECHAIN engages an internal sidechain filter for processing only the frequency selected, for targeted transient control. This can also be used to prevent part of the signal from being processed.
- 2. ATTACK allows for amplifying and attenuating the attack of an audio signal by 15 dB.
- 3. SUSTAIN controls the length of an audio signal's sustain by amplifying (increasing) and attenuating (shortening) by 24 dB.
- 4. OUTPUT adjusts the output level of the module.
- 5. LIMITER engages an internal limiter to avoid digital clipping.
- 6. GAIN EXPANSION/REDUCTION METER shows the amount of gain (+/-) applied to the signal.
- 7. Power On/Off button for the Transient Designer module.



DEESSER

- 1. FREQUENCY sets the target frequency that the deesser module will process.
- 2. THRESHOLD control sets the level at which the deesser begins to attenuate the signal.
- 3. LISTEN isolates & solos the signals in the sidechain to allow for precise targeting of problem frequencies.
- 4. OUTPUT controls the output level of the processed signal.
- 5. MIX controls the amount of uncompressed signal being blended with the compressed signal, allowing the option of parallel processing. 100% = you're hearing the entire processed signal. 0% = you're hearing only the original signal.
- 6. GAIN REDUCTION METER shows the amount of attenuation (measured in dB) being applied.
- 7. AUDIO dropdown menu switches between *Wideband* and *Split* compression modes. In Wideband mode, compression attenuation is applied to the entire audio signal. In Split mode, the audio is split into low and high-frequency signals, with compression attenuation only applied to the high-passed signal.



- 8. SIDECHAIN dropdown menu switches between a *Highpass* and *Bandpass* filter for the internal sidechain. The Highpass filter will process all the frequencies above the set frequency, with the Bandpass at a narrowed band around the set frequency.
- 9. Power On/Off button for the Transient Designer module.

EFFECTS MODULE STL ControlHub



DELAY

Two delay units have been modeled for ControlHub covering time-based effects used in every mix to create movement and depth all the way to vintage-style analog echos with textured lofi options. Currently, there are 17 different Delay Types.

- 1. ON/OFF symbol (top right corner) of the LCD screen engages the delay effect. You can also engage the effect by double-clicking the DELAY text on the LCD screen. The arrows allow you to cycle to the REVERB effects (see REVERB below for more information)
- 2. UNIT displays the delay model currently being used. Click on the UNIT text to bring up the menu displaying the delay units available. You can use the arrows left/right to scroll through the different types for quick auditioning.
- 3. TYPE displays the current style of delay being used. Click on the TYPE text to bring up the menu displaying the delay variations available. You can use the arrows left/right to scroll through the different types for that selected UNIT for quick auditioning.
- 4. TIME shows the delay time value in milliseconds (ms) by default. When the BPM SYNC LED is engaged the delay time is displayed in note values synced to the DAW. Clicking on the note values in the LCD effects screen cycles through these musical note values or you can use the TIME control knob to quickly dial in the amount of delay needed.



- 5. MIX controls the amount of delay effect being blended with the original signal. 100% = you're hearing only the processed signal. 0% = you're hearing only the original signal.
- 6. F.BACK controls the amount of delay feedback repeats.
- 7. DEPTH controls the modulation depth of the delay repeats from 0-100%.
- 8. RATE controls the modulation rate of the delay repeats from 0Hz to 5Hz.
- 9. HIPASS EQ filter controls the EQ of the delay repeats from 10Hz to 5000Hz.
- 10. LOPASS EQ filter controls the EQ of the delay repeats from 22kHz to 5000Hz.
- 11. BPM SYNC allows the delay to tempo synchronize with the host DAW.
- 12. PING PONG creates a stereo effect (mono/stereo routing required) of the delay signal bouncing between the left and right channels.
- 13. Power On/Off button for the EFFECTS module.



REVERB

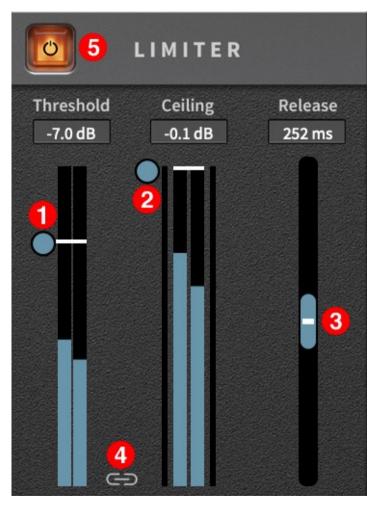
Seven reverb units have been modeled for ControlHub with 55 different types at your fingertips, giving you access to everything from tight short room sounds to ethereal chambers.

- 1. ON/OFF symbol (top right corner) of the LCD screen engages the reverb effect. You can also engage the effect by double-clicking the REVERB text on the LCD screen. The arrows allow you to cycle to the DELAY effects (see DELAY above for more information).
- 2. UNIT displays the reverb model currently being used. Click on the UNIT text to bring up the menu displaying the reverb units available. You can use the arrows left/right to scroll through the different types for quick auditioning.
- 3. TYPE displays the current style of reverb being used. Click on the TYPE text to bring up the menu displaying the reverb variations available. You can use the arrows left/right to scroll through the different types for that selected UNIT for quick auditioning.
- 4. TIME sets the size of the reverb selected. You can use the arrows left/right to scroll through the different sizes (SHORT, MEDIUM & LONG) for that selected UNIT for quick auditioning.
- 5. MIX controls the amount of reverb effect being blended with the original signal. 100% = you're hearing only the processed signal. 0% = you're hearing only the original signal.



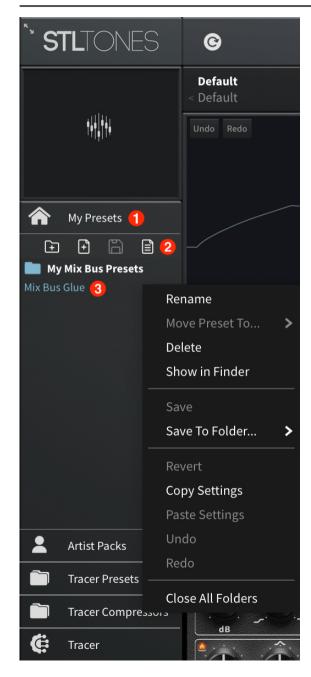
- 6. PRE DELAY determines the amount of time before the reverb begins.
- 7. LENGTH allows you to change the length range of the selected reverb time to further shape the reverb decay.
- 8. DEPTH controls the modulation depth of the delay repeats from 0-100%.
- 9. RATE controls the modulation rate of the delay repeats from 0Hz to 5Hz.
- 10. HIPASS EQ filter controls the EQ of the delay repeats from 10Hz to 5000Hz.
- 11. LOPASS EQ filter controls the EQ of the delay repeats from 22kHz to 5000Hz.
- 12. Power On/Off button for the EFFECTS module.

