

STL Ignite - AmpHub User Guide

For Mac & Windows



Introduction	3
System Requirements	5
Supported Host Software	6
Recommendations	7
iLok User ID & iLok License Manager	8
Installation & License Activation	10
Graphical User Interface	14
Support	23
Troubleshooting	24
Legal Disclaimer	30
Credits	31



STL AmpHub is an all encompassing electric guitar suite in software format, featuring an ever expanding set of stomp-box, amplifier, cabinet, microphone and effect models, covering every possible guitar player needs for any genre.

The core of AmpHub is built around Ignite Amps' proprietary ***GE.M.I.N.I.*** (*Generalized Multistage Intrinsic Interactions*) simulation technology, allowing to digitally emulate any type of electronic circuit with an unsurpassed degree of accuracy comparable to the most advanced electronic CAD software, with added real-time capability thanks to its computational efficiency.

AmpHub is analog modeling at its finest, conceived and developed with guitar players in mind, boasting ease of use and great tones right at your fingertips.

- Low Latency Audio Interface (ASIO / Core Audio compatible).
- High-Z (high impedance, 1 MegaOhm recommended) instrument input.
- Digital Audio Workstation (**DAW**) or a standalone plug-in host (optional if you plan to use the Standalone version of the plug-in).

Minumum Windows requirements:

- Windows 7 or newer, 64 bit.
- Intel “Sandy Bridge” Processor Family or better (with AVX instructions support, check the vendor site for more info).
- AMD “Bulldozer” Processor Family or better (with AVX instructions support, check the vendor site for more info).

Minimum Mac requirements:

- OS X 10.9.0 or newer
- Intel Mac 2011 or newer

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

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

SUPPORTED HOST SOFTWARE

STL AmpHub

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

You can also run STL Tones software as a Standalone application. This plugin officially supports the following software host:

Pro Tools 11 + : Mac & PC: AAX Native

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

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

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

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

STL Ignite - AmpHub comes in **64 bit** format for both Mac and Windows, so it needs 64 bit hosts to function properly.
32 bit hosts and operating systems are not supported.

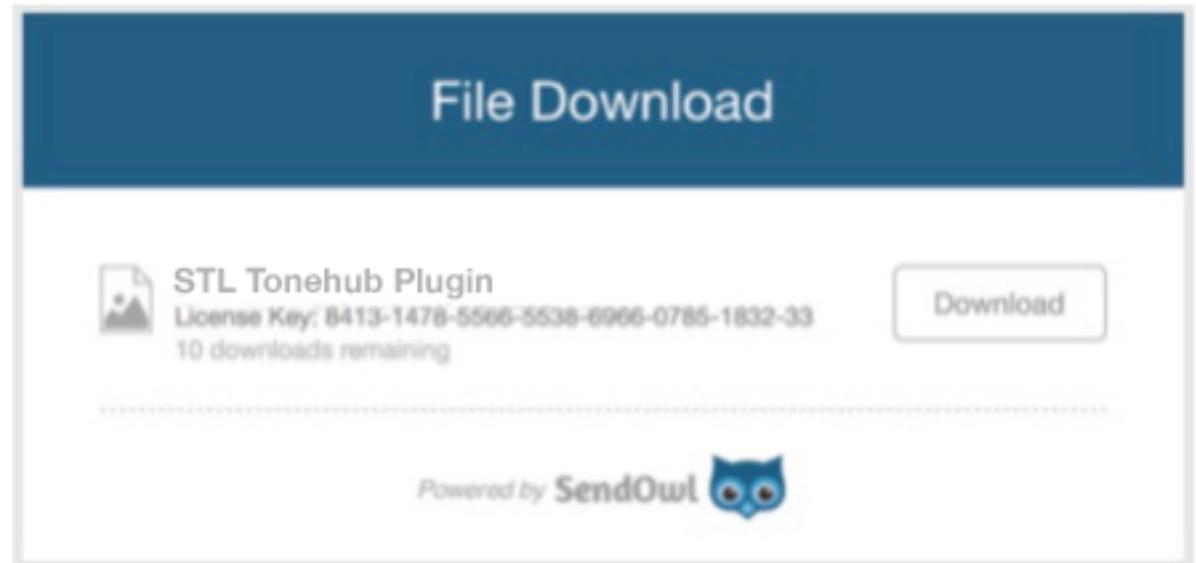
- Always use the high impedance (Hi-Z) input of your sound-card/interface. This will ensure less noise and signal loss. Most real (pre)amplifiers and stomp boxes, have an input impedance of 1MegaOhm, so it would be a good idea to get a sound-card with 1MegaOhm input impedance to use this plugin.
- Always make sure to have the highest input signal before the AD conversion, avoiding clipping.
- Amp sims and stomp box simulators are not noisy, they do not add noise. In fact, they're a lot less noisy than real hardware. If you have noise issues, check your guitar electronic circuit, cables and sound-card settings.
- In almost all cases, amp sims and stomp box simulators don't introduce noticeable latency. STL Ignite - AmpHub doesn't introduce any noticeable latency. If you're experiencing latency issues, check your interface's settings. Experiment with your input buffer size. We recommend a setting of 64 or 128 samples for best playing experience.

