



ControlHub

ControlHub Plugin User Manual

Version 3.0.0

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Introduction

The screenshot displays the 'CONTROLHUB' interface for the 'Core Vol 01' plugin, specifically the '01 Master Acoustic' preset. The interface is organized into several key sections:

- Top Bar:** Features the 'CONTROLHUB' title, the preset name 'Core Vol 01 01 Master Acoustic', a search bar, and navigation icons (back, forward, save, settings, and stereo).
- Left Sidebar:** Contains navigation options: Presets, Capture My Gear, Trace Exchange, Account, and Update.
- Center Spectrum Analyzer:** A frequency response graph with a logarithmic x-axis (20 to 20k Hz) and a linear y-axis (-12 to 12 dB). It shows a signal waveform and a frequency response curve with three highlighted points: a purple point at approximately 1k Hz, a yellow point at 100 Hz, and a red point at 5k Hz.
- Right Level Meter:** A vertical meter showing signal levels. It includes a 'Peak' meter (ranging from -0.4 to -0.0 dB) and an 'RMS' meter (ranging from -25.6 to -19.7 dB). Below the meter are two vertical sliders for gain, currently set at 0.0 dB.
- Bottom Processing Modules:** A row of five main modules, each with its own sub-controls:
 - EQ1:** Includes a 'FILTER' section with HP and LP filters, and three frequency sliders (dB, Q, Hz).
 - COLOR:** Features 'VOLUME', 'PREAMP', 'BASS', and 'TREBLE' controls.
 - COMPRESSOR:** Offers 'AUTO' and 'FET' modes, with controls for 'THRESHOLD', 'ATTACK', 'RELEASE', 'RATIO', 'INPUT', and 'MIX'. It also includes 'MAKEUP' and 'SIDECHAIN' options.
 - EQ2:** Similar to EQ1, with 'FILTER' and three frequency sliders.
 - REVERB:** Includes a digital display for 'UNIT: < HEAVEN >', 'TYPE: < CHAMBER 1 >', and 'TIME: < SHORT >'. It also has 'MIX', 'PREDELAY', 'LENGTH', 'DEPTH', and 'HIPASS' controls.
 - LIMITER:** Features 'INPUT', 'OUTPUT', and 'GR' (grain) meters. It includes 'THRESHOLD', 'CEILING', and 'RELEASE' controls.
- Bottom Left:** A search bar and a vertical list of additional modules: CLIPPER, COMPRESSOR 2, and REVERB.

Introduction

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

- macOS High Sierra (10.13) or later
- Windows 7 (64-bit) or later
- STL Licensing System, no iLok account required

Supported Host Software

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.

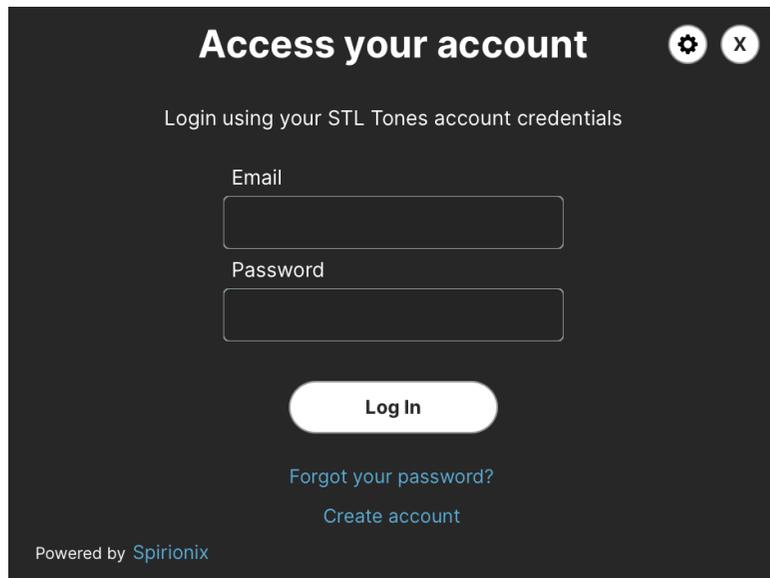
STL Tones License System

- 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.

Installation and License Activation — Full License (Online)

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** that contains your 6-digit verification code. If you didn't receive the email in your main inbox, check your spam folder.

Copy this 6-digit code from your email and paste it into the Verification Code field in the menu, then click **Verify**.



Access your account [Settings] [Close]

Login using your STL Tones account credentials

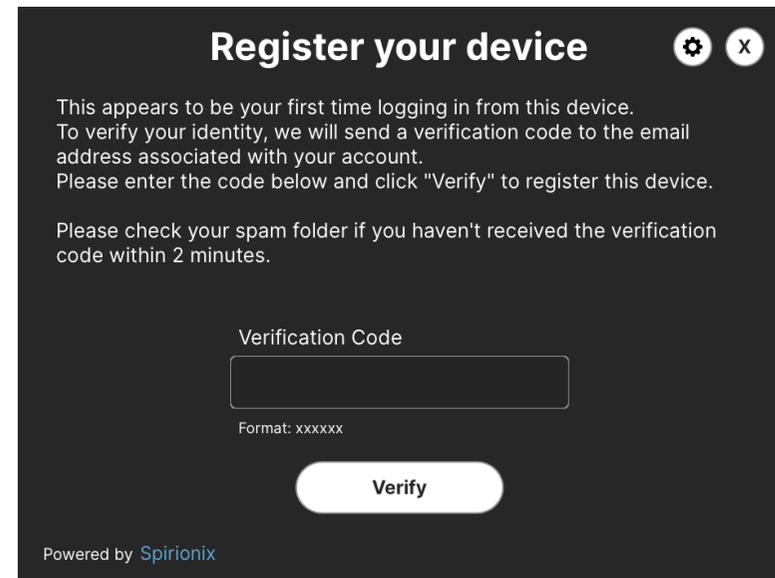
Email

Password

Log In

[Forgot your password?](#)
[Create account](#)

Powered by [Spirionix](#)



Register your device [Settings] [Close]

This appears to be your first time logging in from this device. To verify your identity, we will send a verification code to the email address associated with your account. Please enter the code below and click "Verify" to register this device.

Please check your spam folder if you haven't received the verification code within 2 minutes.