LIMITER STL ControlHub



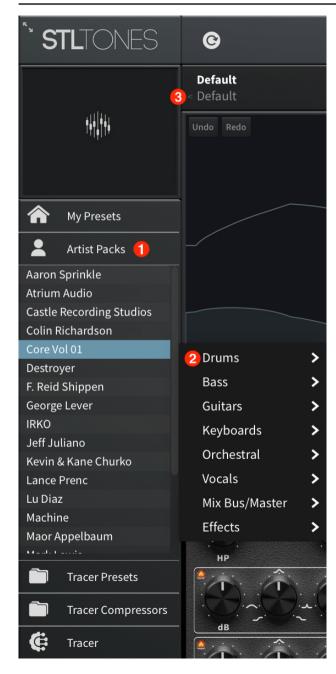
- 1. THRESHOLD control sets the level at which the Limiter begins to attenuate the signal. Set the threshold of the limiter by dragging the slider down. When the threshold is exceeded by the signal, you will see the gain reduction indicated in the stereo attenuation meters to the left and right of the Ceiling slider.
- 2. CEILING sets the output level of the Limiter. The default 0.0 dB is your maximum peak output.
- 3. RELEASE controls how long the Limiter holds the signal before returning to an uncompressed state.
- 4. The LINK button couples the Threshold and the Ceiling sliders in their current position. Helpful when wanting to control a signal's dynamic without increasing the volume.
- 5. Power On/Off button for the LIMITER module.

NOTE: The Limiter has a fixed attack time of 1 ms with a 1.2 ms lookahead detection time. MY PRESETS STL ControlHub

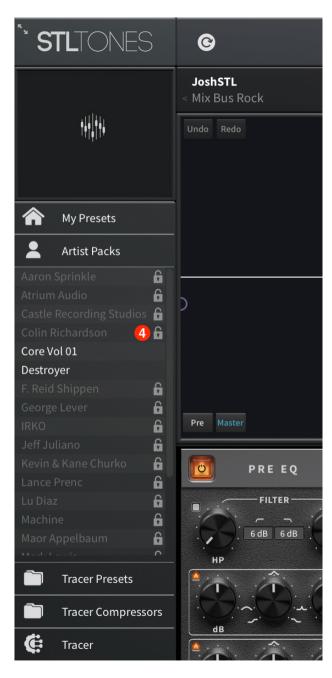


- 1. The *My Presets* folder in the ControlHub navigation menu is you can save artist presets that you have modified.
- 2. Clicking the *My Presets* tab enables the drop-down menu where you can manage this type of preset using the icons:
- Create a new folder
- · Save as new preset in the current folder
- Save preset
- View current preset info/options
- 3. You can also right-click on the blue highlighted folder or preset name to bring up all of the available editing options.

ARTIST PACKS STL ControlHub



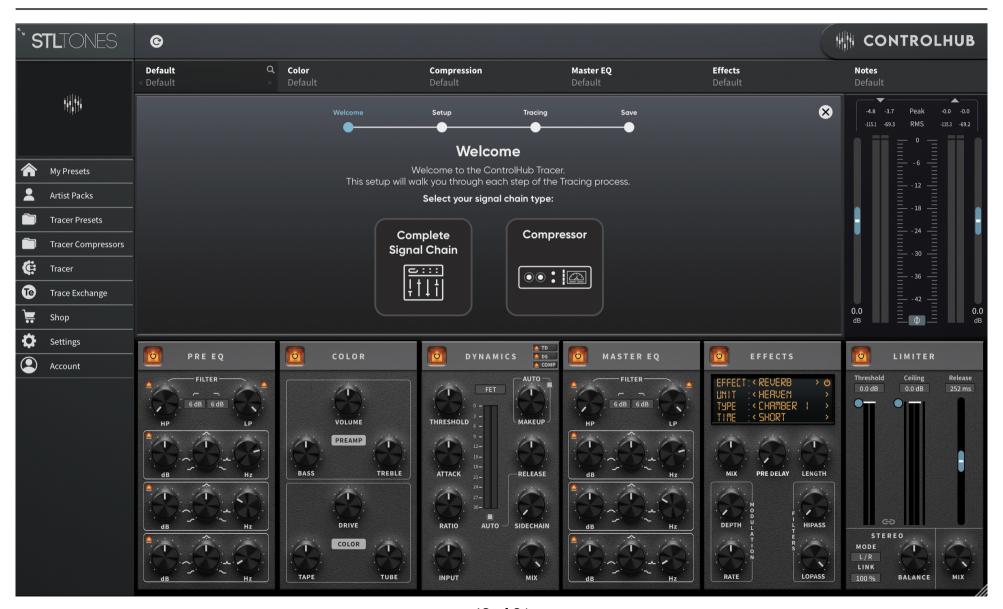
- 1. ControlHub Artist Expansion packs are located in the *Artist Packs* folder of the menu. Once a preset is selected from the dropdown menu, it will load each module and display the signal chain used in the preset browser. You can change presets from both the Artist Packs folder & the browser.
- 2. Presets are organized in the following categories:
- Drums
- Bass
- Guitars
- Vocals
- Keyboards/Synths
- Orchestral
- Mix Bus/Master
- Effects
- Individual Models
- Misc



- 3. Toggle through different presets within a category by using the left/right arrows for quick auditioning.
- 4. The lock symbol indicates that a valid license for that expansion pack couldn't be found on this computer (perpetual license users only). If you have purchased a pack license, you can activate it by clicking on "Activate Product" and following the activation code instructions. If you would like to trail the expansion pack first, click "Activate Trail" to start the free trial.

NOTE: All presets within an official ControlHub Expansion pack are editable, however, they will default back to the artist's original settings if not saved to your My Presets folder. For example, if you edit a preset, and click on another preset, the settings will not be saved automatically.

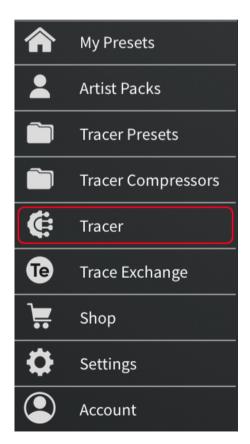
STL ControlHub



Welcome to the ControlHub Tracer

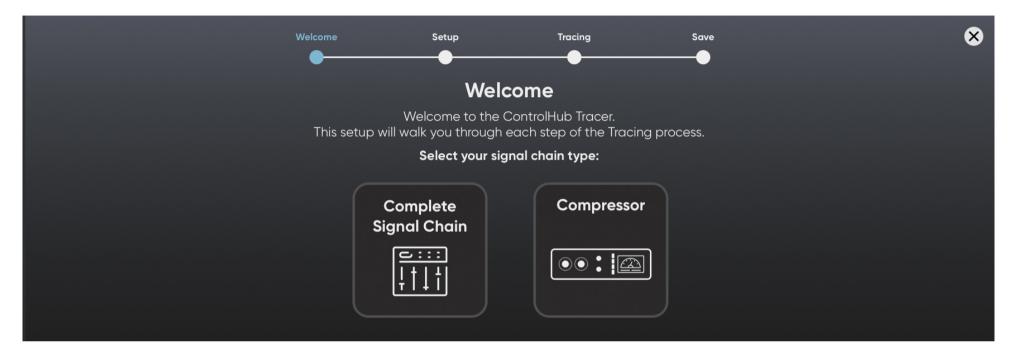
Powered by our advanced Tracing Technology, the ControlHub Tracer can learn and replicate the sonic characteristics of your hardware or software signal chains with unrivaled accuracy. Capture preamps, equalizers, compressors, limiters, and more, in any combination, from a single piece of gear to complex mixing chains to use within ControlHub...Welcome to the future of mixing.