STL Tones User Account -

In your STL Tones User Account, you will have access to your product installers, and latest software updates. To login to your user account, go to <http://www.stltones.com> and click the 'Login' button in the upper right-hand corner of the window. If you don't have a user account, please create one by clicking 'Create Account' inside the same login window. Please note, by purchasing a product with STL Tones, you aren't automatically assigned a user account, you need to manually sign up in order to have access to your downloads and logging in.

License Location -

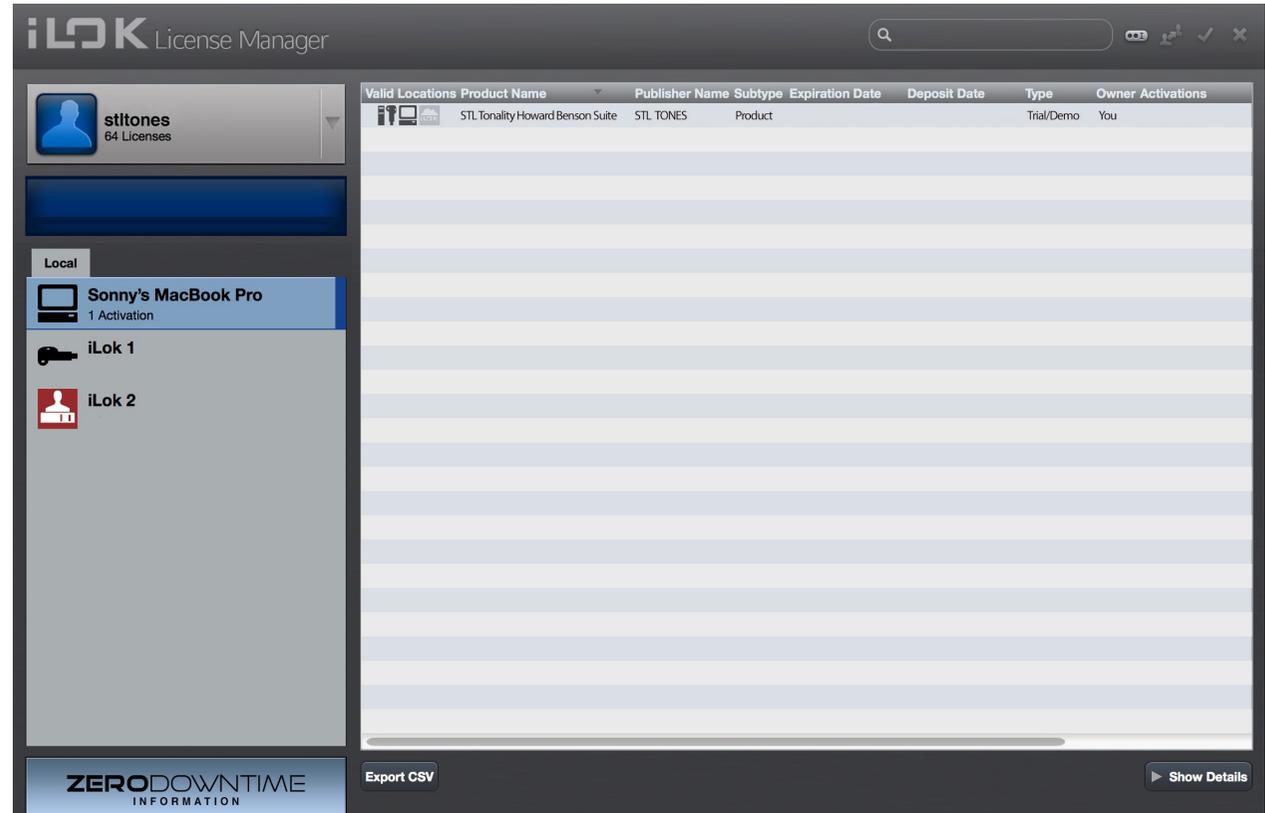
- In your STL Tones account you will have access to your product installers and latest updates. By clicking your product download link, a new window will open that will show your Activation License
- To login into your user account, go to <http://www.stltones.com> and click on the "Login" button in the upper right-hand corner. If you don't have a user account, create one by clicking "Create Account" inside the same login window.



