

ControlHub

ControlHub Plugin User Manual

Version 3.1.0

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Introduction Page 4

ControlHub is an all-in-one mixing plugin that lets you load, customize, and save complete signal chains in seconds. Whether you're using pro-built chains from world-class mixers or capturing your own gear, ControlHub gives you the freedom to instantly recall your signature sound in any session without jumping between multiple plugins.

System Requirements

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- macOS High Sierra (10.13) or later
- Windows 10+ (64-bit) or later
- STL Licensing System, no iLok account required

ControlHub is available in the following plugin formats, compatible with the following Digital Audio Workstation (DAW) platforms:

- VST2 / VST3 (Cubase, Studio One, Ableton Live, and REAPER)
- AU (Logic Pro, GarageBand, and Luna)
- AAX (Pro Tools)

STL Tones Download Center

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

STL Tones License System

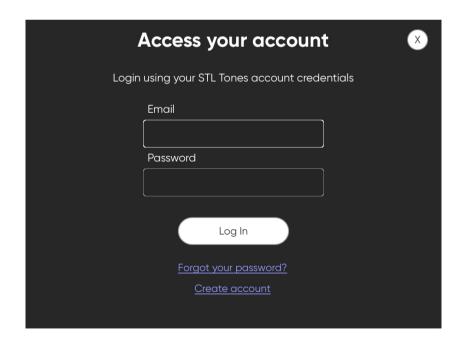
- To log into your user account, go to www.stltones.com and click on the "User" icon in the upper right-hand corner. If you don't have an account, create one by clicking "Sign up free" in the upper navigation bar.
- To trial ControlHub and all the expansion packs for a full 10 days, simply add a ControlHub subscription license to your cart on the STL Tones website, then log into the plugin using your STL account credentials to activate your trial subscription.
- Your Activation License code will be in the confirmation email you received after your purchase (perpetual licenses only).
- Multiple Machines: Each activation code and subscription can be used on up to three different machines.

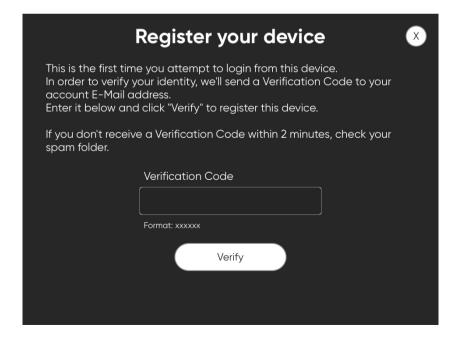
 However, the associated email will always be the email entered during your first activation. If you try to activate the same code on a 2nd machine with a separate email, the activation will fail.
- **Trial Limitations:** Only one trial can be requested per account or machine.

License Activation (Account Login)

- When you first open the plugin, you will be prompted to log in to your STL Tones user account. Insert your credentials and click "Log In".
- If it's the first time you log in from a device, a 6-digit verification code will be sent to the email address you provided.

 Copy the code from your email and paste it into the Verification Code field in the menu, then click "Verify" to authorize your device. NOTE: Check your spam folder if you don't receive a verification code within 2 minutes.
- If you have a valid Subscription or Trial license, the software will automatically search and activate it after you log in.

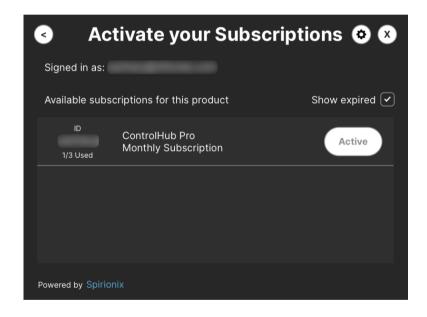


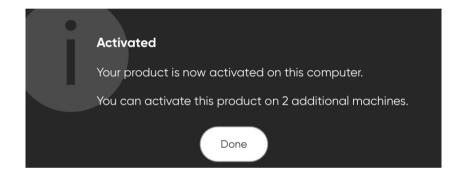


License Activation (Account Login)

Multiple Subscription Licenses

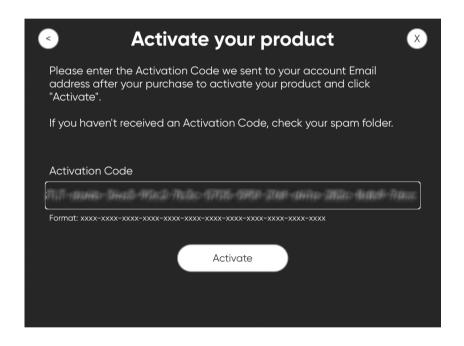
• If you have multiple valid Subscription licenses for this product in your account, you'll be prompted to select which one to activate.

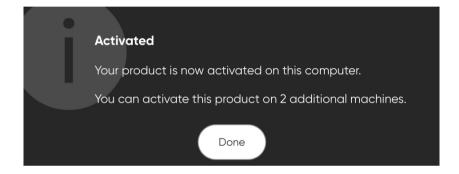




License Activation (Own Outright)

• If you don't have a valid Subscription or Trial license, the software will take you to the Own Outright License activation screen. Enter the activation code you received by email upon purchase and click "Activate".





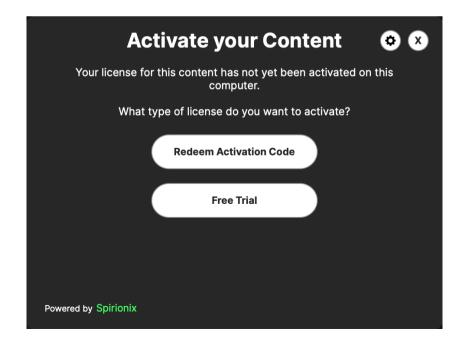
License Activation (Own Outright)

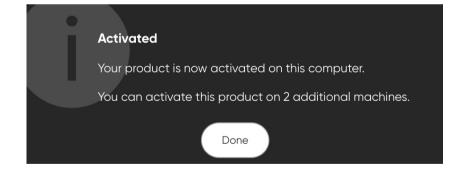
Expansion Pack Activation

Activate your expansion license by clicking on the Expansion tile to bring up the activation window.



- If you have an activation code for the selected expansion, click "Redeem Activation Code". If you want to try the model before purchasing, click "Free Trial".
- If you select "Redeem Activation Code," you'll be prompted to enter your code and click "Activate."