Verification Code

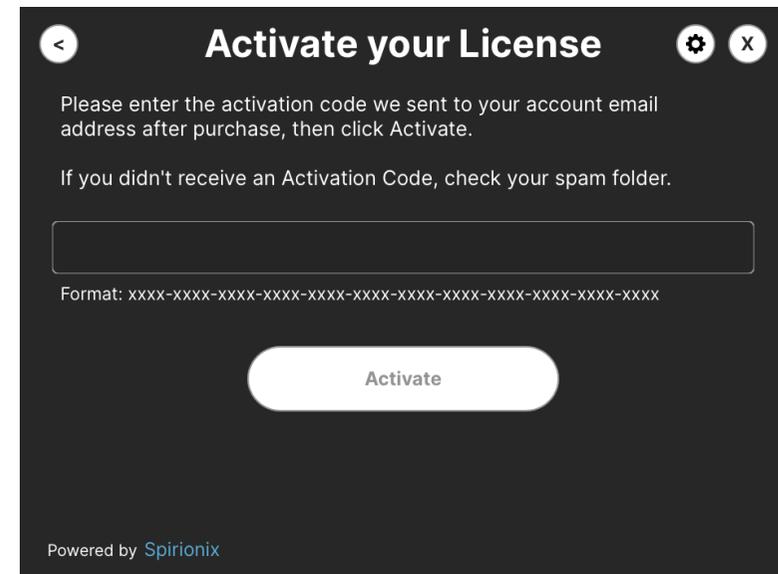
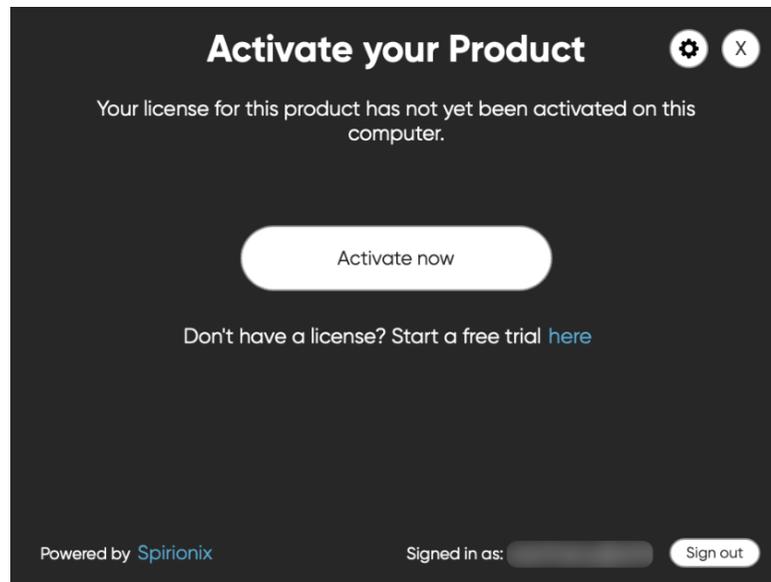
Format: xxxxxx

Verify

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Installation and License Activation – Full License (Online)

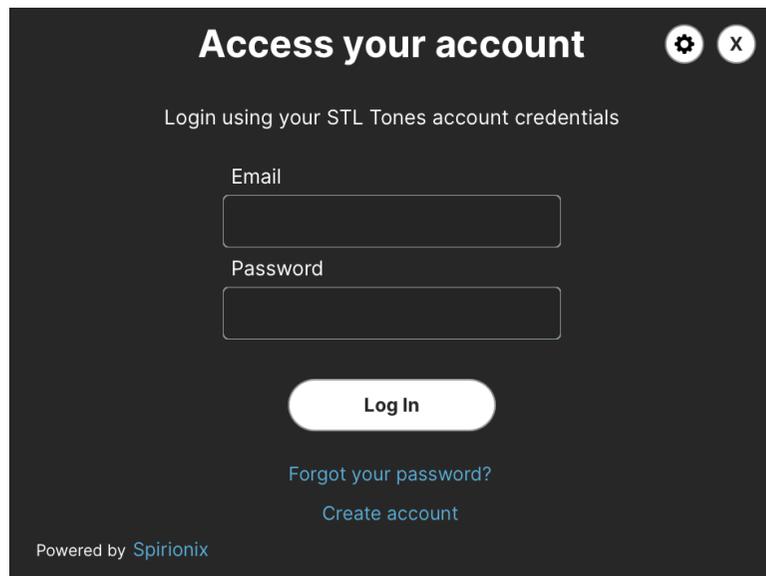
You will then be prompted to activate a license. Select **Activate now**. This will take you to the activation screen. Enter your activation code and click **Activate**.



Installation and License Activation — Subscription / Trial (Online)

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** that contains your 6-digit verification code. If you didn't receive the email in your main inbox, check your spam folder.

Copy this 6-digit code from your email and paste it into the Verification Code field in the menu, and click **Verify**.



Access your account [Settings] [Close]

Login using your STL Tones account credentials

Email

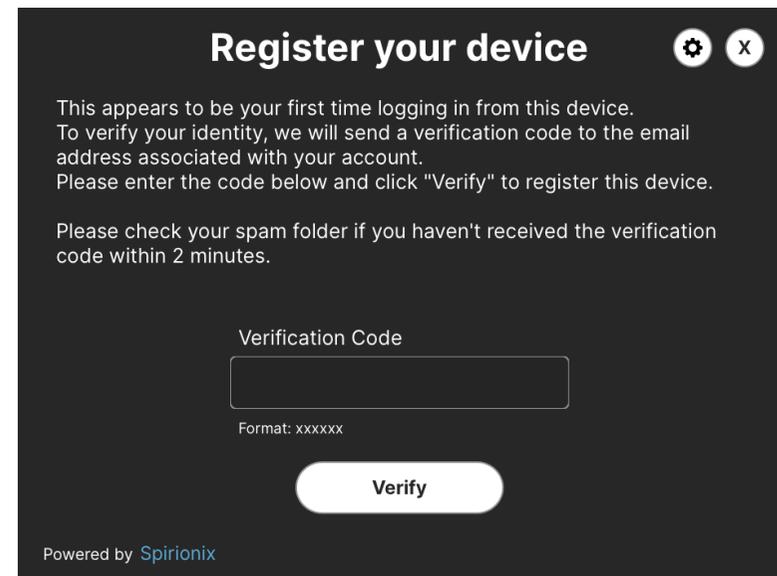
Password

Log In

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Register your device [Settings] [Close]

This appears to be your first time logging in from this device. To verify your identity, we will send a verification code to the email address associated with your account. Please enter the code below and click "Verify" to register this device.

Please check your spam folder if you haven't received the verification code within 2 minutes.

Verification Code

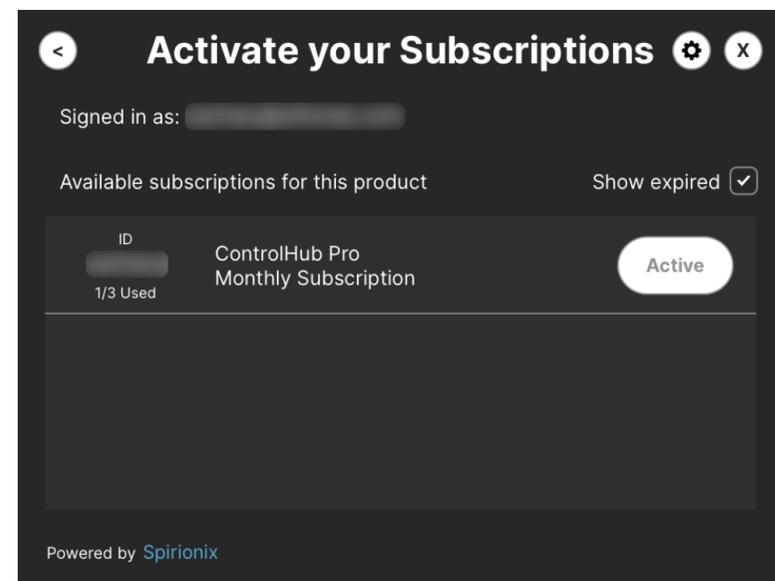
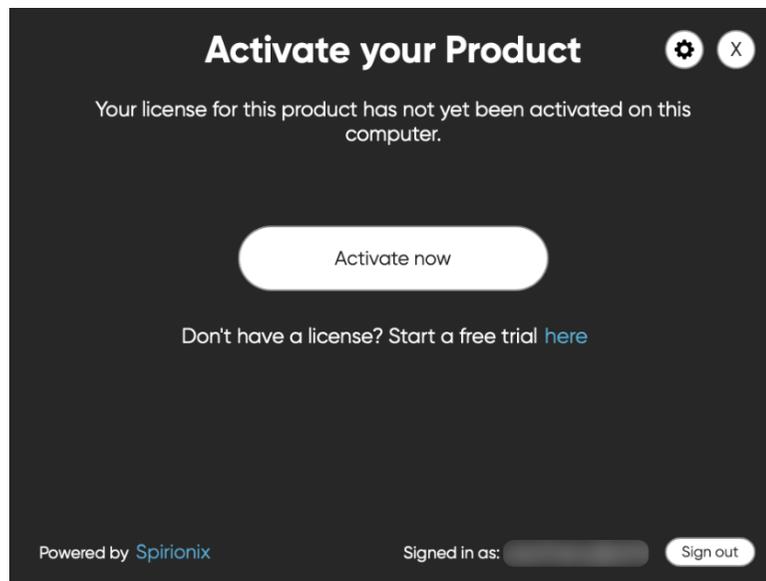
Format: xxxxxx