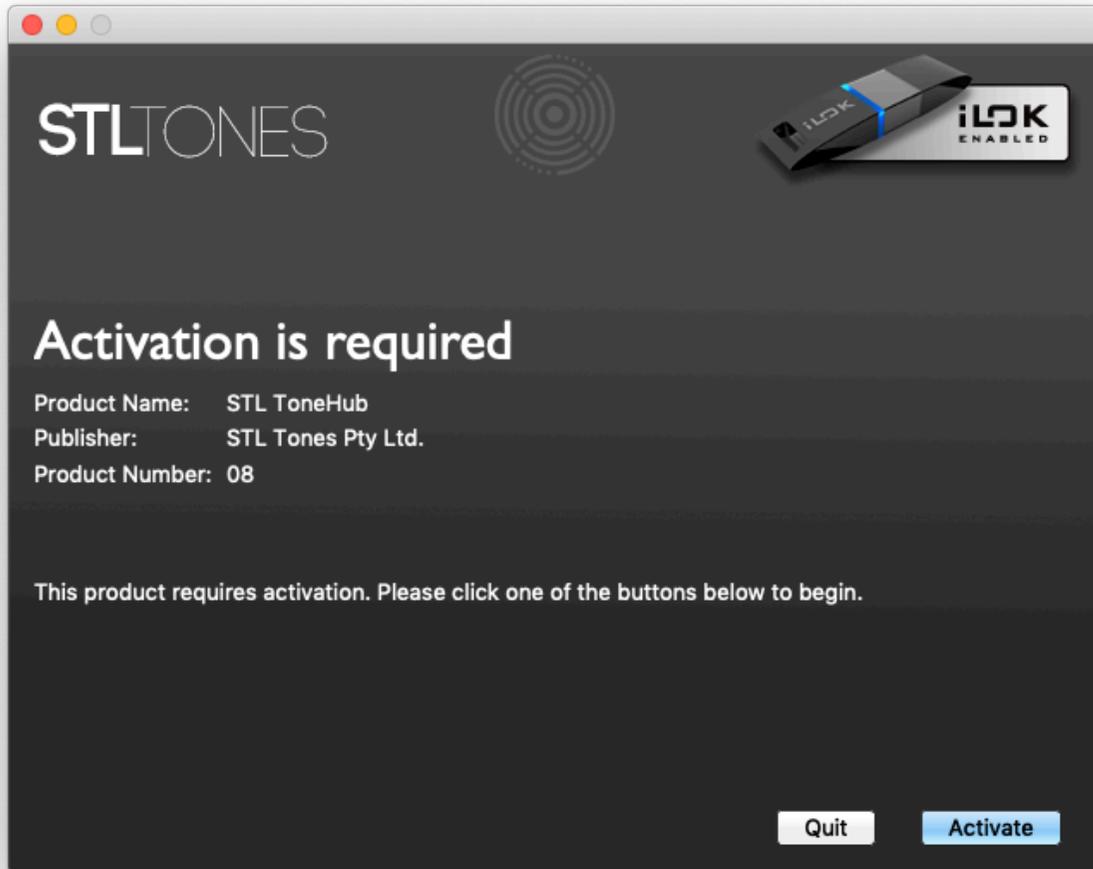
Please create an iLok account by visiting <http://www.ilok.com> and download the latest version of the iLok license manager application. This will allow you to register your serial number and deposit your license to your computer or an iLok USB key. **NOTE:- You DO NOT need an iLok USB Dongle in order to use this plugin. You can simply register your iLok license code to your computer that you intend to use the plugin on.**

Install the **iLok License Manager**, open the program on your computer, and sign in with the iLok User ID information that you created at <http://www.ilok.com>. When logged in, a list of available destinations for license placement will be displayed under your User ID, such as your computer, or your iLok USB Keys. A list of all currently activated products will be shown in the main right list window. Inactive licenses will be shown in the “available” tab on the top.

You can drag and drop licenses to deposit them in your computer or iLok USB Keys.



- Run the provided installer which you will receive via email, follow the on-screen instructions given by the installation software. NOTE - both PC and Mac installers are provided within in the same folder.



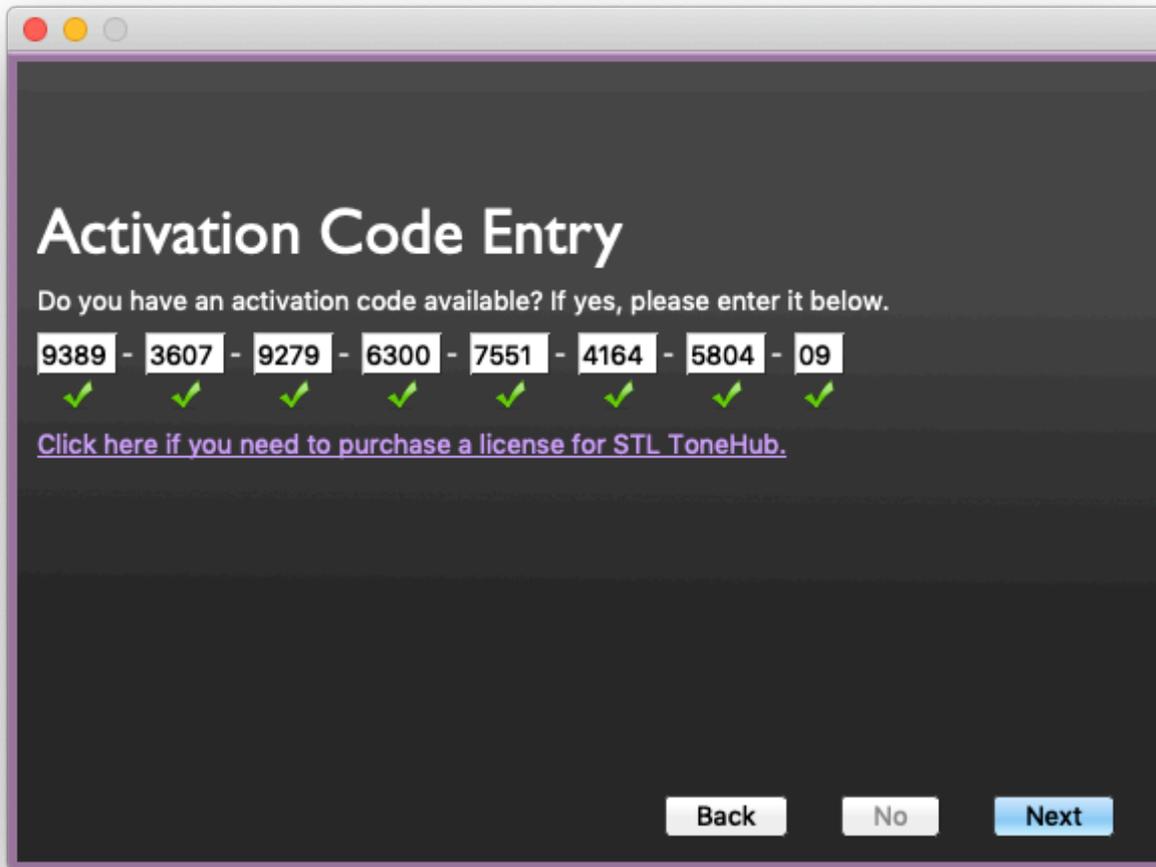
License Activation -

The plugin won't be functional until you activate it with a valid iLok license.