User Interface (Sidebar)



User Interface (Sidebar)

ControlHub Sidebar Menu:

Discover: Browse New releases, Artist Expansions, trending presets, and today's top-performing Artists while building your personalized ControlHub experience by following your favorite Artists and Bookmarking presets. See the "Discover" section for more information.

My Library: Access your personalized collection of Artist presets and all your saved presets from the Discover browser.

My Favorites: A dedicated browser that displays all of your favorite Artist Expansion presets, My Presets, and My Traces.

Capture My Gear: Access the ControlHub Tracer with step-by-step guides to capturing personalized models of your own signal chains, compressors, or individual models. See the "Capture My Gear / ControlHub Tracer" section for more information.

How To Trace

- 1. **Locate** the tracer file included in the ControlHub files.
- 2. **Record** the tracer file through your hardware and/or software signal chain export to disk after.
- 3. **Import** the new, processed tracer file and trace.

User Interface (Sidebar)

Mix Assistant: Your built-in expert for everything ControlHub, from Artist Expansions, plugin features, and user manual support.

My Profile: View and edit your ControlHub profile.

Activations: Linked to your STL Tones account, this window allows you to handle any subscription or perpetual licensing information within the plugin. You can redeem new codes, manage your currently activated licenses, or browse the list of machines currently active under your account.

Update: Our native update feature will notify you when there is a new update available and supply links to instantly download the newest version.

User Interface (Toolbar)



User Interface (Toolbar)

Preset Info Header: The Preset Info Header displays information about the currently loaded preset. It also provides the following controls: Click on the Preset Name text to toggle the display of the Preset Browser, and click on the left or right arrows to navigate to the previous or next preset, as displayed in the Preset Browser table.

Preset Browser: Clicking the browser header files alphabetically reorders items in the list. Columns can also be dragged into new positions as well as resized by dragging the edge of the header. Right-clicking the header prompts full customization of what specifiers you want in your browser — display all pertinent information or only select a few descriptors.

Toggle Browser Filter View: To find the perfect preset for your session, ControlHub's preset browser filter view allows you to quickly sift through preset types relevant to your mixing needs. The filter view has similar functionality to the standard browser to give you full customization of how your view is organized. Command-click or shift-click items in a list when you need multiple of one type. The 'Search...' bar allows for targeted browsing through the selected expansion pack.

Quick Search: Navigate all the available presets instantly within ControlHub.

Undo / Redo: Manage track changes made inside the plugin.

Save: Shortcut to saving options for My Presets or My Traces.

Plugin Settings: Manage fixed plugin window sizes as well as advanced frequency analyzer settings, including standardized FFT window sizes and types, peak-hold time, averaging time, and analyzer refresh rate (Hz).

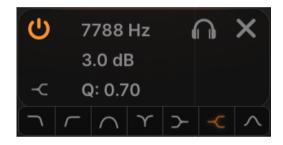
Routing: Select the plugin's processing mode: Mono, Mono/Stereo, or Stereo. *NOTE: When in Stereo, the CPU load will increase as two instances of the plugin are running in parallel.*

User Interface (Graphic EQ Analyzer)



User Interface (Graphic EQ Analyzer)

To toggle a band on or off, double-click the band's node. For high-pass and low-pass filters, you can change the slope of the filter (dB/oct) by right-clicking and dragging the node. Modify the bandwidth (Q) of the remaining filter types using the same functionality. When EQ modules are present in your ControlHub signal chain, click the module's title to engage the respective processor's analyzer.



The cutoff frequency being adjusted and the amount of gain (dB) are displayed with the node for a faster workflow. Change the shape of any EQ band by selecting the shape icon. Available options are: High and low cut, band-pass, notch, high and low shelves, and bell.

Switch between all active modules from the spectrum view window dropdown menu. Active modules will have white text, while bypassed modules will be deactivated but still visible. To change the bounds of the Graphical EQ's display, target the dropdown menu in the upper right-hand corner of the analyzer. The default bounds are ± 15 dB, but you can also adjust to ± 10 dB, ± 6 dB, or ± 3 dB.

User Interface (Master Output Controls)



User Interface (Master Output Controls)

Input & Output Slider: Adjust the input or output level of the plugin. Readout displays the Peak and RMS values.

Mix: Controls the blend between processed and unprocessed signal, leaving the plugin. This gives you the option for parallel processing. 100% is only processed audio, while 0% only outputs the incoming, unprocessed signal.

Phase Invert Button: Inverts the polarity of the output signal.

Global Stereo Controls: This allows the user to choose where the signal chain is applied on the signal — either Stereo (L/R) or Mid/Side (M/S). Depending on the processing type, the Balance controls determine how much processing is applied to either the L/R image in Stereo or M/S in Mid/Side. The Link parameter controls the amount of gain reduction being applied from the compressor and limiter, where 100% denotes equal compression on both channels and 0% denotes independent compression between channels.

Modules Page 22



Module Navigation: Instantly browse, drag, and drop modules anywhere in your chain. Double-clicking an available module will load it to the last slot in the chain.

Module Controls: Toggle any module on or off with the Power Button in the upper left-hand corner. The Module Lock in the upper right-hand corner of the module locks all the parameters while scrolling through artist packs. Click the X to remove the module from the chain.

Modules Page 23

The following modules are currently available inside your ControlHub plugin:

- Cassette
- Clipper
- Color default and individual model types
- Compressor
- DeEsser
- Delay
- EQ (equalizer)
- Gate
- Limiter
- LoFi
- Reverb
- Shaper (transient shaper)

Cassette Module



Drive: Linked drive/saturation parameters of magnetic tape emulation

Tension: Hysteretic width control for tape drive.

Wow: Linked frequency and amplitude modulation at low rates.

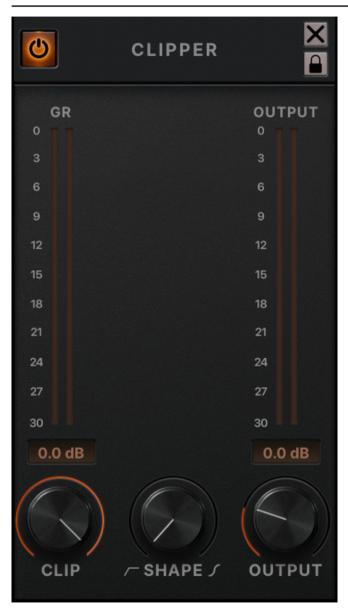
Flutter: Linked frequency and amplitude modulation at high rates.

Warble: Oscillator to the WOW path to randomize low-frequency modulation.