Getting started with ControlHub Tracer



Add the ControlHub plugin to your track. You will see the *Tracer* tab in the main Navigation menu.

Once the tab is selected, you have the choice to trace a *Complete Signal Chain* or individual *Compressor*.

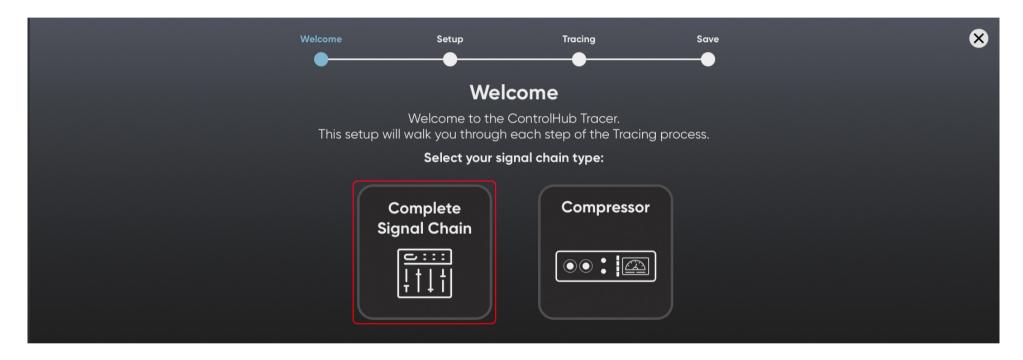


Note: Using the *Complete Signal Chain* option is the best for capturing preamps, EQ, and compressors intended to be used as a full chain. The advantage of tracing a *Compressor* separately is this allows you the flexibility to load that compressor model into an existing preset, and also capture the characteristics and color of an individual compressor.

Complete Signal Chain

Welcome

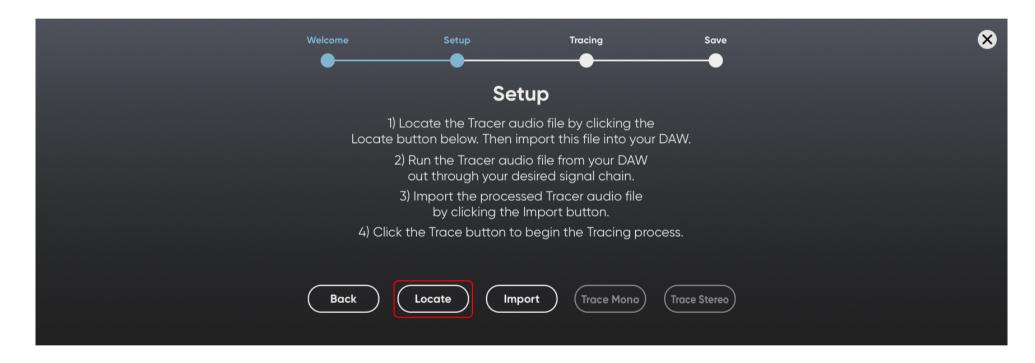
Click on the Complete Signal Chain button to begin the tracing setup.



Setup

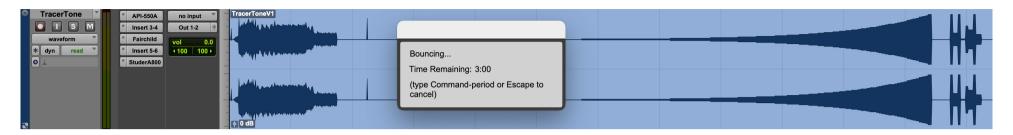
1. Locate the Tracer audio file by clicking the *Locate* button, then import the file into your DAW.

Note: Please refer to your DAWs instructional manual on the best way to import files however most DAWs simply allow you to drag & drop the audio file into your current session. You can also find the Tracer audio file here: Finder > Documents > STL > ControlHub > Tones.



Note: It is important to make sure the sample rate and bit depth of the Tracer audio file and your session is matched. Most DAWs will automatically convert the TracerTone audio file on import however please be aware these settings need to be the same for the Tracing technology to function correctly.

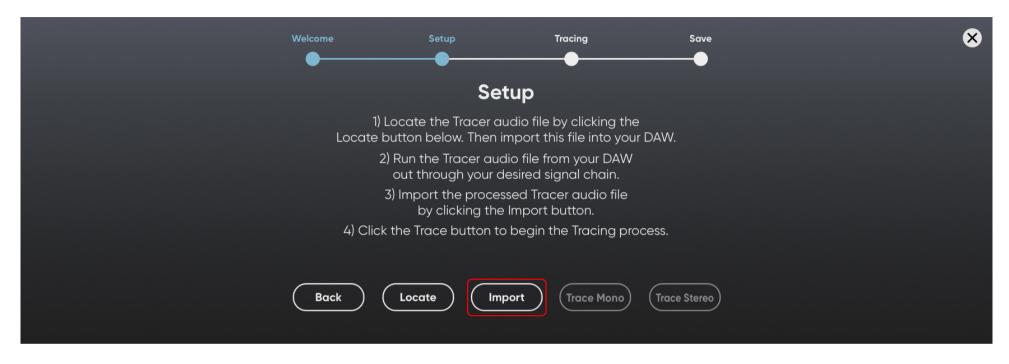
2. Run the Tracer Tone audio file from your DAW out through your desired signal chain.