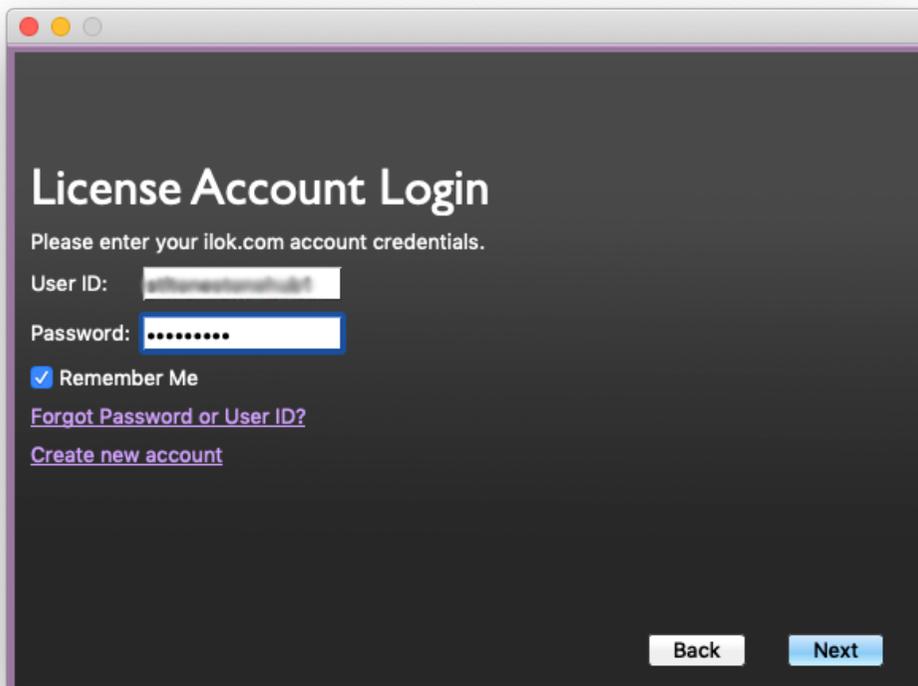
Follow these steps to complete the software activation.

STEP 1 -

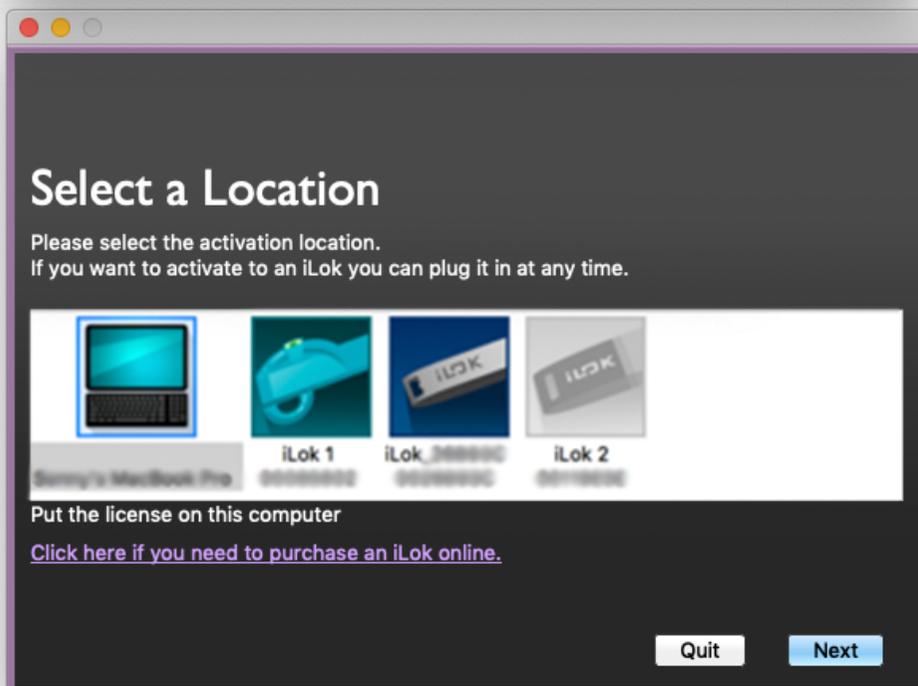
After logging in to your iLok Account, click on the "Activate" button and go through the process to authorise your software.



