THU v2
USER MANUAL

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INTRODUCTION

THANK YOU!

Thank you for purchasing THU v2!

This latest version represents the natural evolution of our previous software THU, building upon its strong foundation with numerous enhancements and innovations. We have meticulously developed and integrated a wide array of new features designed to elevate your guitar amp simulation experience to new heights.

In addition to these functional upgrades, we have also completely redesigned the user interface. Our goal was to create an interface that is not only more visually appealing but also more intuitive and user-friendly. We believe these improvements will make it easier for you to navigate the software, access its features, and customize your settings to achieve the perfect sound.

We are confident that THU v2 (just THU from now on) will exceed your expectations and provide you with a powerful tool for your musical creations. Enjoy exploring the new possibilities that this advanced version offers, and thank you for your continued support and trust in our products.

Overloud

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NEW FEATURES

- **Fluid Capturing**: Fluid Capture technology is unique in its ability to precisely capture the exact tone of a device while simultaneously replicating the full dynamics of each knob. This is achieved by capturing the device at multiple settings and then retrofitting the model to faithfully recreate the sampled tone.
- **Fluid IRs**: Fluid IRs are an advanced type of impulse responses that capture more detailed sonic characteristics than traditional IRs. While standard IRs only replicate a speaker's frequency response, Fluid IRs also reproduce the speaker's dynamic behavior and harmonics. This enhancement results in a more robust, lifelike, and direct tone, with improved bass frequency management.
- **Fluid Convolution**: Convolution is the mathematical process used to apply an IR to an audio stream. Fluid Convolution enables the removal of digital artifacts typically associated with conventional IR processing. It allows seamless switching between different IRs while also reducing CPU usage.
- **Completely Redesigned Application Window**: Every area of the THU window has been reworked and redeveloped from scratch. It is now easier to browse Presets, Model lists, Rig Models, and SuperCabinets, applying effective and quick filters to the lists. Everything is simpler and more ergonomic, greatly enhancing productivity.
- **MIDI Bank support**: Given the ever-increasing number of presets, especially in more complex setups, we have added support for MIDI Bank Change messages. Bank references are highlighted on the graphical interface with a different color compared to Preset references.
- **Multiline Sound Chain**: Longer sound chains are difficult to visualize using the entire display area. They can now be split and distributed across multiple lines, without any changes to the audio processing.

ABOUT THU

With THU, you can replicate your own real guitar rig by adding effects and modules and adjusting their parameters as if you were using real hardware. THU also enables you to reproduce specific sounds using accurate reproductions of corresponding amps, cabinets, and effects.

Additionally, THU allows you to use specific Rig Models with the dedicated Rig Player component and SuperCabinet IRs with the powerful exclusive SuperCabinet component.

USER INTERFACE

The user interface of THU is organized into the following sections, arranged from top to bottom and left to right: **Toolbar** at the top, **Preset List** on the left side, **Sound Chain** with optional **Overview** in the center, a variable list on the right side (**Models**, **Rig Models**, **SuperCabinets**), optional **Looper**, and **Footer**.

The **Toolbar** contains buttons and controls for easy access the main functionalities of THU.

The **Presets List** lists all the available presets. Presets are grouped into Banks. The number of Banks is unlimited, with each Bank containing 128 Presets.

The **Sound Chain** is an interactive view over the current rig, resembling a chain of modules. This makes it easy to follow how the sound is processed from the THU input to the THU output. An optional **Overview** can be displayed on the top of the Sound Chain. The Overview provides a zoomed-out view over the Sound Chain, useful for getting a comprehensive view and for navigating by dragging or just clicking on the desired position.

The variable list on the right side alternates between showing **Models**, **Rig Models**, and **SuperCabinets**. The three dedicated buttons on the Toolbar switch between these lists. Adding an element to the Sound Chain from these lists is simple: just drag and drop the desired element into the Sound Chain at the desired position.

The **Looper** is a two-track loop machine which can be used to record, play and overdub up to two parallel audio streams, making it useful for both practicing and performing.

The **Footer** includes input and output meter indicators for constant level monitoring, the Tuner, and controls to adjusting the Sound Chain zoom level.