Verify

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Installation and License Activation – Subscription / Trial (Online)

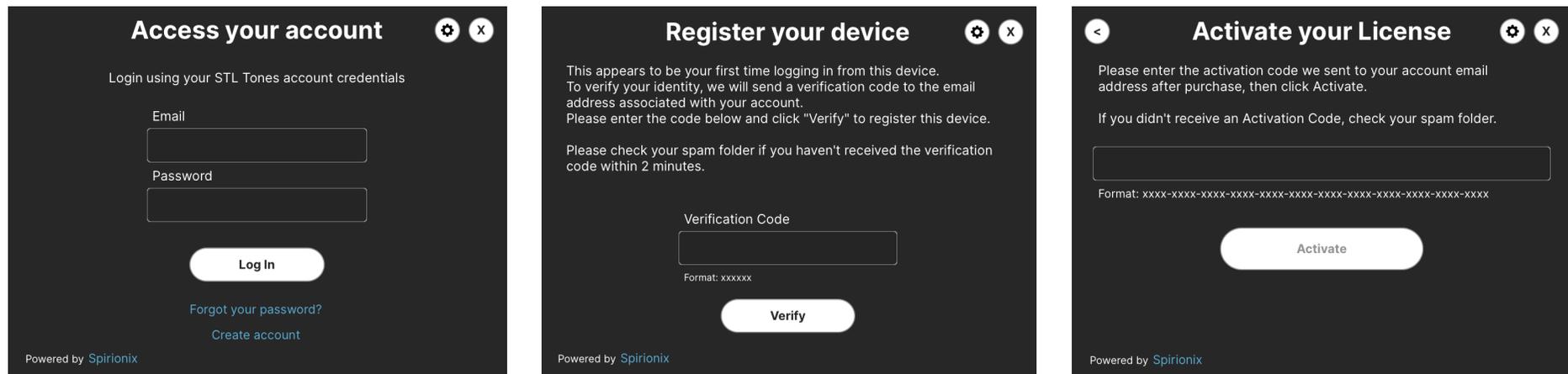
You will then be prompted to activate a license. Select **Activate now**. You will then be prompted to activate the subscription license connected to your account. Select **Activate**.



Installation and License Activation — Expansion Pack Full License (Online)

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** that contains your 6-digit verification code. If you didn't receive the email in your main inbox, check your spam folder.

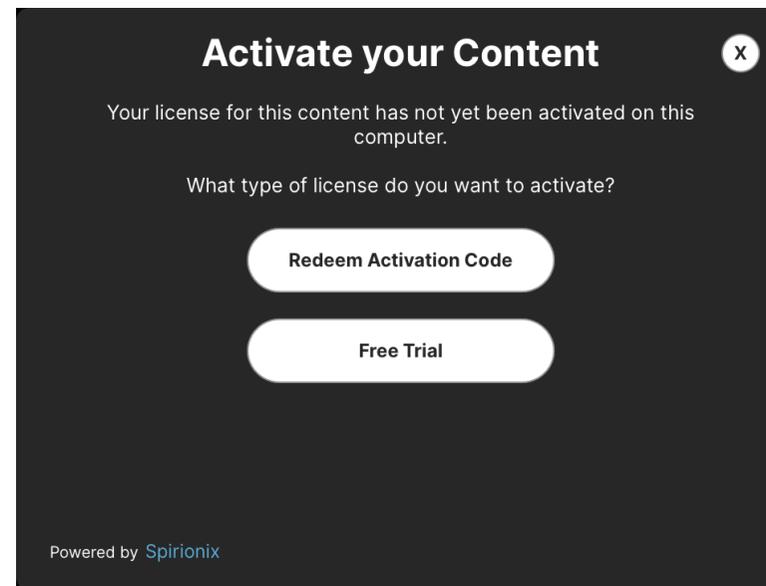
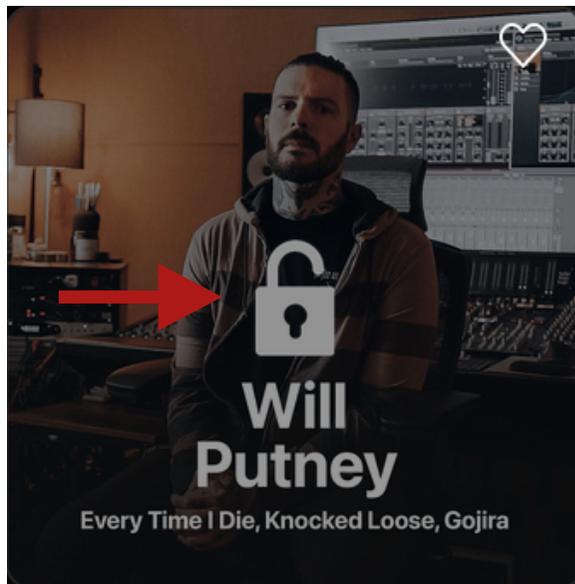
Copy this 6-digit code from your email and paste it into the Verification Code field in the menu, then click **Verify**.



You will then be prompted to activate a license — select **Activate Product**. This will take you to the activation screen. Enter your activation code and click **Activate**.

Installation and License Activation — Expansion Pack Full License (Online)

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. The lock icon will disappear once your license has been activated.