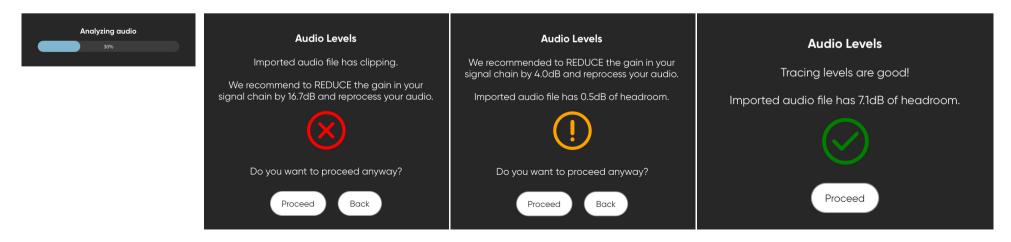
Here are our guidelines for getting the best result from the ControlHub Tracing Technology:

- Avoid digital clipping! Do not exceed 0 dBFS. Aim for a target level of around -3 dBFS at the loudest peaks of the Tracer Tone audio file.
- Extreme deliberate clipping/distortion may produce unwanted results.
- No wet/dry parallel blends. Must be the 100% wet processed signal. Tip! Trace only the parallel signal chain and use the ControlHub mix knob to blend in the 100% wet parallel preset.
- Moderate Threshold and Gain Reduction settings (-3db to -12db gain attenuation on the loudest parts of the Tracer Tone audio file)

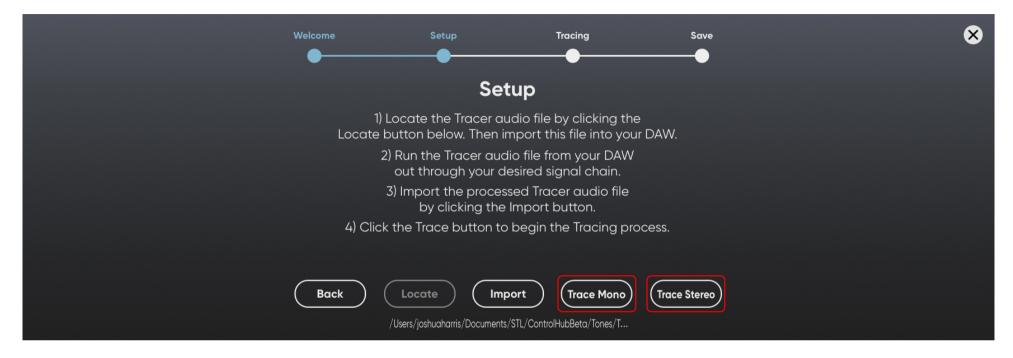
3. Import your processed (100% wet) Tracer Tone audio file by clicking the *Import* button.



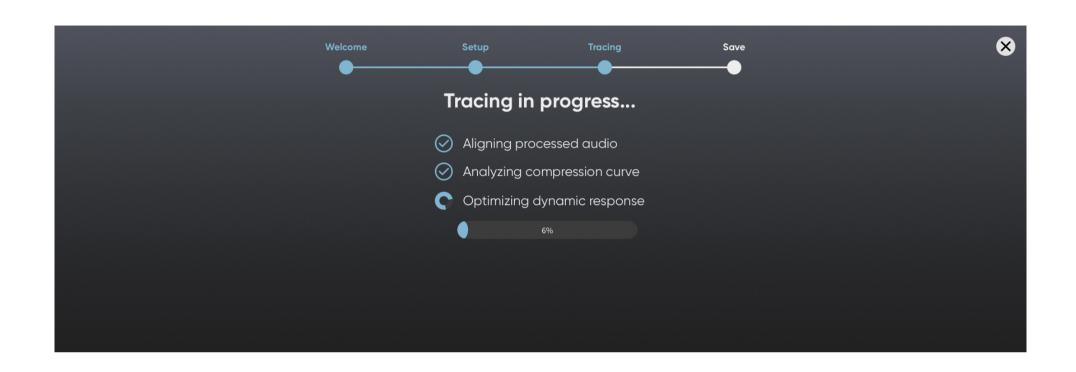
Note: The ControlHub Tracer analyzes the imported audio and prepares the file for tracing. You will be prompted on the audio levels of your processed file to let you know if the Tracer is receiving optimal levels for tracing.



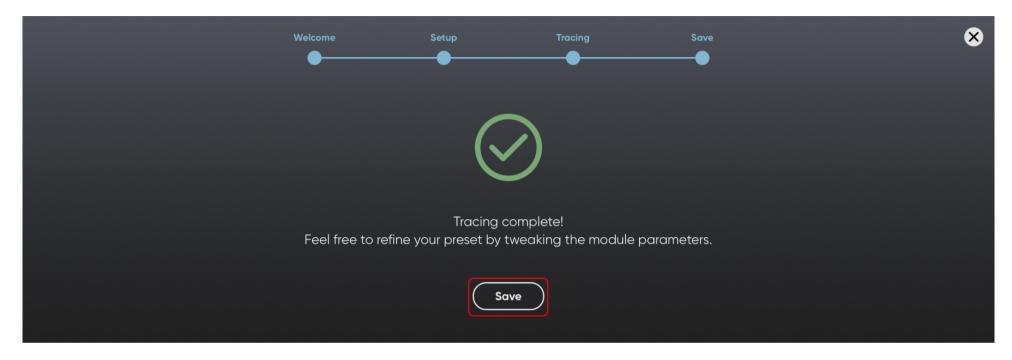
4. Click either the *Trace Mono* or *Trace Stereo* button to begin the Tracing process.



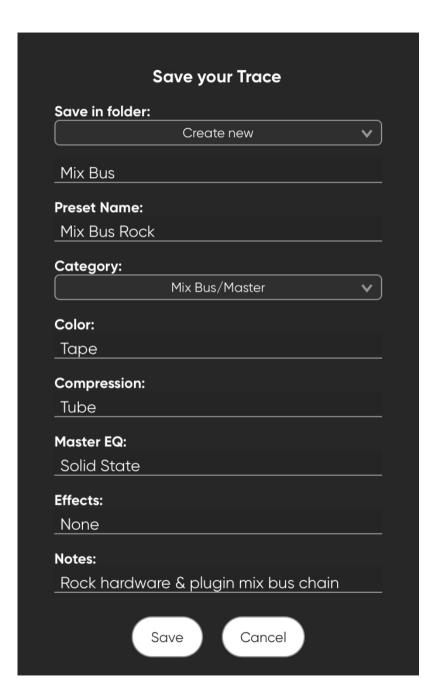
Note: Depending on the type of signal chain you are tracing, you may want to capture the subtle variations in your signal chain's left/right channels, hence making a Stereo Trace. Mono Tracer presets can still be used on stereo audio files in your mix using ControlHub & vice versa, Stereo Tracer presets can be used on mono tracks in your mix.



5. Save your Trace!



Note: Here is when you can tweak any of the modules to further customize your preset. For example, increase the color module drive, tube, and tape circuits to match closer to your reference track's complex saturation/distortion, or add ControlHub modules not in your original chain to take your preset to another level! All presets are completely tweakable once saved.