Age: Control over high-pass and low-pass filters.

Hiss: Tape hiss control.

Clipper Module



Clip: Threshold (dB) of the clipping processor.

Shape: The shape of the clipping — the more this parameter is increased, the softer the curve of the distortion.

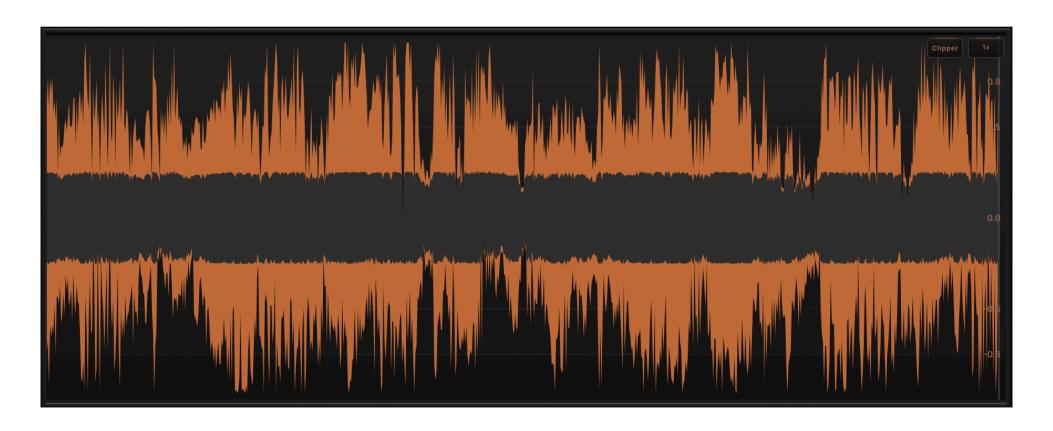
Output: Output gain trim.

Gain Reduction (GR) Meter: The amount of gain reduction from the clipping processor.

Output Meter: The level of the output signal.

Clipper Module View offers visual feedback on the clipping applied to your signal. For slower scroll times, utilize the dropbox in the top right-hand corner — defaulted to 1x speed — for 1/2x and 1/4x options.

This view can be accessed via the module-specific dropdown menu in the top right-hand corner of the default analyzer view, as well as by clicking the Clipper module header in the signal chain.



Color Module (Default)



PREAMP — Preamp-style filters that precede the Color saturation circuits.

Volume: The volume of the signal — effectively an output trim. This knob is scaled in decibels and applies no saturation to the signal.

Bass: Shelving filter with a center frequency at 100Hz, allowing for subtle low-end control.

Treble: Shelving filter with a center frequency at 5kHz to help shape a track's high-end.

COLOR — The dropdown allows you to use the "Default" module or load an "Individual" model trace. The Tape and the Tube distortions are mixed in parallel for a balance of both circuit types.

Drive: The amount of signal driven into the circuit processors.

Tape & Tube: Respective mix controls for each emulation style. The Tape parameter offers a sub to low-mid frequency bump while the Tube control models classic analog distortions.

Color Module (Individual Model)



When an Individual Model, the Drive parameter controls the amount of traced saturation harmonic content from the individual model. This is adjustable, allowing for more flexibility after tracing and using existing artist presets or tracer presets, i.e., the Complete Signal Chain Compressor.

Compressor Module



Compressor Type: Drop-down menu for different compression type options. You can now select from FET, VCA, Tracer, and My Tracer Compressors. If you are not on an active license, tracer compressor features will not be available.

Threshold: Controls the maximum level (dB) the compressor begins to attenuate the signal.

Makeup: This allows you to manually match the input and output levels once the signal is attenuated. When the LED button is enabled, this will automatically compensate for the gain reduction caused by the compressor.

Attack: Controls how fast the compressor reacts to transients of the incoming signal.

Release: Controls the length of the gain envelope that targets an uncompressed signal. When in FET mode, the Auto setting bypasses the knob entirely — similarly, the same parameter bypass happens when the VCA compressor is in anything other than Manual.

Compressor Module



Ratio: Determines how much gain reduction the signal above the given Threshold will be compressed.

Sidechain: High-pass filters the input signal to control how much low-end signal is triggering the compressor.

Input: Controls the signal level going into the compressor.

Mix: Dry/wet blend between an uncompressed signal and a compressed one, respectively.

Knee (VCA only): Controls how the compressor transitions between the uncompressed and compressed audio signal. 0 dB denotes a soft knee style, while 30 dB denotes a hard knee style.

The gain reduction meters show the amount of attenuation (dB) being applied by the compressor.

When capturing compressors with the ControlHub Tracer, input gain, threshold level, and makeup gain parameters are matched to streamline the auditioning process between models.

DeEsser Module
Page 31



Frequency: The target frequency that the module will process.

Threshold: The level at which the processor begins to attenuate the signal.

Listen Button: Solos the side-chained signal to more easily help you detect where the frequencies that need attenuation are.

Output: Controls the output level of the processed signal.

Mix: Dry/wet blend between an uncompressed signal and a compressed one, respectively.

Gain Reduction Meter: Shows the amount of attenuation (dB) being applied.

The **Audio** dropdown menu switches between two compression modes:

- Wideband: Compression attenuation is applied to the entire audio signal.
- **Split:** The audio is split into low and high-frequency signals, with compression attenuation only applied to the high-passed signal.

Sidechain: The dropdown menu switches between a high-pass and bandpass filter for the internal sidechain. The high-pass filter will process all the frequencies above the set frequency, with the Bandpass at a narrowed band around the set frequency.

Delay Module



Unit: Displays the delay model currently being used. The arrows can be used to scroll through the different types for quick auditioning.

Type: Dropdown menu that displays the current style of delay being used as subcategories of the selected Unit.

Time: Shows the delay time value in milliseconds by default. When BPM **Sync** is engaged, the delay time is displayed in note values synced to the DAW's internal BPM setting.

Mix: Dry/wet blend between an uncompressed signal and a compressed one, respectively.

Feedback: Controls the amount of delay feedback repeats.

Depth: Controls the modulation depth of the delay path. 0% denotes no modulation.

Rate: Controls the modulation rate of the delay path from 0.1 Hz to 10Hz.

High-pass / "HIPASS": Filters the delayed signal from 10Hz to 5000Hz.

Delay Module



Low-pass / "LOPASS": Filters the delayed signal from 500Hz to 22kHz.

BPM Sync: Synchronizes the module with the host DAW's internal BPM.