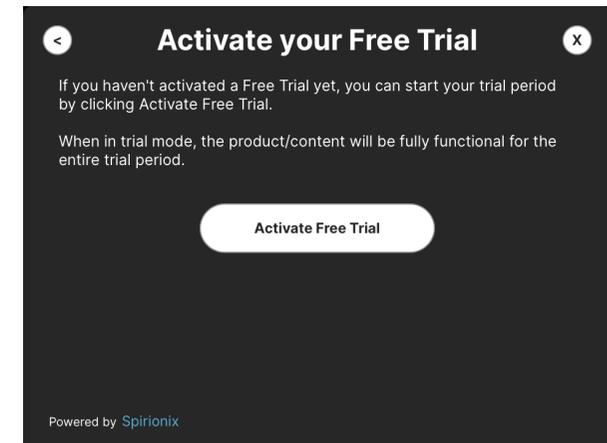
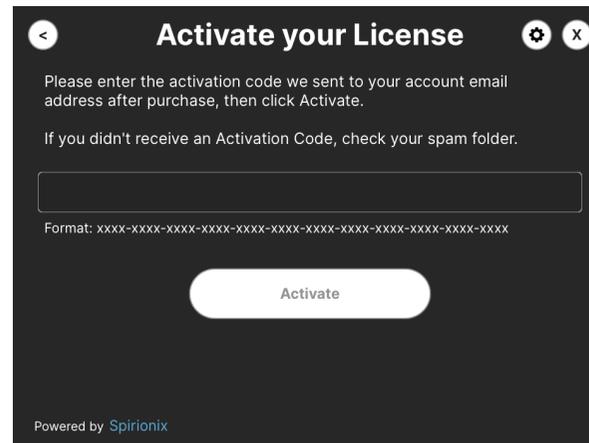
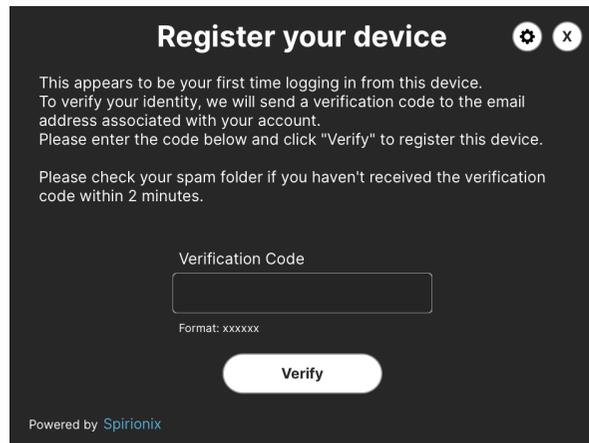


Installation and License Activation — Trial License for Expansion Packs

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** that contains your 6-digit verification code. If you didn't receive the email in your main inbox, check your spam folder. Copy this 6-digit code from your email and paste it into the **Verification Code** field in the menu, then click **Verify**.

You will then be prompted to activate a license. Select **Free Trial** for your 5-day trial expansion pack license.



User Interface — ControlHub Menu

The screenshot displays the ControlHub software interface. On the left, a vertical menu is highlighted with a red border, containing the following items: Presets, Capture My Gear, Trace Exchange, Account, and Update. The main area features a frequency response graph with a white curve and a grey waveform, showing gain in dB on the y-axis (from -12 to 12) and frequency in Hz on the x-axis (logarithmic scale from 20 to 20k). A search bar is located at the top center. On the right, there are level meters for Peak and RMS, and a stereo indicator. The bottom section contains several audio processing modules: CLIPPER, COMPRESSOR 2, EQ1, COLOR, COMPRESSOR, EQ2, REVERB, and LIMITER. Each module has various knobs and sliders for adjusting parameters like threshold, attack, release, and gain.

Presets: The home base of your ControlHub plugin. Access **Artist Expansions** or the **Trace Exchange**, as well as a personalized directory for **My Presets** and **My Traces**, unique to your account.

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**.

Trace Exchange: ControlHub doesn't just offer the ability to model your own gear — the ControlHub Trace Exchange offers a social platform to share your own gear models or signal chains with the world under your own profile.

Account: 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 — ControlHub Toolbar

The screenshot displays the ControlHub software interface. At the top, the 'CONTROLHUB' title is on the left, followed by the current preset 'Core Vol 01' and '01 Master Acoustic'. A search bar is located to the right of the preset name. Below the title bar, a sidebar on the left contains navigation options: Presets, Capture My Gear, Trace Exchange, Account, and Update. The main area features a frequency response graph with a white curve and a grey waveform, showing gain in dB on the y-axis (from -12 to 12) and frequency in Hz on the x-axis (logarithmic scale from 20 to 20k). To the right of the graph is a vertical scale for EQ 1, set to 15 dB, with a peak level of -0.4 dB and an RMS level of -25.6 dB. Below the graph, a toolbar contains several modules: EQ1, COLOR, COMPRESSOR, EQ2, REVERB, and LIMITER. Each module has its own set of controls, including knobs, sliders, and buttons. The COMPRESSOR module is currently set to 'AUTO' mode. The REVERB module is set to 'HEAVEN' unit, 'CHAMBER 1' type, and 'SHORT' time. The LIMITER module shows an input level of -6.0 dB, an output level of -1.0 dB, and a release time of 252 ms. A search bar is also present in the bottom left corner of the interface.

User Interface – ControlHub 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.

The screenshot shows the ControlHub interface with a sidebar on the left and a main table area. The sidebar contains navigation options: Presets, Capture My Gear, Trace Exchange, Account, and Update. The main area displays a table of presets under the heading 'Core Vol 01' and '01 Master Acoustic'. The table has a search bar and navigation arrows. The table columns are: Preset, Pack, Category, Color, Dynamics, Master EQ, and Effects. The '01 Master Acoustic' preset is highlighted in orange.

Preset	Pack	Category	Color	Dynamics	Master EQ	Effects
05 Synth Stranger Bus	Core Vol 01	Keyboard/Synth	Console, Tape	Fairchild 670, API 250...	Pultec EQP-1A, Waves ...	
01 Master Acoustic	Core Vol 01	Mastering	Console	Universal Audio 1176 R...	Pultec EQP-1A	
02 Master Alternative	Core Vol 01	Mastering	Console	Universal Audio 1176	Pultec EQP-1A	
03 Master Country	Core Vol 01	Mastering	Console	Universal Audio 1176	Pultec EQ	
04 Master Dance	Core Vol 01	Mastering	Console	SSL 4000 G Bus Comp...	FabFilter Pro Q3	
05 Master Dub	Core Vol 01	Mastering	Console	SSL 4000 G Bus Comp...	Pultec EQP-1A	
06 Master Electronic	Core Vol 01	Mastering	Console	SSL 4000 G Bus Comp...	SSL 4000 G	
07 Master House	Core Vol 01	Mastering	Console	SSL 4000 G Bus Comp...	Pultec EQP-1A, FabFilt...	
08 Master Hip Hop	Core Vol 01	Mastering	Console	dbx 160	Pultec EQP-1A	
09 Master Rock	Core Vol 01	Mastering	Console	Universal Audio 1176	Pultec EQP-1A	
10 Master Pop Punk	Core Vol 01	Mastering	Console	Universal Audio 1176	Pultec EQP-1A	
11 Master Modern	Core Vol 01	Mastering	Console	SSL 4000 G Bus Comp...	SSL 4000 G	
12 Master Clarity	Core Vol 01	Mastering	Console	Neve 33609/N	Pultec EQP-1A	
13 Master Depth & Clar...	Core Vol 01	Mastering	Console	Neve 33609/N	Pultec EQP-1A	
14 Master Add Depth	Core Vol 01	Mastering	Console	SSL 4000 G Bus Comp...	Pultec EQP-1A	

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.

The screenshot shows the ControlHub interface with the preset browser filter view open. The interface is dark-themed. On the left, there is a sidebar with navigation icons for Presets, Capture My Gear, Trace Exchange, Account, and Update. The main area is titled 'Core Vol 01' and '01 Master Acoustic'. A search bar is visible at the top right of the main area. The filter view is a modal window with a search bar and a close button. It contains a table with columns: Pack, Category, Color, Dynamics, and Master EQ. A red arrow points to the search bar in the filter view. Below the filter view, a table lists the presets.