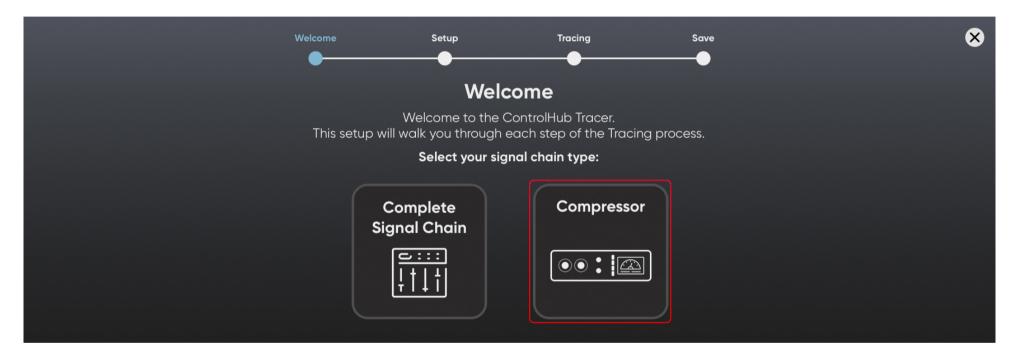


Once you hit the *Save* button, you'll be prompted to input the metadata for your preset.

Tracer Compressor

Welcome

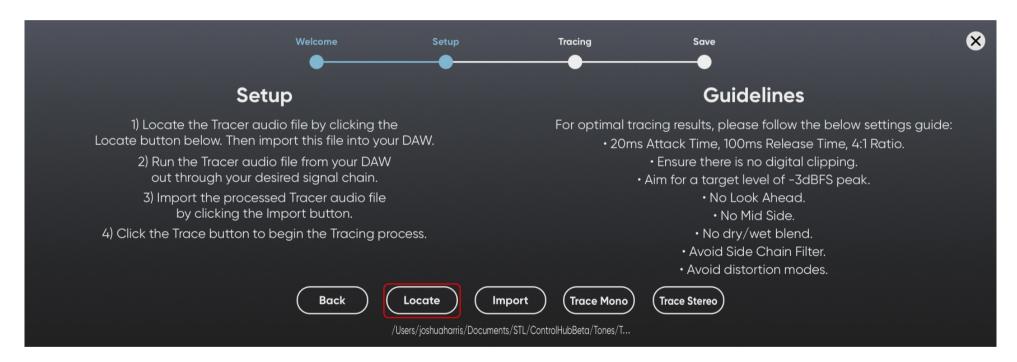
Click on the *Compressor* button to begin the tracer setup.



Setup

1. Locate the Tracer audio file by clicking the *Locate* button below, then import this file into your DAW.

Note: Please refer to your DAWs instructional manual on the best way to import files however most DAWs simply allow you to drag & drop the audio file into your current session. You can also find the Tracer audio file here: Finder > Documents > STL > ControlHub > Tones.



Note: It is important to make sure the sample rate and bit depth of the Tracer audio file and your session is matched. Most DAWs will automatically convert the Tracer Tone audio file on import however please be aware these settings need to be the same for the Tracing technology to function correctly.

2. Run the Tracer Tone audio file from your DAW out through your hardware or software compressor.

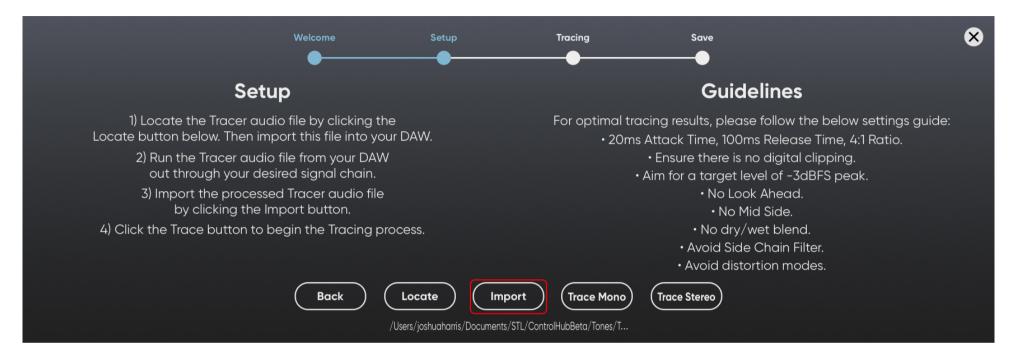


Here are our suggested guidelines for getting the best result from the ControlHub Tracing Technology, please follow these optimal training compression settings for the best results:

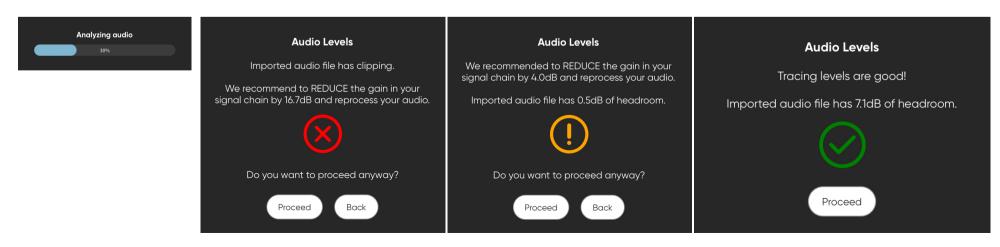
- 20ms Attack Time, 100ms Release Time, 4:1 Ratio
- Moderate Threshold and Gain Reduction (-3db to -12db gain attenuation on the loudest parts of the TracerTone audio file)
- Avoid digital clipping! Do not exceed 0 dBFS. Aim for a target level of around -3 dBFS at the loudest peaks of the TracerTone audio file.
- Avoid lookahead options in compressors and limiters.
- No Mid/Side processing.
- No wet/dry parallel blends. Must be the 100% wet processed signal.
- Avoid internal sidechain filters and optional distortion circuits.

Note: These suggested settings are for optimal ControlHub Tracer training purposes, you can still achieve great results with more extreme settings! Remember, after tracing is complete, feel free to adjust the compressor settings to dial them in further before saving.

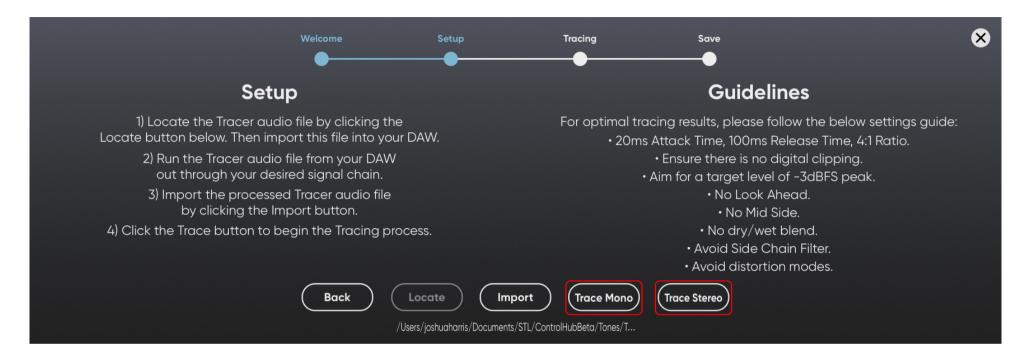
3. Import your processed (100% wet) Tracer Tone audio file by clicking the *Import* button.