Ping Pong: Creates a stereo effect of the delay signal bouncing between the left and right channels. Mono/Stereo routing is required.

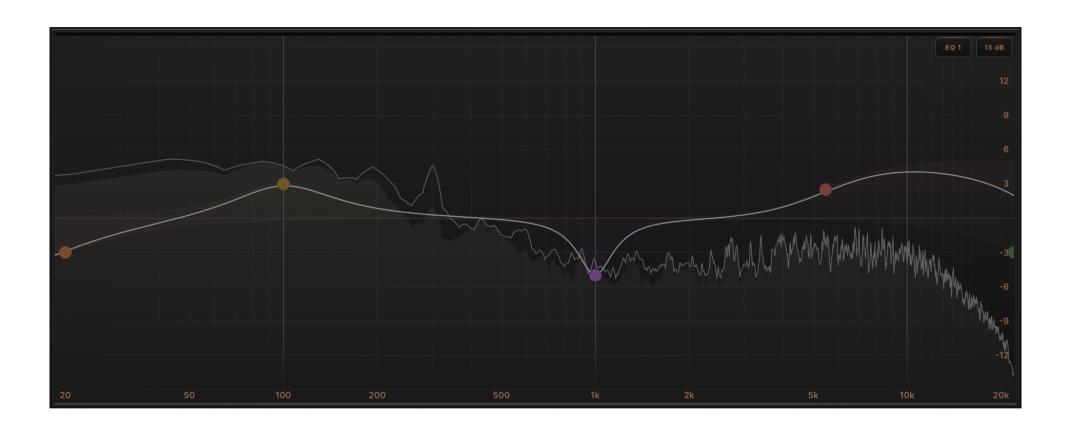


High-pass (HP) & Low-pass (LP) Filters: Toggle the filters on/off state by engaging or disengaging the LED button. The slope of the filter (dB/oct) shows the options as a dropdown menu. These filters are static to their respective filter type.

Additionally, the EQ module contains three other bands that can be low-pass, high-pass, bell/peaking, shelving, fixed-gain bandpass, or notch filters. Each band has a frequency bandwidth of 20Hz - 22kHz.

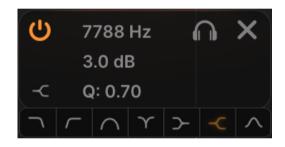
Toggle the module on or off with the Power Button in the upper left-hand corner. The Module Lock in the upper right-hand corner of the module locks all the parameters while scrolling through artist packs. Click the X to remove the module from the chain.

<u>TIP</u>: Double-click to reset the parameter. Right-click to manually enter a specific cutoff value (Hz). \Re (Mac) or CTRL (Windows) while scrolling enables precise parameter turning.



EQ Module Graphic EQ Analyzer View

To toggle a band on or off, double-click the band's node. For high-pass and low-pass filters, you can change the slope of the filter (dB/oct) by right-clicking and dragging the node. Modify the bandwidth (Q) of the remaining filter types using the same functionality. When EQ modules are present in your ControlHub signal chain, click the module's title to engage the respective processor's analyzer.



The cutoff frequency being adjusted and the amount of gain (dB) is displayed above the node for a faster workflow. Change any EQ bands' shape by selecting the shape icon. Available options are: High and low cut, band-pass, notch, high and low shelves, and bell.

Switch between all active modules from the spectrum view window dropdown menu. Active modules will have white text, while bypassed modules will be deactivated but still visible. To change the bounds of the Graphical EQ's display, target the dropdown menu in the upper right-hand corner of the analyzer. The default bounds are ± 15 dB, but you can also adjust to ± 10 dB, ± 6 dB, or ± 3 dB.

Gate Module Page 37



Threshold: The level at which the gate begins to process the signal.

Attack: The attack time controls how quickly the gate opens once the input signal rises above the threshold.

Range: The Range control sets how much the signal is reduced when the gate is closed.

Hold: The Hold control determines how long the gate remains fully open after the signal drops below the threshold

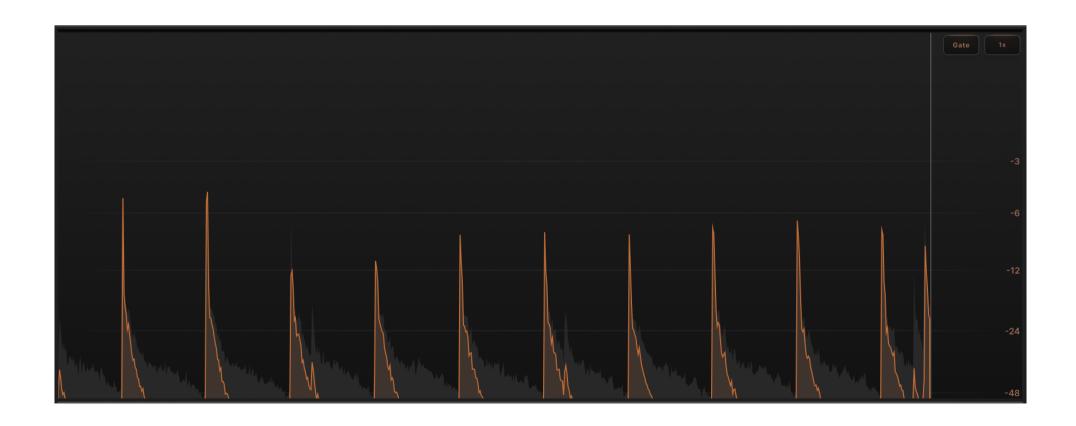
Sidechain: High-pass filters the input signal to control how much low-end signal is triggering the gate.

Release: The Release control sets how quickly the gate closes after the Hold time has finished and the signal stays below the threshold.

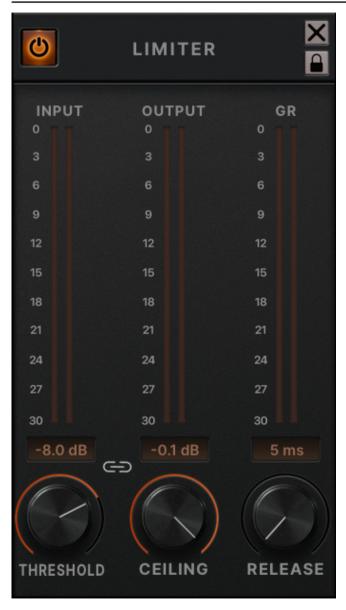
Gate Module View

The Gate Module View offers visual feedback on the gate applied to your signal. For slower scroll times, utilize the dropbox in the top right-hand corner — defaulted to 1x speed — for 1/2x and 1/4x options.