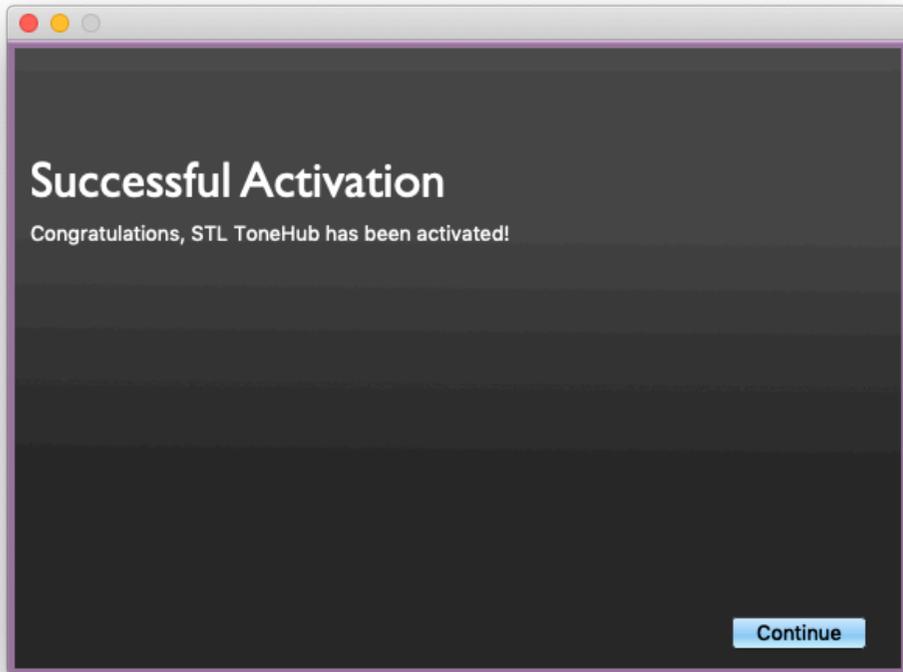
STEP 2 - Enter your activation code and if valid, green ticks will appear, as seen in the image below.



STEP 3 - Sign in to your iLok user account. If you haven't yet created one, click on the 'Create new account' link, and you will be directed to ilok.com to create an account, which is free.



STEP 4 - Here you will see all available locations to place your license. Select either your computer, iLok Cloud, or iLok USB key.



STEP 5 - Successful Activation window will appear, confirming you have registered your product correctly.

Footer Controls



Input: sets how much signal level the plug-in will receive. Adjust according to the pickups you are using and your sound card input. The Input Meters will turn red if the signal goes above the +6dB threshold (4V of total swing) but this is just a warning, rest assured AmpHub will retain your input signal perfectly intact without clipping it in any way.

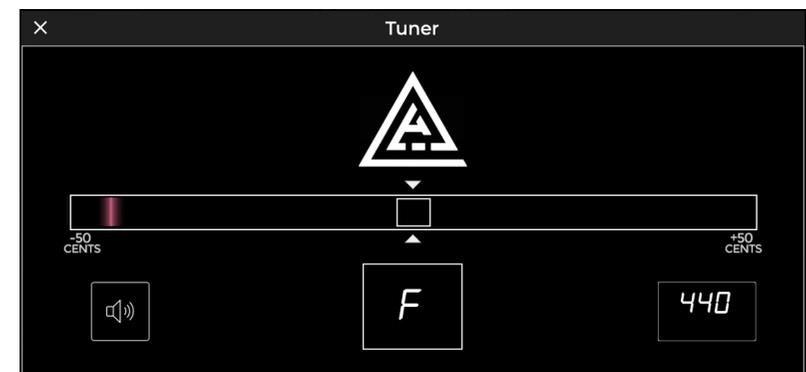
Tip: if you see the Input meters turning red too often while playing, you're most likely feeding AmpHub with a signal that is too hot compared to what a real amplifier would see from your guitar in an analog world scenario. In order to make the virtual circuits react naturally to your guitar playing, it is vital to use the correct signal level, so we suggest to lower the Input level in such case.

Gate: cuts unwanted noise spill, hiss or hum by setting a threshold at which the input signal needs to be above for getting through. Keep in mind that setting the Gate threshold too high is likely to kill the sustain on open notes, so be careful

Tuner: click to open the Tuner. The tuning indicator light will span from left to right and turn green when the note is in tune (middle position).

When using the Tuner, you can switch off the output sound of the plug-in for convenience by clicking the speaker icon button on the bottom left side of the window.

If you're willing to change the master tuning frequency to something different from 440Hz, you can do so by clicking on the text-box in



the bottom right side of the window.

Keep in mind that the Tuner runs in a modal window, so all the other controls in AmpHub are disabled until you close it.

StompBox: click to open the StompBox view.