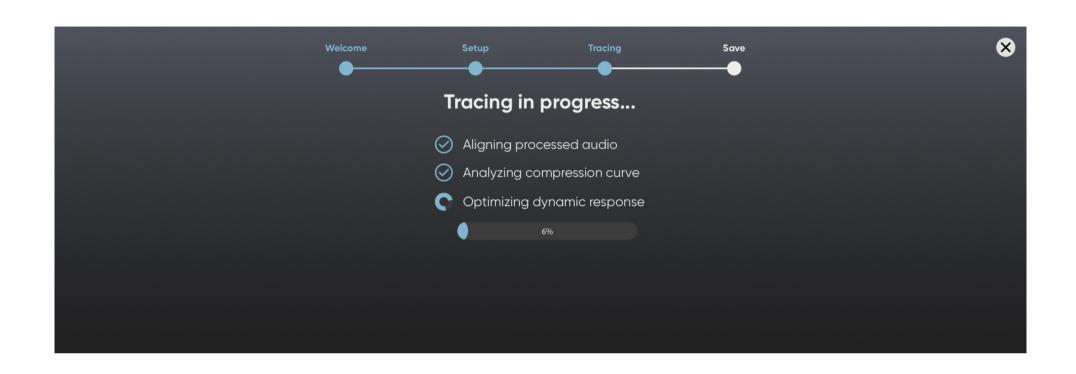
Note: The ControlHub Tracer analyzes the imported audio and prepares the file for tracing. You will be prompted on the audio levels of your processed file to let you know if the Tracer is receiving optimal levels for tracing.



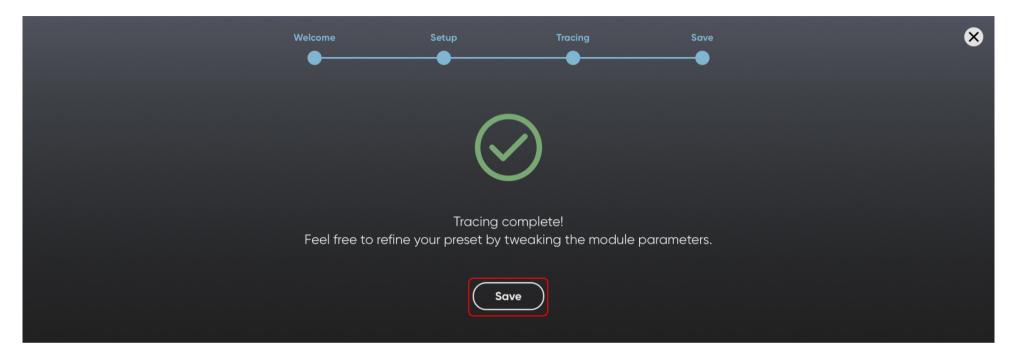
4. Click either *Trace Mono* or *Trace Stereo* button to begin the Tracing process.



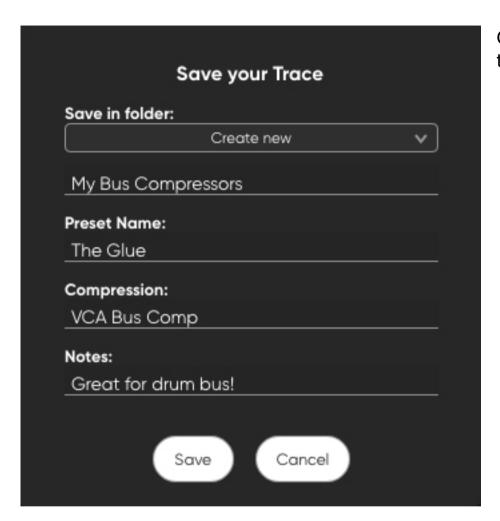
Note: Depending on the type of compressor you are tracing, you may want to capture the subtle variations in your compressor's left/right channels, hence tracing in stereo. Mono Tracer presets can still be used on stereo audio files in your mix using ControlHub & vice versa. Stereo Tracer presets can be used on mono tracks in your mix.



5. Save your Trace!



Note: Here is when you can tweak any of the modules to further customize your preset. For example, increase the color module drive, tube, and tape circuits to match closer to your reference track's complex saturation/distortion, or add ControlHub modules not in your original chain to take your preset to another level! All presets are completely tweakable once saved.



Once you hit the *Save* button, you'll be prompted to input the metadata for your compressor preset.

Tracer Compressor



- 1. Drop-down menu for compression options. You can now select from FET, VCA, Tracer, and My Tracer Compressors.
- 2. THRESHOLD control sets the level at which the compressor begins to attenuate the signal. This level is related to the ratio setting.
- 3. MAKEUP gain allows you to manually match the input levels to the output levels once the signal is being attenuated.
- 4. AUTO MAKEUP GAIN LED will automatically compensate for the level reduction caused by the compressor.
- 5. ATTACK controls how fast the compressor reacts to the incoming signal.
- 6. RELEASE controls how long the compressor holds the signal before returning to an uncompressed state.
- 7. RATIO determines how much gain reduction the signal above the given Threshold will be compressed. The Tracer compressor module has a variable ratio from 1:1 to -1:1.
- 8. SIDECHAIN controls a high-pass filter for the Compressors input detection circuit.
- 9. INPUT controls the signal level going into the compressor.



- 10. MIX controls the amount of uncompressed signal being blended with the compressed signal, allowing the option of parallel processing. 100% = you're hearing the entire compressed signal. 0% = you're hearing only the uncompressed signal.
- 11. KNEE controls how the compressor transitions between the uncompressed and compressed audio signal. 0dB = soft knee style. 30dB = hard knee style.
- 12. Gain reduction meters show the amount of attenuation (measured in dB) being applied by the compressor.
- 13. Power On/Off button for the Compressor module.

TRACER PRESETS STL ControlHub

Complete Signal Chain



Your *Complete Signal Chain* presets are saved in the *Tracer Presets* folder in the ControlHub navigation menu. Clicking the Tracer Presets tab enables the drop-down menu where you can manage all your Tracer Presets:

- Create a new folder
- Save as new preset in the current folder
- Save preset
- View current preset info/options

Note: You can also right-click on the blue highlighted folder or preset name to bring up all of the available options.

Tracer Compressors



Your individual *Compressor* models are saved in the *Tracer Compressors* folder in the ControlHub navigation menu.

You can also locate your compressor models in the *My Tracer Compressors* folder located in the updated compressor modules drop-down menu.