This view can be accessed via the module-specific dropdown menu in the top right-hand corner of the default analyzer view, as well as by clicking the Gate module header in the signal chain.



Limiter Module



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.

Ceiling: Sets the output level of the Limiter. The default 0.0 dB is your maximum peak output.

Release: Controls how long the Limiter holds the signal before returning to an uncompressed state.

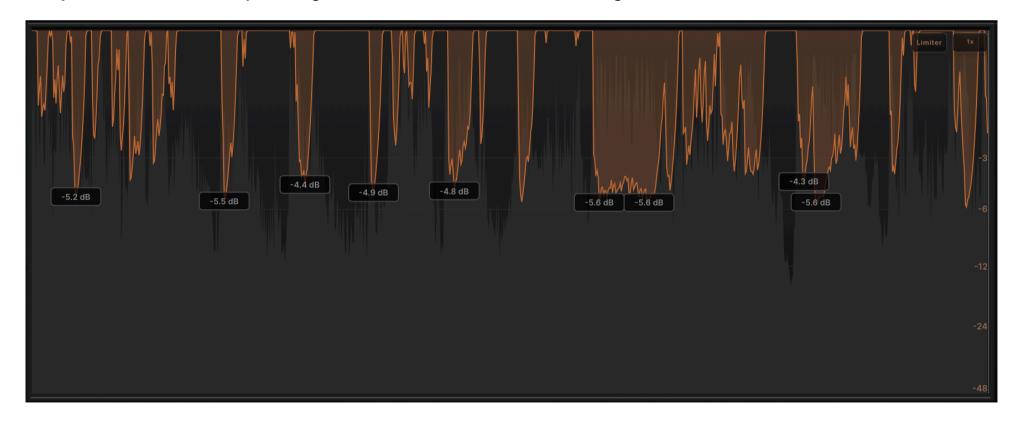
Link Button: Couples the Threshold and the Ceiling sliders in their current position. Helpful when wanting to control a signal's dynamics without increasing the volume.

NOTE: The Limiter module has a fixed attack time of 1 ms.

Limiter Module View

Limiter Module View offers visual feedback on the gain reduction (dB) applied to your signal as well as periodic updates on the maximum peaks in the envelope. For slower scroll times, utilize the dropbox in the top right-hand corner — defaulted to 1x speed — for 1/2x and 1/4x options.

This view can be accessed via the module-specific dropdown menu in the top right-hand corner of the default analyzer view, as well as by clicking the Limiter module header in the signal chain.



LoFi Module
Page 41



Quality: Down-sampler

Antialias: Control over distortion artifacts that occur during digital audio conversion.

Bits: Amplitude bit crusher.

Resolution: Dither noise.

Type: Dither noise types (rectangular, triangular, and Gaussian)

Mix: Global effect mix.

Reverb Module



Unit: Displays the reverb model currently being used. The arrows can be used to scroll through the different types for quick auditioning.

Type: Dropdown menu that displays the current style of delay being used as subcategories of the selected **Unit**.

Time: Selects a reverb model of that general time length.

Mix: Dry/wet blend between an uncompressed signal and a compressed one, respectively.

Pre Delay: Determines the amount of time before the reverb begins.

Length: Allows you to change the length range of the selected reverb time to further shape the reverb decay.

Depth: Controls the modulation depth of the delay path. 0% denotes no modulation.

Rate: Controls the modulation rate of the delay repeats from 0.1Hz to 10Hz.

Reverb Module



High-pass / "HIPASS": Filters the delayed signal from 10Hz to 5kHz.

Low-pass / "LOPASS": Filters the delayed signal from 500Hz to 22kHz.

Shaper Module Page 44



Sidechain: This engages an internal sidechain filter to process only the frequency selected for targeted transient control. It can also prevent part of the signal from being processed.

Attack: Allows for amplifying and attenuating the attack of an audio signal by 15 dB.

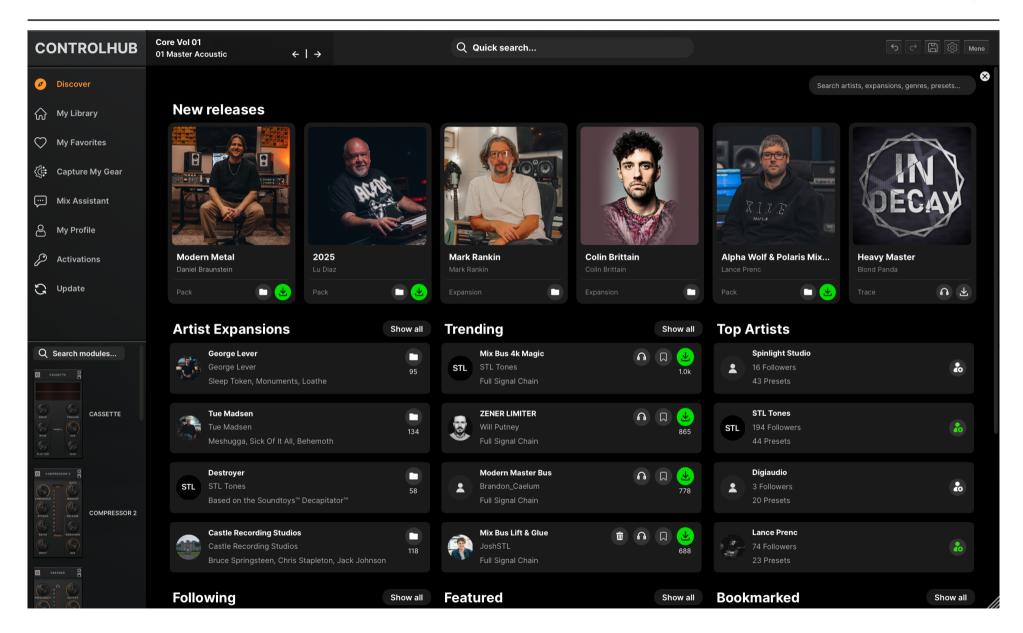
Sustain: Controls the length of an audio signal's sustain by amplifying and attenuating by 24 dB.

Output: Adjusts the output level of the module.

Limiter: Engages an internal limiter to avoid digital clipping.

Sidechain Options: High-pass or bandpass filter used for the sidechain detection.

Gain Reduction/Expansion Meter: This shows the amount of gain applied to the signal.



Discover is the ultimate way to explore all the available presets on ControlHub.