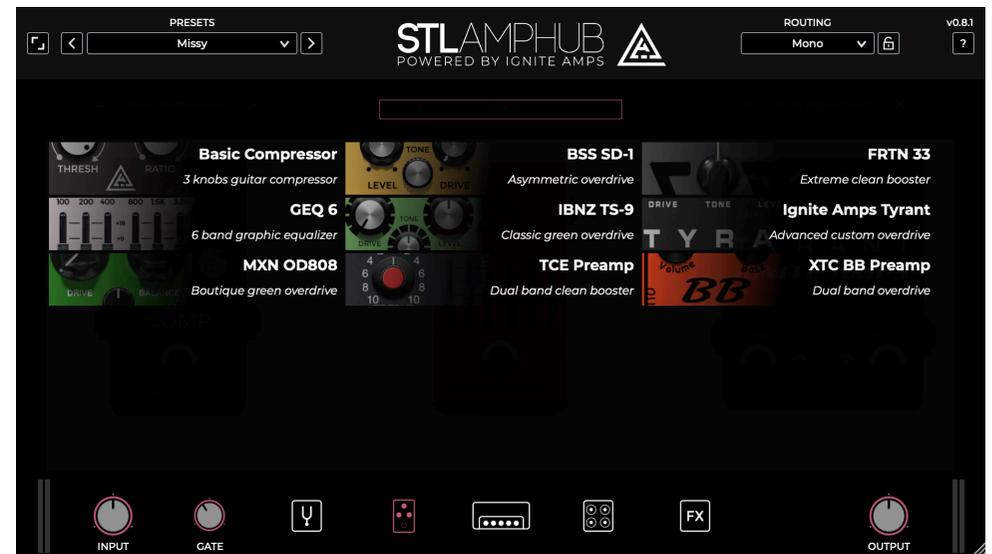
In this section you'll be able to decide what kind of pedal you want to add in front of your amplifier. AmpHub offers a variety of options between overdrive, distortion, compressor, eq, linear boosts, etc.

The StompBox section can host up to 4 pedals at the same time, you can use the scrollbar right under the header section to scroll the view and access all the available slots.

To select a pedal just click on the "Select..." button and a menu will open with all the available models. You can type the pedal model or brand or keyword if you want to filter the available options.

If you don't have the **AmpHub Access Pass**, the models for which you don't own a license will appear in grey and will not be selectable. A "Buy" button is featured to access the STL site and get more informations.

Use the "X" button to remove a pedal from a certain slot. If you want to move a pedal from one position to another while retaining the settings, you can click the "double arrow" button on the right of the selector. Now your pedal is in "swap" mode, so just select where you want to move it by clicking the "double arrow" button on the destination slot.



Clicking on the StompBox button while the StompBox view is open will bypass all the pedals even if their power indicator is on, so if you feel like tweaking the stomp-boxes controls has no effect on your tone, make sure you didn't bypassed them by mistake.



Amplifier: click to open the Amplifier view.

In this section you'll be able to select the amplifier you want to play through. Each model has its own sets of controls according to its analog counterpart.

To select an amplifier just click on the model button and a menu will open with all the available models. You can type the amplifier model or brand or keyword if you want to filter the available options.

If you don't have the **AmpHub Access Pass**, the models for which you don't own a license will appear in grey and will not be selectable. A "Buy" button is featured to access the STL site and get more informations.



The hardware version of some of the amps available in AmpHub (especially the vintage ones) has crosstalk between channels (sometimes referred as "channel bleed"). This is what contributes to make those amp tones so unique and, being AmpHub models 100% circuit derived, the same behavior has been replicated with incredible accuracy, so don't be surprised if you hear some slight tonal differences when turning the knobs of the inactive channels.

It is worth noting that in the analog world the amplifier

power section behaves differently depending on the speakers connected to it. We spent countless hours measuring the impedance curves for all the cabinets featured in AmpHub to be able to replicate this behavior perfectly, so once again don't be surprised if you feel the dynamic and saturation of the power amp changes when you switch between different cabinets, because that's exactly what happens in the analog world too.

Check the Cabinet section for more informations.

Clicking on the Amplifier button while the Amplifier view is open will bypass the amplifier.

Cabinet: click to open the Cabinet view.

In this section you'll be able to change cabinet and microphone models within an ever-growing collection of some the best in the industry.

Taking advantage of Ignite Amps "**Azimuth 4**", four dimensional IR (*Impulse Response*) interpolation technology, you'll be able to move the microphone around the speaker with 4 degrees of freedom: X (horizontal axis), Y (vertical axis), Z (distance) and W (angle).

Each cabinet has been measured with each of the available microphones in more than 100 positions to achieve the ultimate realism and accuracy, for a total in the order of the tens of thousand IRs among all cabs and mics.

In addition to moving the microphone around the speaker, you can further tweak your tone by using the featured Hi/Lo pass filters and Resonance control, change the volume of each microphone by using the related volume slider, flip the phase with the related button and set the mix of the 2 to find the perfect balance.

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



You can even switch off the cabinet by setting it to “Disconnected”. By doing so, the amplifier sound will pass through the cabinet section unprocessed.

Clicking on the Cabinet button while the Cabinet view is open will bypass the cabinet section.

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

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

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

Tip 4: setting the cabinet as “Disconnected” is not the same as bypassing the cabinet section entirely! This is extremely important to know when using AmpHub with external IRs!

If you bypass the cabinet section, the amplifier will keep seeing the load related to the selected cabinet(s) even if the cabinet and microphone are not processing the signal. If you change the cabinet when the cabinet section is bypassed you’ll still notice some differences in how the amp sounds and reacts, because you’re still changing the load connected to its poweramp.

For the most transparent poweramp sound when using external IRs, you should set the cabinet as “Disconnected” and switch off the cabinet section.

Feel free to experiment with various combinations to find some secret tones!

Effects: click to open the Effects view.

In this section you'll be able to decide what kind of effect you want to add after your cabinet. AmpHub offers a variety of options between modulation effects, delay, reverb, compressor, eq, etc.

The Effects section can host up to 4 pedals at the same time, you can use the scrollbar right under the header section to scroll the view and access all the available slots.

To select a pedal just click on the "Select..." button and a menu will open with all the available models. You can type the pedal model or brand or keyword if you want to filter the available options.