- FET
- VCA
- Tracer (Please note! This compressor model is the one that was trained when capturing a *Complete Signal Chain*. It is saved as part of the *Complete Signal Chain* trace and not as an individual *Compressor* model)
- My Tracer Compressors (Please note! The *Input, Threshold, and Makeup Gain* settings are "shared" between all compressor types. This helps when comparing different compressor traces as the volume will stay consistent)

General Tracing Guidelines

Here are some recommendations to get the best out of your ControlHub Tracer:

- Avoid heavily distorted signal chains. The ControlHub Tracer can match these presets; however, be aware it is not how it is intended to be used. Tip! Use the Color module to add more drive to your signal chain and experiment with using the Pre EQ to push into the Colors' Drive, Tape, and Tube circuits.
- ControlHub is not able to trace time-based effects such as delays, reverbs, tremolo/phase effects, doubler, and stereo-width enhancing tools.
- ControlHub can not trace expanders/gates. We recommend bypassing these processors when tracing as it may affect optimal tracing results.
- If compressor stacking (ex: 1176 into an LA2A) the ControlHub Tracer analyzes this as one compression stage so keep in mind the resulting ratio, threshold may be higher than you expect.
- If the volume of your Tracer Preset or Tracer Compressor isn't matching with the original chain, please ensure there
 are no volume automation/volume changes enabled on the track as this will affect the final output level of the final
 Trace.

FAQ

What is considered a "Complete Signal Chain"?

A typical signal chain might look something like what is found on most hardware and plugin channel strips. Preamp
 > EQ (pre/post compression) > Compressor > Limiter. Of course, signal chains can get much more complex with
 multiple EQ/compression stages and the ControlHub Tracer does a fantastic job of emulating these!

Why trace only a compressor?

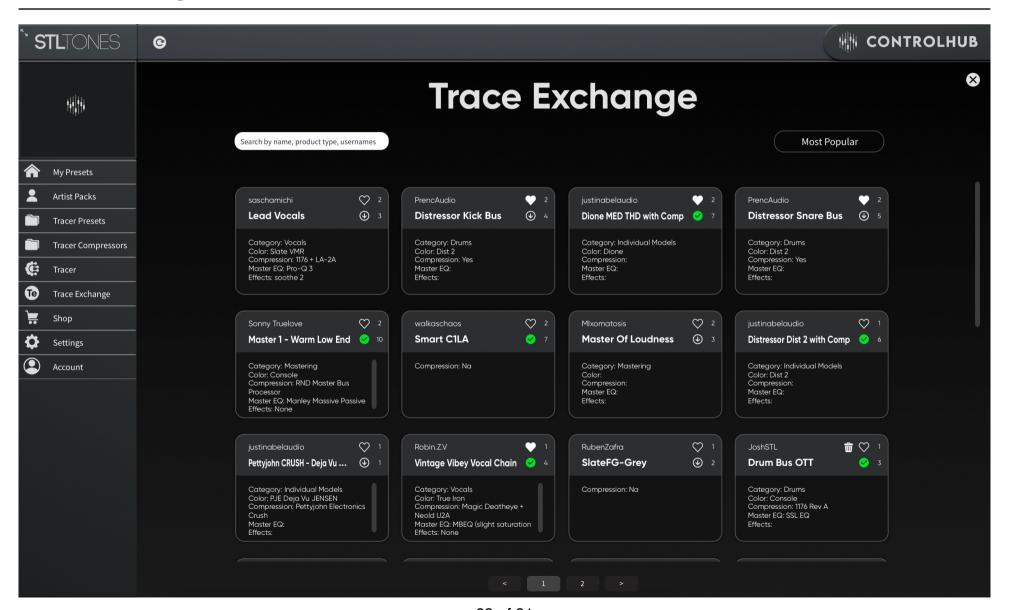
The power of tracing a compressor individually is the fact you can load your traced compressor model into any
existing preset! This opens up a world of tonal options as you can insert your favorite compressor into artist presets
or traces that you download from the STL Trace Exchange.

I want to capture EQ only. Which tracing method should I choose?

Complete Signal Chain. This will trace the frequency response of the EQ you are wanting to capture. Note: The
Tracer compressor module will engage by default however you can simply bypass it to hear the resulting EQ-only
trace.

Can it trace heavy overdriven guitar amp-like distortion?

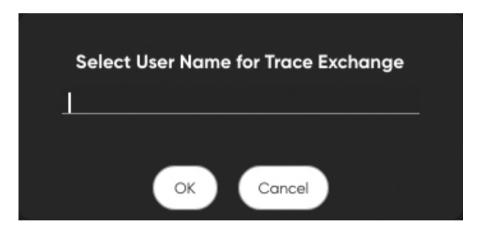
No. It is not the intention of the ControlHub Tracer, it is meant to be used as a mixing and mastering tool. Note: You can achieve very extreme distortion, be aware this needs to be manually dialed in using the ControlHub modules post-tracing.



Welcome to the Trace Exchange

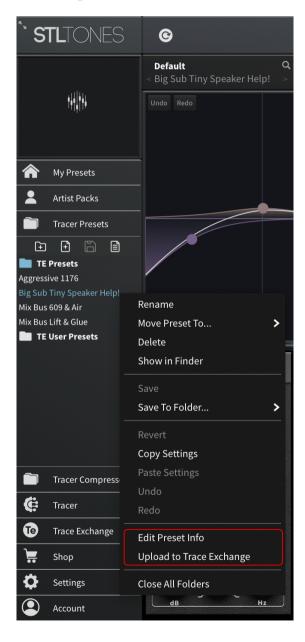
Trace Exchange is your access to a limitless library of mixing presets. Create your own captures of hardware and software signal chains to share with users from around the world. Trace Exchange lets you access hundreds of full signal chains, and individual compressor models created by the mixing community, all available in the new Trace Exchange. These presets can be accessed directly from within ControlHub in the Trace Exchange tab, where you can instantly search, filter, and download user-created presets.

Setting up a username



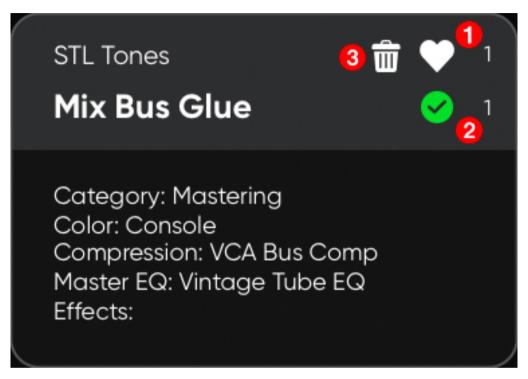
When using the Trace Exchange for the first time, you will need to create a user name. Note: This user name is linked to your STL Tones user account and associated email. If you need to change your username, please contact support directly via support@stltones.com.

Sharing Tracer Presets and Tracer Compressors on the Trace Exchange



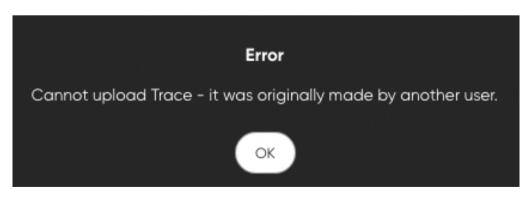
- Simply right-click on the preset you'd like to share to the Trace Exchange and select "Upload to Trace Exchange".
- Here you can also update the preset metadata of your *Tracer Presets*. Note: you can change the metadata of any Tracer Preset however you can not update the original creator's username connected to the preset.