Pack	Category	Color	Dynamics	Master EQ
Core Vol 01	Mastering	Console	Fairchild 670	API 550A
		Tape	Manley Stereo Variable Mu	Black Box Analog Design HG-2
			Neve 33609/N	FabFilter Pro Q3
			SSL 4000 G Bus Compressor	Pultec EQ
			Universal Audio 1176	Pultec EQP-1A
			Universal Audio 1176 Rev A	SSL 4000 G
			dbx 160	

Preset	Pack	Category	Color	Dynamics	Master EQ	Effects
01 Master Acoustic	Core Vol 01	Mastering	Console	Universal Audio 1176 R...	Pultec EQP-1A	
02 Master Alternative	Core Vol 01	Mastering	Console	Universal Audio 1176	Pultec EQP-1A	
03 Master Country	Core Vol 01	Mastering	Console	Universal Audio 1176	Pultec EQ	
04 Master Dance	Core Vol 01	Mastering	Console	SSL 4000 G Bus Comp...	FabFilter Pro Q3	
05 Master Dub	Core Vol 01	Mastering	Console	SSL 4000 G Bus Comp...	Pultec EQP-1A	
06 Master Electronic	Core Vol 01	Mastering	Console	SSL 4000 G Bus Comp...	SSL 4000 G	
07 Master House	Core Vol 01	Mastering	Console	SSL 4000 G Bus Comp...	Pultec EQP-1A, FabFilt...	

Global 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).

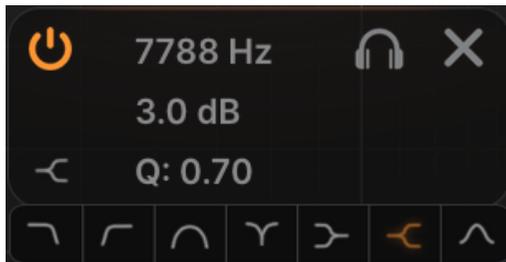
Routing: Select the plugin's processing mode: **Mono**, **Mono/Stereo**, or **Stereo**. Note that when in **Stereo**, the CPU load will increase as two instances of the plugin are running in parallel.

User Interface — Graphic EQ Analyzer

The screenshot displays a software interface for audio processing, titled "CONTROLHUB" with the preset "Core Vol 01" and "01 Master Acoustic". A search bar is located at the top right. The main area features a frequency response graph with a red border, showing a signal spectrum from 20 Hz to 20 kHz. The graph includes a white line for the original signal and a grey line for the processed signal. Three frequency points are highlighted with colored dots: a yellow dot at approximately 100 Hz, a purple dot at 1 kHz, and a red dot at 5 kHz. To the right of the graph is a vertical scale for EQ 1, showing a gain of 15 dB. Below the graph are several audio processing modules: CLIPPER, COMPRESSOR 2, EQ1, COLOR, COMPRESSOR, EQ2, REVERB, and LIMITER. Each module has various knobs and sliders for adjusting parameters. The REVERB module is currently set to "HEAVEN" unit, "CHAMBER 1" type, and "SHORT" time. The LIMITER module shows input and output levels, with a threshold of -6.0 dB and a release time of 252 ms.

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

The screenshot displays the 'Core Vol 01 01 Master Acoustic' software interface. At the top, the 'CONTROLHUB' section includes a search bar and navigation icons. The main area features a frequency response graph with a white curve and a grey waveform, and a vertical level meter on the right showing peak and RMS levels. The bottom section contains several processing modules: EQ1, COLOR, COMPRESSOR, EQ2, REVERB, and LIMITER. Each module has various knobs and sliders for adjusting parameters like frequency, volume, threshold, and attack. A sidebar on the left provides quick access to presets and account settings.

CONTROLHUB Core Vol 01 01 Master Acoustic Search... Stereo

Presets Capture My Gear Trace Exchange Account Update

EQ 1 15 dB

Peak -0.4 -0.5 -0.0 -0.0
RMS -25.6 -26.2 -18.7 -19.7

20 50 100 200 500 1k 2k 5k 10k 20k

0.0 dB 0.0 dB

CLIPPER COMPRESSOR 2 REVERB

EQ1 FILTER HP 6 dB 6 dB LP

COLOR VOLUME PREAMP BASS TREBLE

COMPRESSOR THRESHOLD MAKEUP ATTACK RELEASE RATIO SIDECHAIN INPUT MIX

EQ2 FILTER HP 6 dB 6 dB LP

REVERB UNIT: < HEAVEN > TYPE: < CHAMBER 1 > TIME: < SHORT > MIX PREDELAY LENGTH DEPTH HIPASS RATE

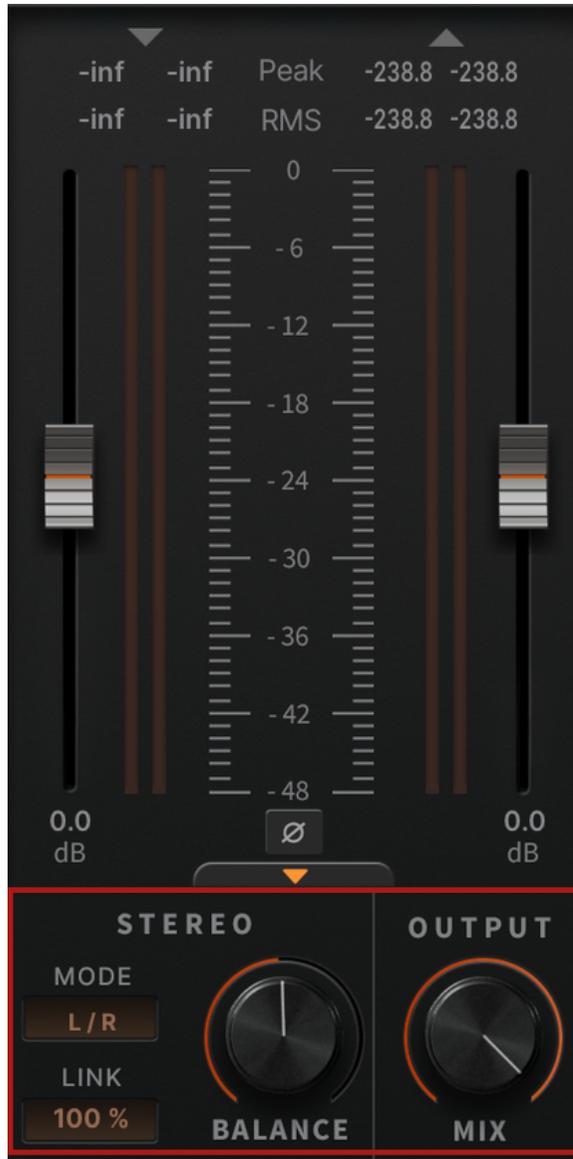
LIMITER INPUT OUTPUT GR THRESHOLD CEILING RELEASE

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 determines 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.