If you don't have the **AmpHub Access Pass**, the models for which you don't own a license will appear in grey and will not be selectable. A "Buy" button is featured to access the STL site and get more informations.

Use the "X" button to remove a pedal from a certain slot. If you want to move a pedal from one position to another while retaining the settings, you can click the "double arrow" button on the right of the selector. Now your pedal is in "swap" mode, so just select where you want to move it by clicking the "double arrow" button on the destination slot.

Clicking on the Effects button while the Effects view is open will bypass all the pedals even if their power indicator is on, so if you feel like tweaking the effects controls has no effect on your tone, make sure you didn't bypassed them by mistake.



Output: sets how much signal level the plug-in will output. Adjust according to your listening system and mix project if you're using AmpHub in a DAW. The Output Meters will turn red if the signal goes above the +0dB threshold but this is just a warning, rest assured AmpHub will retain your output signal perfectly intact without clipping it in any way.

Header Controls



Resize: click to resize the plug-in interface. 3 possible values are available: 50%, 75% and 100%. In addition to these 3 modes, you can fine tune the size using the resize function in the bottom right corner

Presets: click to manage the AmpHub default and user settings.

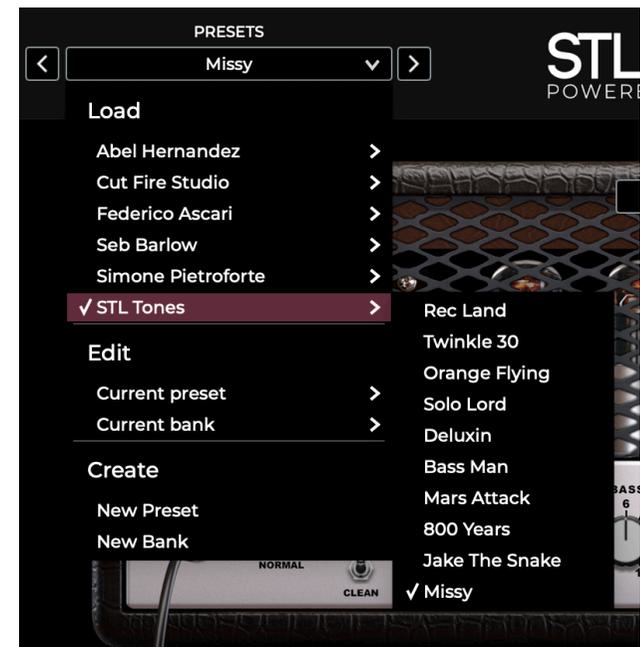
The Preset manager is divided into 3 sections: Load, Edit and Create.

Under the Load section you'll find all the available banks where each bank entry has a submenu featuring all the presets it contains. If you don't have the **AmpHub Access Pass**, some presets may appear greyed out: this happens when presets feature models you don't own.

Under the Edit section you can tweak the currently loaded Preset or Bank. Some presets and Banks may not be editable if they're set as read only (ex. AmpHub default presets).

Under the Create section you can either add a Preset to the current Bank or create a new Bank entirely. When creating a new Bank, the currently loaded Preset will be copied into it, you can tweak it later using the Edit options.

Tip: if you want to rapidly copy some settings from one instance to another in-



side a DAW project, you can use the Edit > Current Preset > Copy function. This will store the settings in the clipboard, so you can move into your second instance and select Edit > Current Preset > Paste to paste the stored settings.

Keep in mind that settings in the clipboard are preserved until there is at least 1 instance of AmpHub available. If you close all the instances and open a new one later, the clipboard will be cleared out and you won't be able to paste.

It is also worth noting that Copy/Paste only works between plug-ins of the same format: you can Copy/Paste from a VST3 to another VST3 or from an AU to another AU, but you can't from a VST3 to AU, etc.

Routing: click to change the routing of your virtual rig.

AmpHub supports 3 different routing modes: Mono, Mono/Stereo and Stereo.

Mono: all the rig sections will process the signal in Mono mode (this is the most CPU efficient routing)

Mono/Stereo: all the rig sections will process the signal in Mono mode until an element supporting the “Mono-To-Stereo-Split” is encountered. When this happens, the signal is split and the remaining elements in the chain will automatically switch to Stereo processing. Delay and Reverb are typical models supporting the “Mono-To-Stereo-Split”, so when using those pedals in Mono/Stereo routing mode, the signal will be split and the subsequent effects will work in Stereo mode until the signal reaches the output.

Stereo: all the rig sections are internally doubled and will process the signal in Stereo mode (this is the most CPU intensive routing)

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

Tip 2: in the standalone versions of AmpHub, if the Routing menu only features the “Mono” option you've probably only set a single output in the Audio I/O settings. Enable at least 2 outputs from the Audio I/O menu, close the application and re-open it: you should now see all the Routing options available.

Routing Lock: click to lock the current Routing Mode.

This control is useful when you want to audition different presets maintaining the routing untouched. Since the Routing Mode is saved in the Preset itself, loading a Preset may change it. If you want to avoid it, just activate the lock and it will be kept fixed until you unlock it, avoiding overrides.

Info: click to RTFM :-)

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

Support Information to be provided -

In order to help us assist you the best way possible, please provide the following information to our support team:

Product Version Number (e.g STL AmpHub - v1.0.0.)

Version number of your DAW (e.g ProTools 11.2.2, Logic 10.2.4)

Interface/hardware (e.g. Focusrite Scarlett 2i2, Apogee Duet 2, etc.)