GETTING STARTED

Let's take a few minutes to get acquainted with THU, so you can feel more confident using it. This chapter will guide you through the fundamental aspects of the THU application, enabling you to start using it right away.

We understand you'd rather play than read through a user manual.

CREATE YOUR OVERLOUD USER ACCOUNT

The first step, if you haven't already done so, is to create your own Overloud User Account.

Visit the Overloud website at www.overloud.com and create your account by providing your personal information. Be sure to enter your email address correctly, as it will be the primary means of communication and the identifier our servers will use to deposit your licenses.

AUTHORIZE THU

The first step, if you haven't already done so, is to create your own Overloud User

How THU is authorized is dependent on which version of THU you are currently using **THU** and **THU Slate Edition**.

We will consider each of these authorization procedures in turn.

Authorizing THU

After completing the purchase of THU, you will receive a follow-up email containing the serial number, which represents your THU license.

The serial number follows this format: TUBN-KH5K-00F5-RMWP.

To authorize your license, first run THU. You will see a dialog box informing you that THU is not currently authorized. You can choose from one of three options:

- Launch a short 10-minute demo of THU
- Begin a two-week evaluation period
- Authorize a license

Both demo options allow you to use the full version of THU for a limited time, ensuring you have the opportunity to work with an uncrippled version before deciding to purchase it.

To authorize your THU license, provide the required information and choose where to store your authorization.

Click the Authorize button on the THU Authorization dialog box, then enter your account email address and the serial number.

Next, choose where to store the authorization information:

- This computer
- USB removable device

Choosing "This computer" will enable your computer to run THU. This option is the easiest, quickest, and most seamless way to authorize THU. Our licensing management servers allow you to remove your authorization at any time, for example, if you plan to sell your computer.

Choosing the "USB removable device" option allows you to store the authorization information on a USB device. This is particularly useful if you use multiple computers or frequently rebuild or reformat your system.

DE-AUTHORIZE THU

You can de-authorize THU in two ways: from within THU itself or from your User Account online page.

To de-authorize from within THU, click **LICENSES**.

You will see a list of all your active authorizations, each with an icon representing the location currently storing the information.

Move the cursor over the icon, and it will turn into a **trash can**. Simply click that button to remove the authorization.

THU maintains a connection with our online servers to keep track of the number of active authorizations.

AUTHORIZATION LIMITS

You can authorize THU on up to three separate computers and one USB stick.

You can de-authorize the same THU license up to five times within a calendar year (365 days) and two times on a USB stick.

AUTHORIZE THU SLATE EDITION

The Slate edition of THU, like other Slate Digital products, uses the **iLok licensing scheme**. Therefore, there is no need to authorize the Slate Edition of THU if the license information has already been stored according to Slate Digital's instructions.

UPGRADE THU SLATE EDITION TO THU PREMIUM

Although the Slate Edition includes a somewhat limited selection of THU Models, upgrading from the Slate Edition to the Premium version of THU is very easy.

To upgrade, you simply need to obtain the license for the components that are not active in the Slate Edition.

Once you have received the upgrade license, follow these steps:

If you don't already have one, create an online Overloud User Account at www.overloud.com

Launch THU Slate Edition.

Access the Authorization panel from THU Slate Edition by clicking **LICENSE**.