Once successfully uploaded, you will see your preset with options to:



- 1. Like
- 2. Download the preset for other users to use within ControlHub.
- 3. Delete. You can remove your preset from the Trace Exchange by clicking on the trash icon.

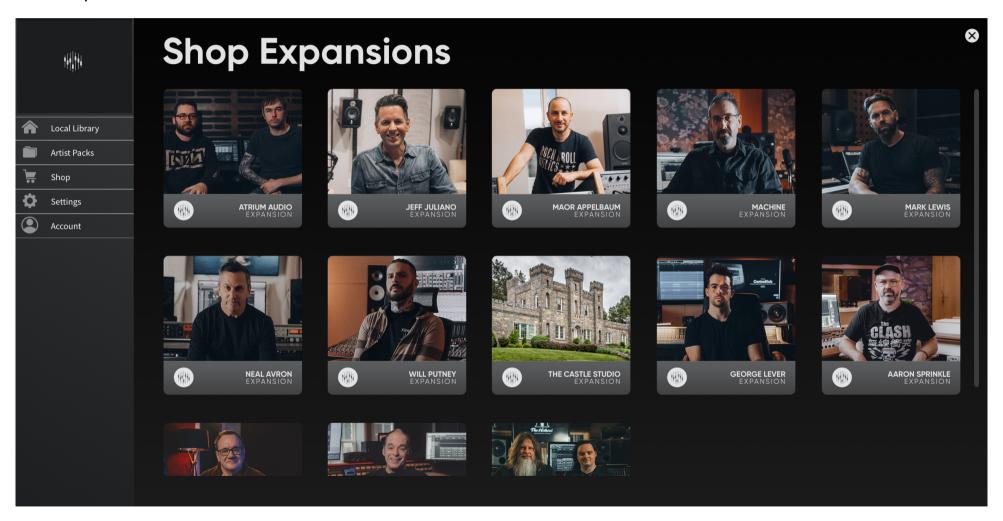
Note: This only deletes the presets from the Trace Exchange. Your preset is still saved on your local drive, located in the *Tracer Presets* and *Tracer Compressors* folder.



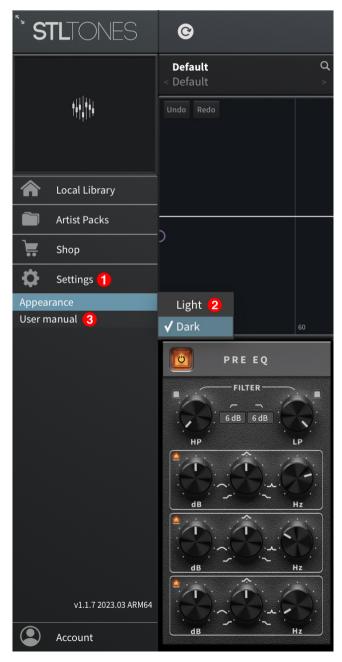
Note: You cannot upload another user's preset under your Trace Exchange account. The original creator's username is always connected to the presets metadata and cannot be changed.

SHOP STL ControlHub

Browse our range of artist expansion packs and explore the ControlHub platform by clicking on the artist thumbnails for in-depth mix videos and interviews.

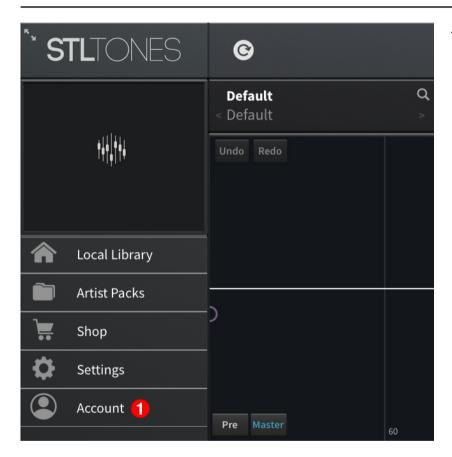


SETTINGS STL ControlHub



- 1. Plugin SETTINGS for ControlHub.
- 2. The APPEARANCE tab lets you change the color scheme for the plugin. Chose between Dark & Light modes.
- 3. ControlHub plugin user manual.

ACCOUNT STL ControlHub



1. Manage your ControlHub perpetual licenses and subscriptions.

SUPPORT STL ControlHub

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 in the best way possible, please provide the following information to our support team:

- Product Version Number (e.g. STL ControlHub V1.0.0.)
- Version number of your DAW (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 11.5.1, Windows 10 ver 1709, etc.)
- Please include a detailed description of your problem.

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, ensuring 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 plugins 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 ControlHub 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, ensuring 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/Plugins/VST/STL ControlHub

File Locations: Windows

64-bit VST: C:\Program Files\VSTPlugins\STL ControlHub

If you don't find the respective files please reinstall your STL ControlHub 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 Plugins > 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 ControlHub

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 ControlHub plugin. If the pop-up window tells you to activate please press the "activate" button and insert your Full license serial code.

How do I find my plugin in Pro Tools?

If you cannot find your STL ControlHub 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, ensuring 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.

VST: Macintosh HD / Library / Audio / Plugins / VST / STL ControlHub

AAX: Macintosh HD / Library / Application Support / Avid / Audio / Plugins /STL ControlHub

File Locations: Windows

64-bit VST: C:\Program Files\VSTPlugins\STL ControlHub

64-bit AAX: C:\Program Files\Common Files\Avid\Audio\Plugins\STL ControlHub

If you don't find the respective files please reinstall your STL ControlHub 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 ControlHub Plugin located on my computer?

Mac:

AudioUnits: Macintosh HD / Library / Audio / Plugins / Components / STL ControlHub

VST: Macintosh HD / Library / Audio / Plugins / VST / STL ControlHub

AAX: Macintosh HD / Library / Application Support / Avid / Audio / Plugins / STL ControlHub

Windows:

64-bit VST: C:\ Program Files \ VSTPlugins \ STL ControlHub

64-bit AAX: C:\ Program Files \ Common Files \ Avid \ Audio \ Plugins \ STL ControlHub

LEGAL DISCLAIMER STL ControlHub

All names of gear and/or accessory brands are trademarks owned by their respective manufacturers and are in no way affiliated with STL Tones or ControlHub. Product names are simply used for the purpose of identifying the hardware chain that was used to create the digital presets.

CREDITS STL ControlHub

Plugin Development

Federico Berti (Ignite Amps) & Momchil Jeliazkov

GUI Design

Sonny Truelove, Dan Dankmeyer & Joshua Harris

Need more help?

Find technical support and instructions here: www.stltones.com/pages/contact-us

Contact our friendly Support Team here: www.stltones.com/pages/submit-a-request

Sincerely,

STL Tones Team