Computer and operating system info (e.g MacBook Pro OS X 10.15.6, Windows 10 ver 1709, etc.)

Please include a detailed description of your problem and possibly the steps to replicate it.

Having issues with our software?

Uninstall / Reinstall

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

Steps:

- 1) Close out of all host software (Pro Tools, Logic, Cubase, etc.)
- 2) Uninstall your plug-in.
- 3) Open your host software and ensure that the plug-ins no longer showing up in the inserts list. If the plug-ins are still present, locate the files on your computer and remove them manually. Once they no longer show up in your DAW (after restarting it), move on to step 4.
- 4) Close out of all host software.
- 5) Download the latest iLok License Manager application from iLok.com, install it, run the program and login with your iLok credentials.
- 6) Log into your STL Tones User Account and download the latest installers for the plug-in.
- 7) Run the latest installers and start your host program.
- 8) To confirm, ensure that your host program is reading the latest version of our software.

iLok synchronization:

If you receive a message telling you to activate your licenses again, follow these steps.

Fix iLok connectivity:

If your iLok cannot connect to your computer, try plugging it in through a powered USB 2.0 hub – this will increase the likelihood that the iLok will connect to the computer. Once it is synched, it should be able to be plugged back into the computer's USB port for use.

Repair your computer's hard-drive:

Repair permissions on your computer.

Instructions: Mac & Windows

Run your host software as an administrator (Windows-only) :

This can fix a variety of issues that result in crashing or error messages on Windows DAWs that are loading our plug-ins for the first time.

Steps:

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

How do I find my plugin in Reaper?

If cannot find your STL AmpHub plugin in Reaper, follow these steps in order to make the plugin available.

Step1:

Download and install the latest version of iLok License Manager from iLok.com. After you install, open it and login with your iLok credentials. If you don't have an iLok account, please create an account for free at iLok.com.

Step2:

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

File Locations: MAC

VST: Macintosh HD/Library/Audio/Plug-ins/VST/STL AmpHub

File Locations: Windows

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

64-bit VST3: C:\Program Files\Common Files\VST3

If you don't find the respective files please reinstall your STL AmpHub Product. If the relevant plugin files are in the above folder, perform a rescan:

In Reaper, press [Ctrl] + P (Windows) / [Cmd] + [,] (Mac) to access Preferences.

Go to Plug-ins > VST.

Under "VST Plugin Path," make sure that the following path is listed (if not, add it):

Windows:

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

Mac:

System HD > Library > Audio > Plug-ins > VST

Click on Clear Cache/Re-Scan. Create a new session with a supported sample rate, add a track and load your STL AmpHub plugin. If the pop-up window tells you to activate please press “activate” button and insert your license code.

How do I find my plugin in Pro Tools?

If you cannot find your STL AmpHub plugin in Pro Tools, follow these steps in order to make the plugin available.

Step1: download and install the latest version of iLok License Manager from iLok.com. After install, open it and login with your iLok credentials. If you don't have an iLok account, please create an account for free at iLok.com.

Step2: check if the plugin is installed on your computer in the default folder.

AAX: Macintosh HD/Library/Application Support/Avid/Audio/Plug-ins

File Locations: Windows

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

If you don't find the respective files please reinstall your STL AmpHub Product. If the relevant plugin files are in the above folder, perform a rescan:

To do a Rescan you need to delete certain files on your computer depending on your Pro Tools version. Please follow the official Avid website to do this.

Authorization Exception Error Message:

If this error message pops up, follow these steps:

Close your DAW (Pro Tools, Logic, etc.)

Go to iLok.com and download the latest version of the iLok License Manager application.

Run the iLok License Manager installer on your computer.

Restart your computer.

This issue only affects users who have not installed iLok License Manager 4.0.3 or later.

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. Please check the license activation window and double check that it still says you are registered. If not, simply redo the steps mentioned in the License Activation chapter.

Where do I find the installers?

You can download your plug-ins from your STL Tones account. Your account will display the installers and serial numbers for all of the STL Tones products you have purchased.

Where is the STL AmpHub Plugin located on my computer?**Mac:**

AU: Macintosh HD/Library/Audio/Plug-ins/Components

VST: Macintosh HD /Library/Audio/Plug-ins/VST

VST3: Macintosh HD /Library/Audio/Plug-ins/VST3

AAX: Macintosh HD/Library/Application Support/Avid/Audio/Plug-ins

Windows:

VST: C:\Program Files\VSTPlugins

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

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

LEGAL DISCLAIMER

STL AmpHub

All names of amps, pedals, cabinets, microphones, and other gear and/or accessory brands are trademarks owned by their respective manufacturers and are in no way affiliated with STL Tones or STL AmpHub or Ignite Amps. Product names are simply used for the purpose of identifying the hardware chain that was used to create the digital presets.

AAX is a trademark of Avid Technology Inc.

Audio Unit is a trademark of Apple Inc.

VST and **VST3** are trademarks of Steinberg Media Technologies GmbH

STL AmpHub uses:

Takuya Ooura's OouraFFT library, to perform fast Fourier transform

Aleksey Vanev's r8brain library, to perform high quality resampling

CREDITS

STL AmpHub

Plugin Development - Federico Berti (Ignite Amps)

GUI Design - Sonny Truelove

Sincerely,
the STL Tones and Ignite Amps Team!