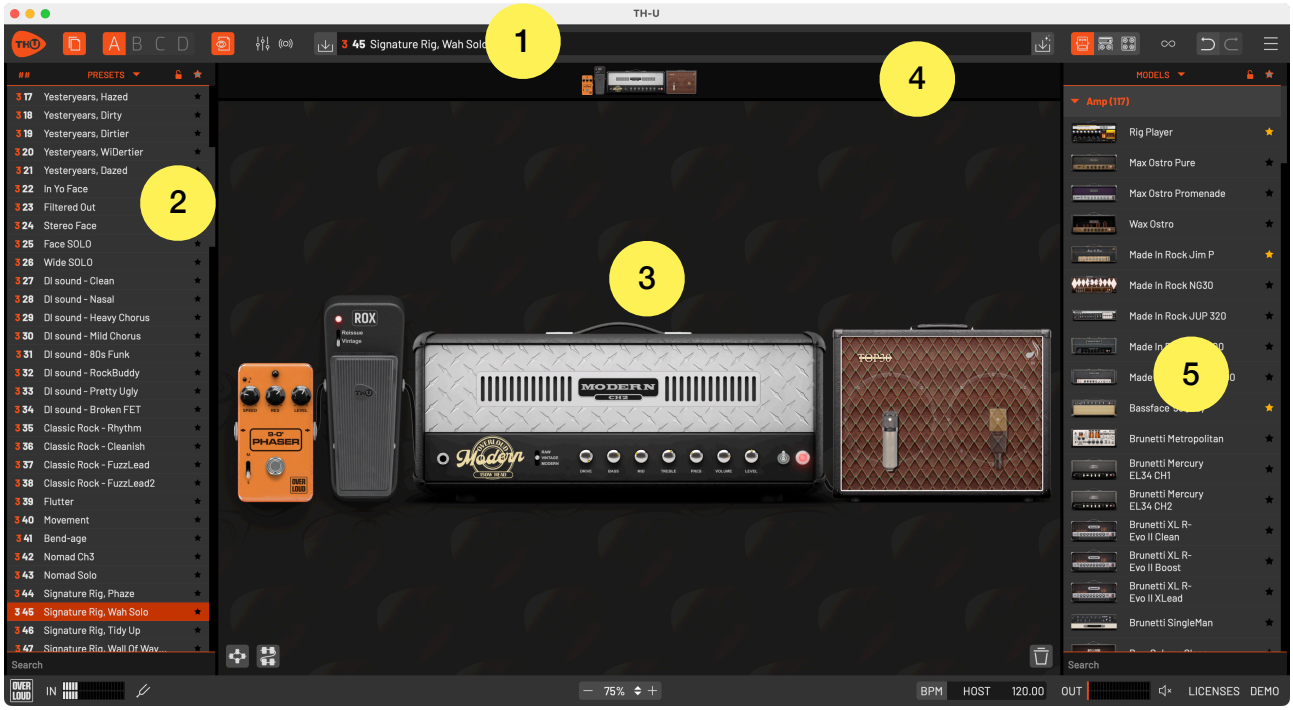
Register the upgrade serial number (you will be prompted for your Overloud account information in the authorization panel if you have just created a new account).

INSTALL AND AUTHORIZE RIG LIBRARY

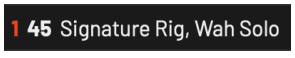
To install and authorize a Rig Library, start by dragging the Rig Library file (a **.riglib** file) directly onto the THU graphical interface and then follow the guided procedure.

For a comprehensive tutorial on how to install and authorize a Rig Library, please visit: www.overloud.com/node/353

THU MAIN WINDOW ELEMENTS



1. TOOLBAR

	THU Logo
	Show/Hide Presets
	Scene selectors
	Show/Hide Overview
	Show/Hide Master Controls
	Live Mode On/Off
	Save Current Preset
	Current Preset Name
	Save As New Preset
	Show: Models, Rig Models, SuperCabinets
	Show/Hide Looper
	Undo/Redo
	Menu

A click on the **THU logo** opens the About window, where the application's credits and any relevant copyright information are listed.

Show/Hide Presets: Shows or hides the Presets column.

Scene Selectors: These are four buttons that select Scenes labeled A, B, C and D. All scenes share the same Sound Chain of the preset but can store different combinations of on/off settings for the models.

For example, suppose you want a mild overdrive with no effects during the verse, and a distortion with delay and reverb during the chorus. You can add all these effects to the Sound Chain and enable the Overdrive in Scene A. In Scene B, you can turn off the Overdrive and turn on the Distortion, Delay, and Reverb.

By clicking on the A or B button, you can immediately switch between the two configurations without changing the preset. Scenes can also be recalled via MIDI. Refer to the MIDI chapter to learn how to assign a MIDI command to a specific THU function.

Show/Hide Overview: This option toggles the visibility of the Overview panel, providing a global view of the Sound Chain. This view helps you to quickly assess and navigate through your entire signal chain setup.

Show/Hide Master Controls: This button toggles the visibility of the Master panel, which contains controls for adjusting various parameters, primarily designed for live performance settings. This panel allows you to make real-time adjustments during your performance.