All Artist Expansions and ControlHub community shared presets are accessible from Discover. Easily see new releases, trending presets, and today's top-performing Artists. Follow all the Artists you love, get notified when they drop something new, and bookmark presets for quick access anytime. Instantly return to your go-tos and uncover fresh inspiration across the ControlHub Artist community.

Setting up your ControlHub Profile

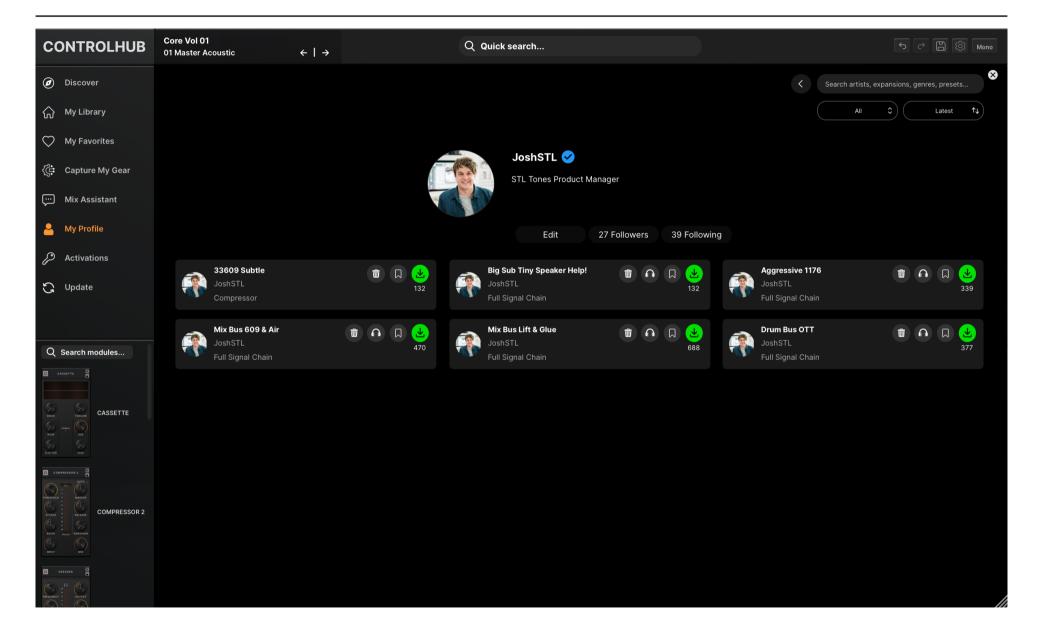
When using Discover for the first time, you will need to create a username and will be prompted to add a photo and bio.

NOTE: This username 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.

Discover includes the following browsing functionality and options:

- The Discover search bar is the best way to find any preset within ControlHub. Search for Artists, Expansions, genres, preset names, and it will filter, displaying the most relevant results.

- Clicking once on an Expansion will load and display the presets in that expansion, including the signal chain used in the preset browser.
- Click on the 'Show all' button to display all Expansions in one window. Click 'Open in Browser' to display all available Expansions in the preset browser view.
- Perpetual license users only: Clicking on an Expansion without a valid license for that expansion will display a popup window explaining that a license couldn't be found on this computer. If you have purchased an Expansion license, you can activate it by clicking on Redeem Activation Code > Activate. Click Free Trial if you would like to trial the Expansion first.
- Clicking on the folder icon will display a description of the Expansion, and for Packs, you'll see a list of presets contained.



Sharing your Traces on Discover

Located in My Library is your My Traces folder. Right-click on the Trace or folder (Pack) you would like to share to Discover and select "Upload to Discover". You can also access the Trace Editor here to change the Trace's metadata if required. See the 'My Traces' section for more information.

NOTE: You can change the metadata of any Trace; however, you can not change the original creator's username connected to the Trace.

Discover presets have the following options:

Audition headphone button: Allows you to use tones instantly by selecting the headphone icon. *NOTE: This is only available for 'Complete Signal Chain' presets.*

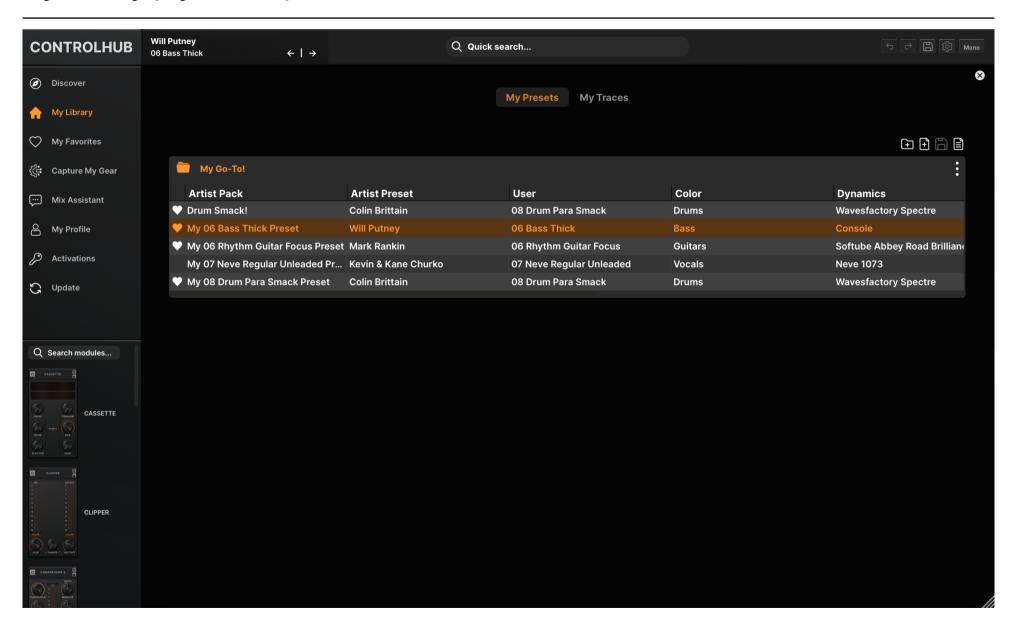
Bookmark button: Allows you to flag presets you like and easily browse these presets using the "Bookmarked" filter type.

Download button: Downloads the preset or Pack to 'My Traces'.

Trash button: Removes your preset from Discover. *NOTE: This only deletes the preset from Discover and will not delete any local copy on your computer.*

User name text/button: View the user's profile and all their available presets.