Available Modules

CONTROLHUB Core Vol 01 01 Master Acoustic

Search... ← | → EQ 1 15 dB -0.4 -0.5 Peak -0.0 -0.0 -25.6 -26.2 RMS -18.7 -19.7 Stereo

Presets
Capture My Gear
Trace Exchange
Account
Update *Beta version*

20 50 100 200 500 1k 2k 5k 10k 20k

EQ1 15 dB

EQ1: HP 6 dB 6 dB LP

COLOR: VOLUME, PREAMP, BASS, TREBLE, DRIVE, VOLUME LINK, COLOR (Default), TAPE, TUBE

COMPRESSOR: THRESHOLD, ATTACK, RATIO, INPUT, MIX, AUTO, MAKEUP, RELEASE, SIDECHAIN

EQ2: HP 6 dB 6 dB LP

REVERB: UNIT: < HEAVEN >, TYPE: < CHAMBER 1 >, TIME: < SHORT >, MIX, PREDELAY, LENGTH, DEPTH, HIPASS, RATE, LOPASS

LIMITER: INPUT, OUTPUT, GR, THRESHOLD, CEILING, RELEASE

CLIPPER: CLIP, THRESHOLD, OUTPUT

COMPRESSOR 2: THRESHOLD, ATTACK, RATIO, INPUT, MIX, AUTO, MAKEUP, RELEASE, SIDECHAIN

REVERB 2: UNIT, TYPE, TIME, MIX, PREDELAY, LENGTH, DEPTH, HIPASS, RATE, LOPASS

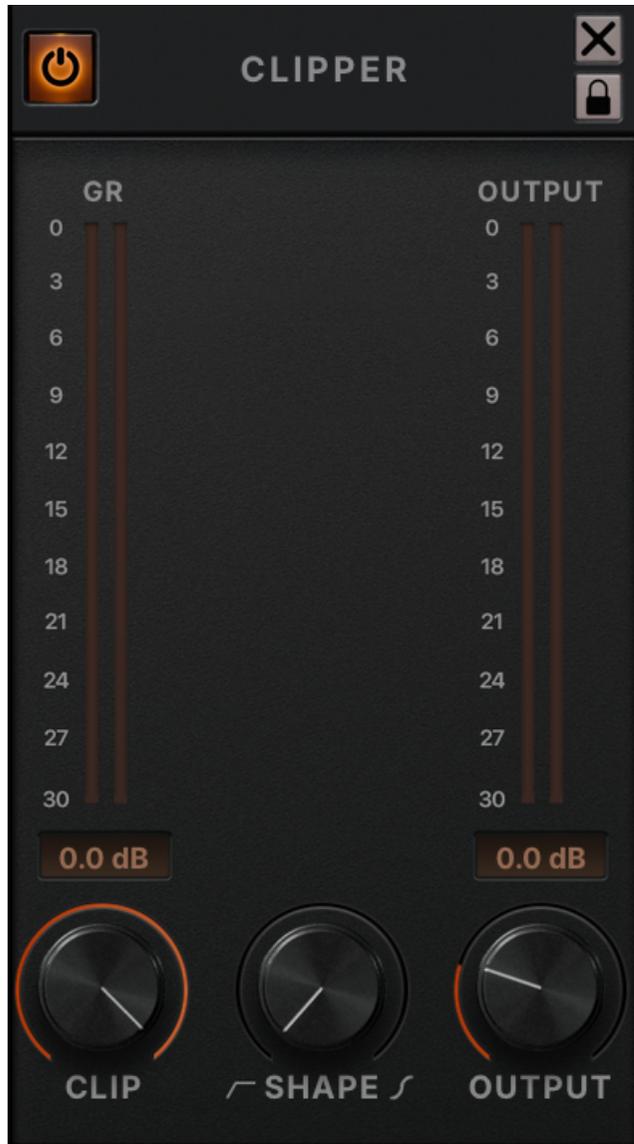
Available Modules

The following modules are currently available inside your ControlHub plugin:

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

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.



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.

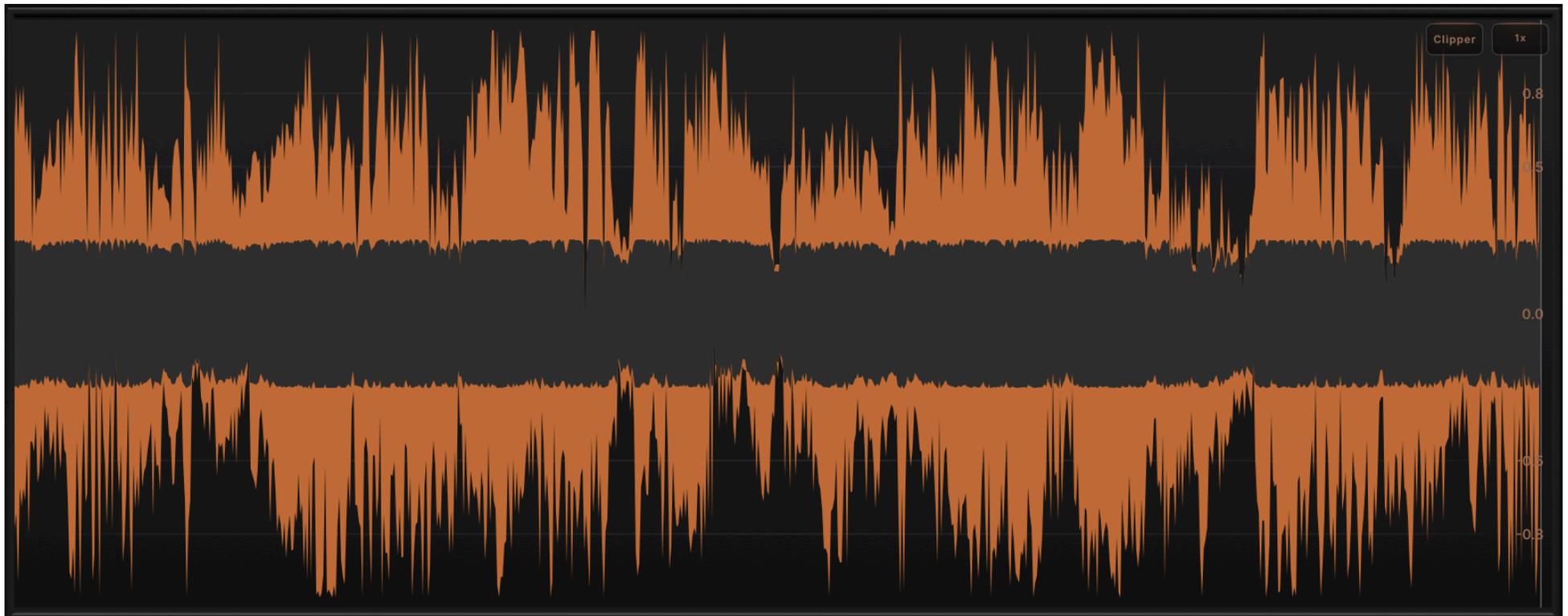
Gain Reduction (GR) Meter: The amount of gain reduction from the clipping processor.

Output Meter: The level of the output signal.

Clipper Module View

New to ControlHub 3, the **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.





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.



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 Type: Drop-down menu for compression different 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 being 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 either than **Manual**.



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.



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.



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.



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.