Live Mode On/Off: This control manages the Live Mode status in THU. When Live Mode is activated, THU avoids interruptions by suppressing prompts about unsaved changes when switching presets.

Preset management in THU tracks any alterations made to a preset. An orange circle will appear next to the preset name at the top of the preset column to indicate that changes have been made. When you attempt to load a new preset while changes are pending, a prompt will appear asking if you want to discard those unsaved changes.

During a live performance, this prompt could be disruptive, as you may need to adjust controls (e.g., via MIDI) and still switch presets without being

obstructed by this confirmation dialog. Enabling Live Mode allows you to bypass this prompt, ensuring a smoother transition between presets.

TIP: When not performing live, it is advisable to disable Live Mode to avoid accidentally losing any pending modifications.

TIP: When Live Mode is enabled, and you load a new preset, any parameters connected to GLOBAL MIDI BINDINGS will retain their values from the previous preset. However, any modifications to those parameters will be discarded. For instance, if you switch from one preset to another, both using a Volume pedal, and you set the pedal position via MIDI using a foot controller, the pedal position will remain consistent across preset changes.

Current Preset Name: This display shows the name of the currently loaded preset. If present, the two numbers preceding the name represent the bank number (in orange) and the preset number (in white), respectively.

TIP: To locate the preset in the preset list, simply click on its name in the display.

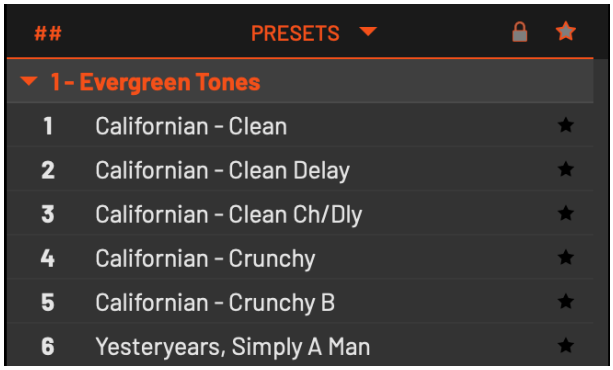
Show Models, Rig Models, SuperCabinets: Switches between displaying the three types of THU content. When you click the selected button, the content column will be hidden.

Undo/Redo: THU monitors and records your actions as you work. The Undo feature allows you to reverse a recent change or action, effectively reverting to the state before the last modification. Conversely, the Redo feature enables you to reapply any actions that were undone previously.

It's important to note that the Undo/Redo history is cleared each time a new preset is loaded. This means that the ability to undo or redo changes is only available within the current session of the preset you're working on.

Menu: Displays the THU menu.

2. PRESET LIST



Orange represents banks. Bank rows are foldable, allowing you to expand or collapse each bank. By folding banks, you can get an overview of the current contents of the Preset list.

White rows represent presets. Each bank contains 128 presets. This fixed number of presets per bank simplifies MIDI access to specific presets.

To fold or unfold a bank, click the orange row of the desired bank. When a bank is unfolded, all 128 of its presets are listed.

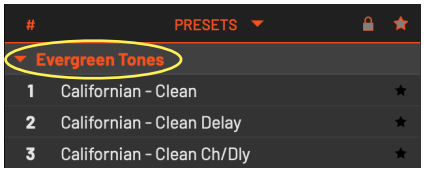
TIP: If you SHIFT-click the fold/unfold arrow, the action is applied to all banks.
This is particularly useful when you want to fold all banks.

Banks are addressed by number, and are theoretically unlimited (MIDI protocol actually supports up to 16,384 banks). Dealing with bank numbers depends on the complexity of the MIDI setup. Most of the timed, the program to recall (programs are the MIDI correspondence to THU presets), is one from a range of 6 or 8. In this case, it can be assumed that the bank never changes. THU support up to three levels of detail for referring to banks:

- Show preset numbers for all presets (banks only appear by name)
- Show bank numbers for all banks and preset numbers for all presets
- Show bank numbers for all banks and bank + preset numbers for all presets

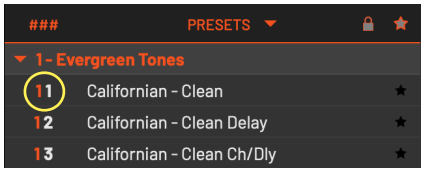
You can change the type of preset/bank numbering by clicking “#” on the heading of the Preset list and choosing from the popup menu.