My Library (My Presets)



My Library (My Presets)

Save, access, and manage your own presets. 'My Presets' can be modified Artist Expansion presets, or presets made up of Compressor and Individual Model Traces. Clicking the 'My Presets' tab displays the My Presets view, where you can manage this type of preset using the following buttons:

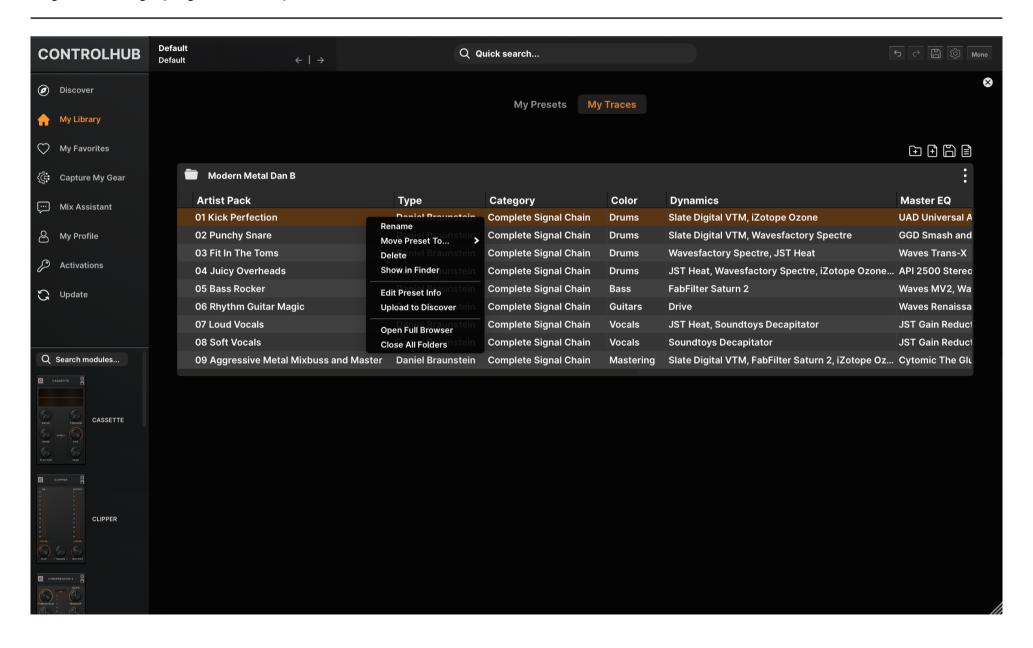
- Create a new folder
- Save as a new preset in the current folder
- Save preset
- View current preset info and options

Right-click on any item in the tree view (folder or preset) to bring up the available options for the selected item. You will be provided with the most options when right-clicking on the currently loaded user preset (signified using a different text color), such as Save / Copy / Paste / Undo / Redo options.

Loading a preset by double-clicking will load the My Presets browser with further filtering options.

NOTE: In most cases, there is always a loaded/selected user preset at any time.

My Library (My Traces)



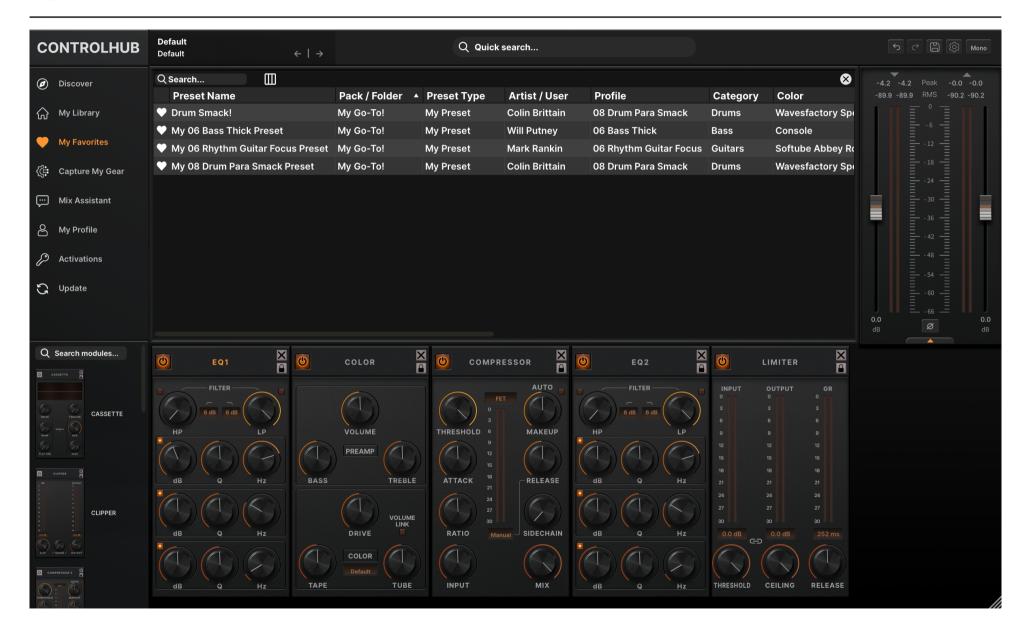
ControlHub Tracer presets are saved in the 'My Traces' tab in the My Library window. This includes any Trace made with the ControlHub Tracer or downloaded from Discover. Clicking the My Traces tab opens the folder view, where you can access and manage all of your Traces. Loading a preset by double-clicking will load the preset browser with further filtering options.

The primary Trace management options are provided using the following four buttons:

- Create a new folder.
- Save as a new Merged Trace in the current folder.
- Save the current Merged Trace.
- View current Trace info/options.

Right-click on any item in the tree view (folder or Trace) to bring up the available options for the selected item:

- Edit Metadata: Available when right-clicking a Merged Trace item. This opens the Trace Editor, which allows you to edit the metadata of the Merged Trace.
- Upload to Discover: Available when right-clicking any Trace item. This allows you to upload the selected Trace to Discover.



My Favorites

Selecting the heart icon will populate that preset or trace into your "My Favorites" browser, accessible from the sidebar menu.

Right-click on any preset or trace in the My Favorites browser to show the preset in its native browser, where you can edit.

Capture My Gear (ControlHub Tracer)



Capture My Gear (ControlHub Tracer)

The ControlHub Tracer, powered by our advanced tracing technology, can learn and replicate the sonic characteristics of your hardware or software signal chains with unrivaled accuracy. Capture preamps, equalizers, compressors, limiters, in any combination - from a single piece of gear to complex mixing chains for use directly within ControlHub.