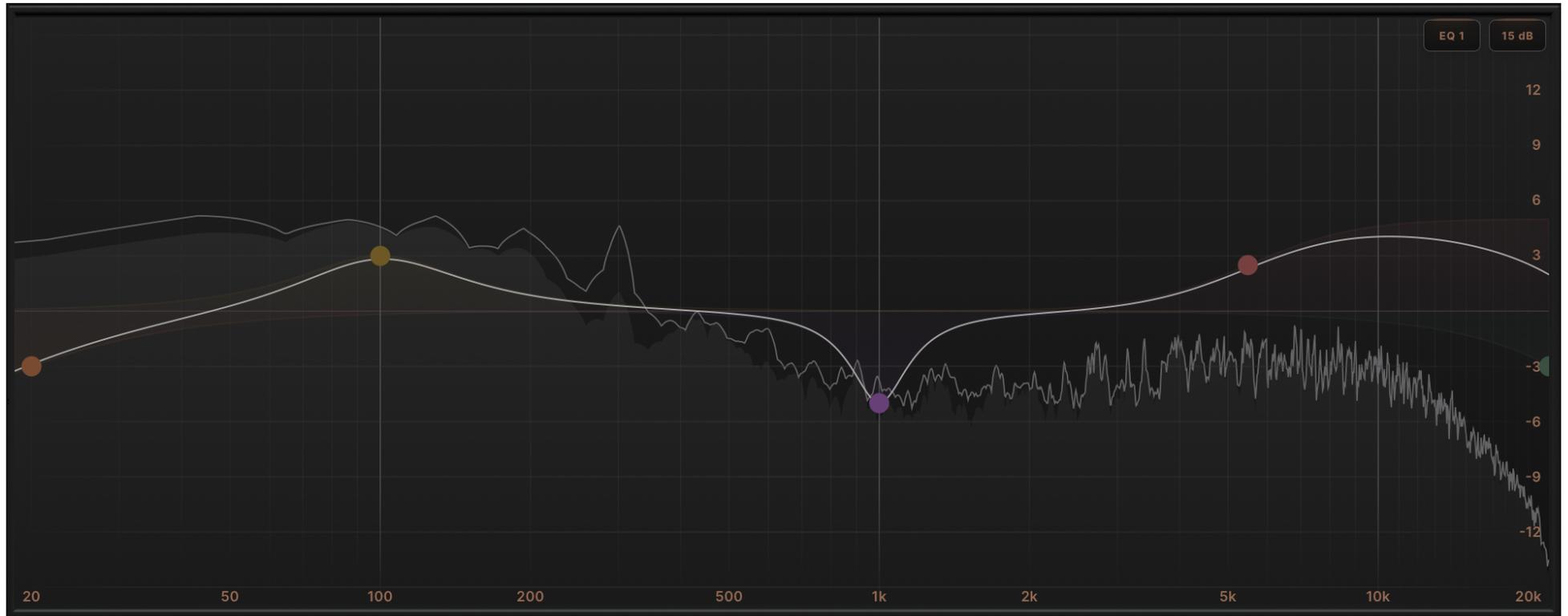


High-pass (HP) & Low-pass (LP) Filters: Toggle the filters on/off state by engaging or disengaging the LED button. The slope of the filter (dB/oct) shows the options as a dropdown menu. These filters are static to their respective filter type.

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**.

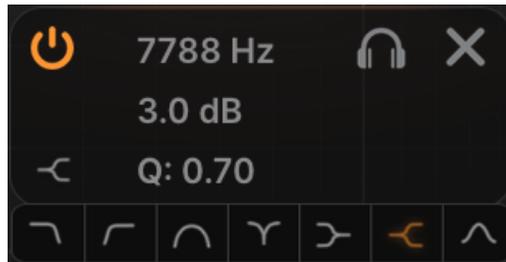
Toggle the module on or off with the **Power Button** in the upper left-hand corner. The **Module Lock** in the upper right-hand corner of the module locks all the parameters while scrolling through artist packs. Click the **X** to remove the module from the chain.

***TIP:** Double-click to reset the parameter. Right-click to manually enter a specific cutoff value (Hz). ⌘ (Mac) or CTRL (Windows) while scrolling enables precise parameter turning.*



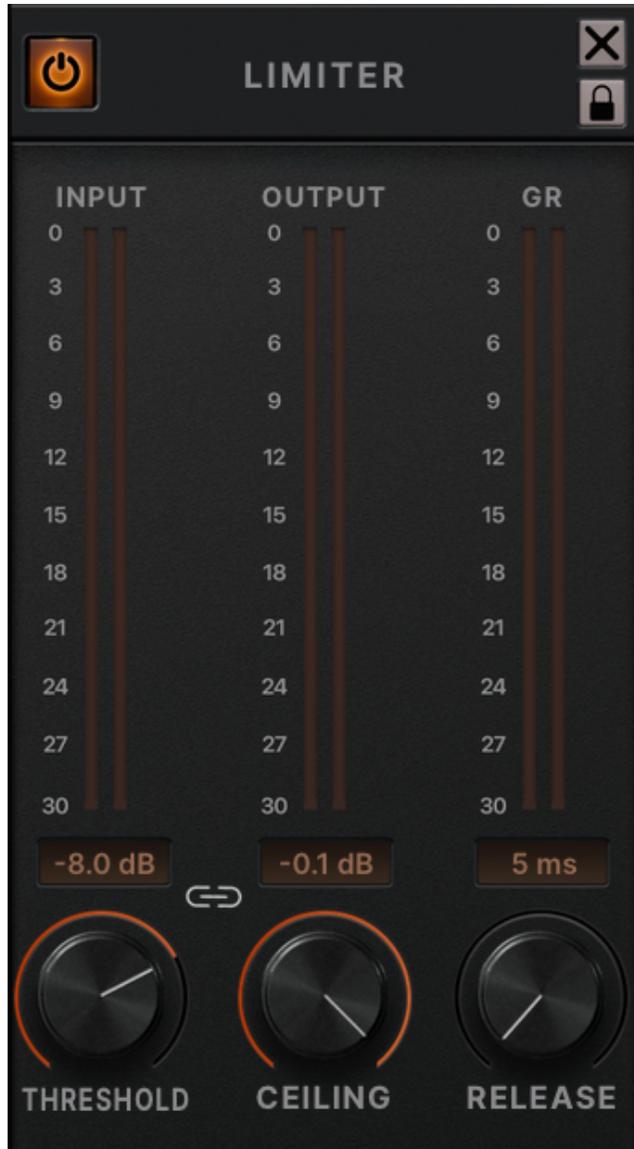
Graphic EQ Analyzer

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) 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 $\pm 15\text{dB}$, but you can also adjust to $\pm 10\text{dB}$, $\pm 6\text{dB}$, or $\pm 3\text{dB}$.



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

New to ControlHub 3, the **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 dropdown 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.





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.



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

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



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.

The screenshot displays the 'Presets' section of a software interface. On the left is a dark sidebar with navigation options: 'Presets' (home icon), 'Capture My Gear', 'Trace Exchange', 'Account', and 'Update' (with a 'Beta version' note). The main area is titled 'Presets' and has sub-tabs for 'Artist Expansions', 'Trace Exchange', 'My Presets', and 'My Traces'. The 'Artist Expansions' tab is active, showing three categories: 'Latest', 'All Expansions', and 'Popular'. Each category contains a grid of artist expansion cards. Each card features a portrait of the artist, their name, and a list of associated artists. A 'New' badge is present on the first card in the 'Latest' section. A 'Show all' button is located at the end of the 'All Expansions' row. The bottom left of the interface shows a partial view of a 'CLIPPER' and 'COMPRESSOR 2' control panel.