Here following is how the three settings affect the preset list:



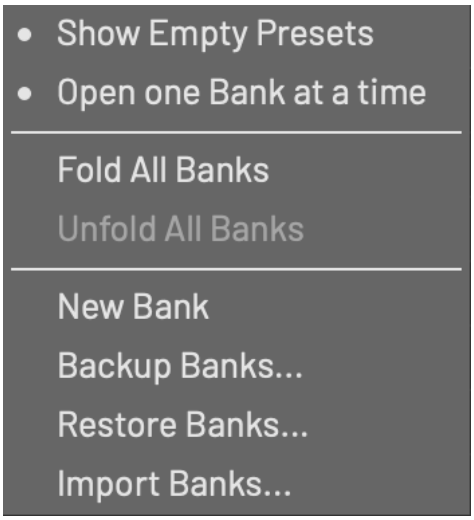
- No bank numbers

- Bank numbers on banks



- Bank numbers on banks and presets

The Preset list provides a command menu which can be accessed by clicking PRESET on the header.



Show Empty Presets shows or hides empty presets. Each bank contains 128 presets that are initially empty. When a bank only has the first few presets in use, the remaining empty presets can make the list unnecessarily long and tedious to scroll through to reach the next bank. Disabling this setting will hide the empty presets.

Open one Bank at a time: since banks are collapsible elements in the list, having multiple banks open, each with its own 128 presets, can be overwhelming. When this setting is enabled, opening one bank will automatically close any other open banks.

Fold All Banks: collapses all banks.

TIP: Folding all banks you can have a global view over all the banks and possibly find and open the bank you are looking for.

Unfold All Banks: expands all banks.

New Bank: creates a new bank with 128 empty presets

Backup Banks...:saves a zip file containing a copy of all banks and their presets to the desired folder.

Restore Banks…: restores the banks from a previous backup.

Import Banks...: imports one or more previously exported banks.

3. SOUND CHAIN

The central area of the user interface is the **Sound Chain View**, which displays the current setup of THU. This view is zoomable, and you can select a suitable zoom level using the zoom buttons on the foot bar. The sound chain begins on the left (the input of the THU sound processing) and flows from left to right, ending at the output.

TIP: Starting from THU v2 you can optionally insert a line break by splitting a line and placing a new segment below. This is useful for managing long horizontal sound chains, allowing you to concentrate more models within the screen view. To insert a line break, simply pick the line break icon

and drag it over the sound chain, then drop it in the desired position for the break.

Two types of sound chains are available: linear and parallel. The linear sound chain is a straightforward sequence of modules between the input and output of THU. The parallel sound chain is a bit more complex: it uses a **Splitter** to divide the sound into two paths (upper and lower), where you can place your modules, and then a **Mixer** combines the two paths back together.

This configuration allows you to process the same sound in two different ways and then mix the two processed sounds together. You can switch

between the types of sound chains by clicking the button in the bottom left corner of the Sound Chain View.

The button's behavior changes depending on the current configuration of the sound chain. For example, you might be prompted for confirmation before removing some models when switching from a parallel back to a linear chain.

4. OVERVIEW

Overview

When the sound chain is long and you use a close-up zoom factor, you may lose the overall view and need to scroll to reach distant points for adjustments.

At the top of the sound chain view, there's an optional Overview that can be shown or hidden using this button on the toolbar.

The Overview is a view that can be resized to better fit the available screen space.

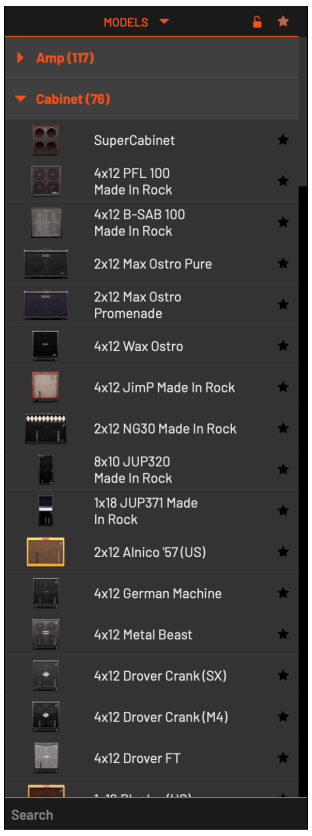
The Overview is also interactive. Clicking anywhere on it will move the Sound Chain to that position. By dragging the cursor, the Sound Chain will scroll accordingly.