NOTE: The ControlHub Tracer is subscription-only.

ControlHub Tracer (Complete Signal Chain)

To trace a Complete Signal Chain, perform the following steps:

- Locate the TracerToneV2 audio file by clicking the Locate button, then import the file into your DAW. You can also find the Tracer audio file here: Finder > Documents > STL > ControlHub > Tones.
- Ensure the TracerTone audio file matches the sampling rate and bit depth of your session. Most DAWs will automatically convert the TracerTone audio file during import; however, please be aware that these settings need to be the same for the Tracing technology to function correctly. Beware of time stretching/warping upon importing.
- Run the TracerTone audio file from your DAW out through your desired signal chain with regard to the following guidelines:
 - 1. 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 and deliberate clipping/distortion may produce unwanted results.
 - 2. If tracing gear with parallel processing, always set the blend to 100% wet.
 - 3. Moderate Threshold and Gain Reduction settings (-3db to -12db gain attenuation on the loudest parts of the Tracer Tone audio file)
- Introduce the processed audio file to the Tracer using the Import button. If clipping is detected, ControlHub will prompt you with the option to proceed and bypass the warning. This is not recommended!

ControlHub Tracer (Complete Signal Chain)

- If your signal chain relies on subtleties between left and right channels, select Trace Stereo; if not, select Trace
 Mono. Mono presets have the capacity to be used during stereo processing as well as stereo presets during mono processing.
- CPU / GPU Selector: Training times are dependent on your operating system's specifications; therefore, we suggest using the default GPU option if you have a good-spec GPU unit. If you believe your GPU to be low-spec, the CPU option may result in faster tracing times. Regardless, the quality of the Trace will not change with either option.
- Save your trace, make any tweaks to the modules, and input the metadata for your custom trace preset.

ControlHub Tracer (Compressor)

To trace a Compressor, perform the same steps for the Complete Signal Chain with regard to the following optimal compressor settings:

- 20ms attack time, 100ms release and a 4:1 ratio
- Via the target-traced compressor's threshold, moderate gain reduction (e.g., between -3dB to -12dB of gain reduction on the loudest parts of the TracerTone audio file)
- Avoid lookahead options in compressors and limiters when possible
- No mid/side processing
- No wet/dry parallel blends must be the fully processed signal only
- Avoid internal sidechain filters and optional distortion circuits when possible

When saving, you will be prompted to input metadata for the tracer preset with information such as Preset Name (ex. "The Glue"), Compression (ex. "VCA Bus Comp"), and pertinent Notes (ex. "Great for drum bus!").

ControlHub Tracer (Individual Model)

To trace an Individual Model, perform the same steps for the Complete Signal Chain with regard to the following optimal compressor settings:

- 20ms attack time, 100ms release and a 4:1 ratio
- Via the target-traced compressor's threshold, moderate gain reduction (e.g., between -3dB to -12dB of gain reduction on the loudest parts of the TracerTone audio file)
- Avoid lookahead options in compressors and limiters when possible
- No mid/side processing
- No wet/dry parallel blends must be the fully processed signal only
- Avoid internal sidechain filters and optional distortion circuits when possible

When saving, you will be prompted to input metadata for the tracer preset with information such as Preset Name (ex. "Brit 73"), Color (ex. "Vintage British Preamp"), and pertinent Notes (ex. "Pairs great with artist presets!").

The Drive knob in the Individual Model controls the traced harmonic distortion and saturation content. This is adjustable, allowing for more flexibility after tracing and use with existing artist presets or tracer presets (Complete Signal Chain and Compressor). The Tape and Tube controls are <u>not</u> available in Individual Models.

Tracing Recommendations

Avoid heavily clipped signal chains. The ControlHub Tracer can match these presets; however, be aware that it is not how it is intended to be used. *NOTE: Use the Individual Model tracing type to capture your distortion and saturation.*Load that tracer model into the Color module to add more drive to your signal chain.

ControlHub is not able to trace time-based effects such as delays, reverbs, tremolo, phase effects, doubler, or stereowidth enhancing tools. ControlHub also cannot trace expanders and 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 and threshold may be higher than expected.

If the volume of your preset or compressor model does not match that of the original chain, ensure there is no volume automation or general volume changes enabled, as this will affect the final output level of the trace.

Tracing FAQs

What's 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 Discover.

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 want 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 by using the Individual Model tracing type for subtle to extreme saturation, and this allows full control after tracing to further tweak and refine.

Support Page 64

For technical issues, please contact us at www.stltones.com/pages/contact-us. Before doing so, follow our Troubleshooting questions below to see if these fix your issue.

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 v2.0.0.)
- DAW version number (e.g., ProTools 11.2.2, Logic 10.2.4)
- Interface and/or associated hardware (e.g., Focusrite Scarlett 2i2, Universal Audio Apollo Twin, etc.)
- Computer and operating system (e.g., MacBook Pro OS X 11.5.1, Windows 10 ver 1709, etc.)
- Detailed description of your problem

Uninstall / Reinstall

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

Steps:

- 1. Close all host software (e.g., Pro Tools, Logic, Cubase, etc.)
- 2. Uninstall your plug-in
- 3. Ensure the target plugin(s) no longer show up in the inserts list. If they are still present, manually delete them from your Library files. Once they no longer show up in your DAW (after restarting), move on to **Step 4**.
- 4. Close out of all host software.
- 5. Follow the installation and licensing procedure outlined in the "Installation and 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.

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.

1. Follow the installation and licensing procedure outlined in the "Installation and License Activation" section of this manual, ensuring you have the latest installers for the plug-in.

2. Now, check if the plugin is installed on your computer in the default folder.

File Locations: Windows

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

File Locations: Mac

VST: Macintosh HD / Library / Audio / Plugins / VST / 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, ensure that the following path is listed:

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 ProTools?

1. Follow the installation and licensing procedure outlined in the "Installation and License Activation" section of this manual, ensuring you have the latest installers for the plug-in.

2. 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.

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 and License Activation" section of this manual to ensure you have the latest installers.

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

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.

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Plugin Development

Federico Berti (Ignite Amps), Momchil Jeliazkov, Zachary Miller, and Dylan Slocum

Plugin Design

Sonny Truelove, Dan Dankmeyer, and Joshua Harris

Need more help?

General technical support and instructions can be found at www.stltones.com/pages/contact-us or contact our friendly Support Team at www.stltones.com/pages/submit-a-request.

Sincerely,

The STL Tones Team