Presets

Artist Expansions Trace Exchange My Presets My Traces

Latest

- New** Cameron Webb (Motörhead, Sum 41, NOFX)
- Dave Clauss (Maren Morris, Brett Eldredge, Shakira)
- Vance Powell (Jack White, Chris Stapleton, Arctic Monkeys)
- Paul Moak (Dolly Parton, Gwen Stefani, Relient K)
- Marcella Araica (Timbaland, Usher)

All Expansions Show all

- Aaron Sprinkle (Acceptance, Anberlin, Copeland)
- Atrium Audio (August Burns Red, Erra, Polaris)
- Benson & Plotnikoff (My Chemical Romance, Hoobastank)
- Cameron Webb (Motörhead, Sum 41, NOFX)
- The Castle (Bruce Springsteen, Chris Stapleton, Jack Johnson)

Popular

CLIPPER

COMPRESSOR 2

Artist Expansions

*Previously called **Artist Packs**.*

ControlHub Artist Expansion packs are located in the **Artist Expansions** tab. Once an Artist Expansion is selected, it will load and display the presets in that expansion, including the signal chain used in the preset browser.

Presets are organized in the preset browser in one of the following categories: “Drums”, “Bass”, “Guitars”, “Keyboards/Synth”, “Orchestral”, “Vocals”, “Mastering”, “Effects”, “Individual Models”, or “Misc”. Once loaded, toggle through different presets within a category by using the left and right arrows for quick auditioning.

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 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 pack first.

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 an artist preset and click on another preset, the settings will not be saved automatically.

The screenshot displays the ControlHub Tracer software interface. At the top, the title bar shows "CONTROLHUB" and "Core Vol 01 01 Master Acoustic". A search bar is located in the top right. The main area is divided into a left sidebar with navigation options (Presets, Capture My Gear, Trace Exchange, Account, Update) and a central workspace. The workspace shows a progress bar with four steps: Welcome, Setup, Tracing, and Save. The "Welcome" step is active, displaying a "Welcome" message and a "Select your signal chain type:" prompt. Three options are available: "Complete Signal Chain", "Compressor", and "Individual Model". To the right of the workspace is a vertical meter showing levels for Peak, RMS, and dB. The bottom section of the interface features a row of audio processing modules: CLIPPER, COMPRESSOR 2, EQ1, COLOR, SHAPER, COMPRESSOR, DEESSER, and EQ2. Each module has various knobs and sliders for adjusting parameters like filter, volume, attack, and threshold.

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, and more — in any combination — from a single piece of gear to complex mixing chains for use directly within ControlHub.

Welcome to the future of mixing.

NOTE: The **ControlHub Tracer** is subscription only.

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

- Locate the **TracerTone** 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 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!

-
- 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.

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!").

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 not available in **Individual Models**.

CONTROLHUB

Core Vol 01
01 Master Acoustic

← | →

Q Search...

↶ ↷ 📁 ⚙️ Stereo

Presets

Artist Expansions **Trace Exchange** My Presets My Traces

Latest

Show all

		0	6
		2	5
		1	7
		1	6
		2	6
		1	4

Popular

Show all

STL	Mix Bus 4k Magic STL Tones	100	862
	ZENER LIMITER Will Putney	150	782
	Modern Master Bus Brandon_Caelum	62	626
	Mix Bus Lift & Glue JoshSTL	54	599
	Modern Metal GTR Bus Brandon_Caelum	52	509
	Main Vocal Brandon_Caelum	30	488

Featured

Show all

	Oh Boy! jonathanroye	3	32
	2 bus - Modern Metal Justin Paul Hill	5	53
	Gluey Exciting Mix bus Spinlight Studio	10	251
	Vocal Tracking 1176 justinabelaudio	15	248
	Teac Tape Print thomasdulin	3	57
	Snare Top Starter chrisblancato	6	130

Following

Show all

Q Search...

CLIPPER

COMPRESSOR 2

EQ3

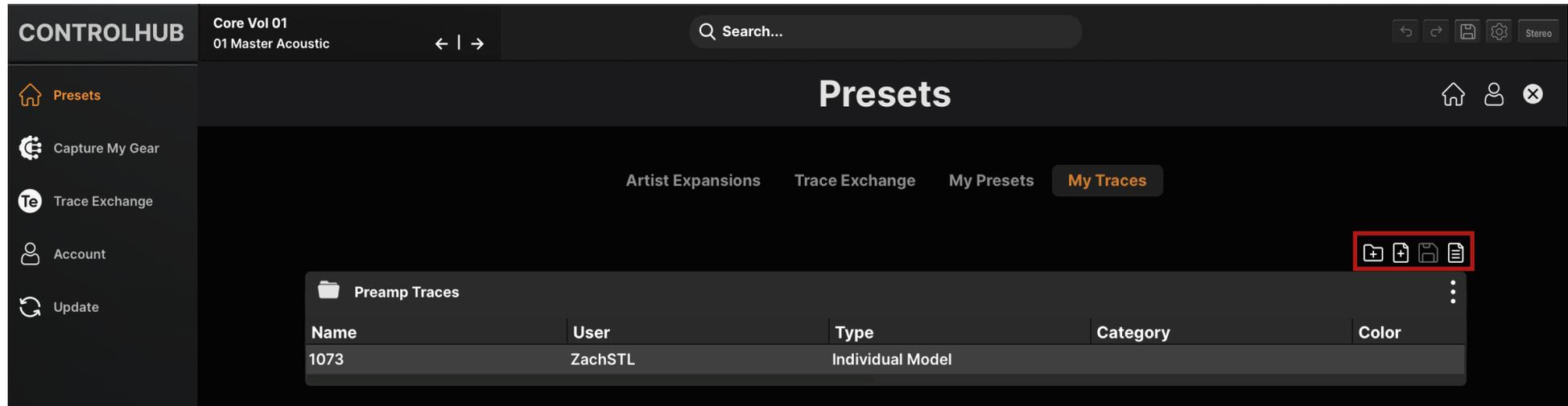
The **ControlHub Trace Exchange** is your access to a limitless library of mixing presets. Create your own models of hardware and software signal chains and share them with users from around the world. These presets can be accessed directly from the Trace Exchange tab in the main ControlHub menu, where you can 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 username. This username is linked to your STL Tones account and associated email. If you need to change your username, please contact support directly at **support@stltones.com**.

Sharing to the Trace Exchange

To upload your presets, right-click your target preset or folder and select “Upload to Trace Exchange” / “Upload Folder to Trace Exchange”. Here you can also update the preset(s) metadata. If a preset has come from another user, you cannot modify the username linked to the preset to prevent stolen intellectual property. Once a preset is uploaded, this introduces the ability for it to be liked, downloaded, and deleted. If you delete a preset from the Trace Exchange, it will only delete it from your Trace Exchange profile and not from your local disk.



All Tracer presets are saved under the **My Traces** tab in the **Presets > My Traces**. The highlighted icons in the graphic above allow you to, respectively:

- Create a new preset folder
- Create and save a new preset in the current folder
- Save preset
- View current preset info/options. You can also right-click on the highlighted folder or preset name to prompt the available options.

Local presets under **My Presets** operate with the same functionality — when using the **Preset Browser**, if you want to save a preset to **My Presets**, right-click and select **Save to My Presets**.

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. 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 stereo-width 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.

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 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 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.

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.

Plugin Development

Federico Berti (Ignite Amps), Momchil Jeliazkov, 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