5. CONTENTS COLUMN

The Content Column lists three different types of content that can be used in the THU Sound Chain: **Models**, **Rig Models**, and **SuperCabinets**. To select which type of content to display, you can use the three dedicated buttons on the toolbar.

MODELS

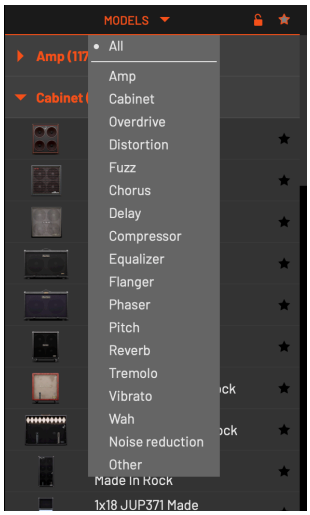
THU's models are simulations of real instruments. The categories that group the models make it easier to find them and include: Amp, Cabinet, Overdrive, Distortion, Fuzz, Chorus, Delay, Compressor, Equalizer, Flanger, Phaser, Pitch, Reverb, Tremolo, Vibrato, Wah, Noise Reduction, and Other.



The categories of models can be expanded and collapsed by clicking the arrow next to the name. Each model in the list shows a small preview of the model itself and its name.

When you hover over an item in the list, a tooltip appears providing additional information about the origin of the modeled instrument.

TIP: You can also select to see one category of models at a time by clicking the down arrow in the header of the template list. A popup category list will appear, allowing you to narrow the list down to the desired category. All means that all categories are listed.



Licensing filter

THU models can be in one of three distinct states: licensed, unlicensed, or evaluating. Licensed and evaluating models are available for loading.

In the header of the list, there is a padlock icon that indicates the current filter applied to the list. You can change the filter by clicking on the icon.

- Show all models without any filter
- Show licensed and evaluating models
- Show only evaluating models
- Show only unlicensed models

Favorite filter

The list supports a favorites filter. Each item in the list has a star icon that can be used to mark it as a favorite. The list can then be filtered to show: all items, only favorite items, or only non-favorite items.

- Show all models without any filter
- Show licensed and evaluating models
- Show only evaluating models

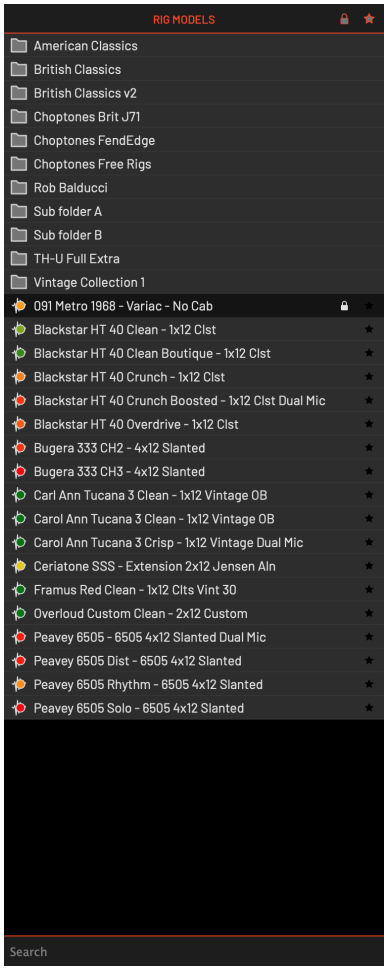
Search filter

At the bottom of the list, there is a Search field where you can type one or more words to apply as a text filter on the names of the list items, excluding all items that do not contain the desired text.

The Search filter is extremely effective for finding a particular model based on its name or part of its name.

RIG MODELS

An IR (Impulse Response) file is a digital representation of how a physical space or piece of equipment responds to an audio signal. In simple terms, it's a snapshot of the sound characteristics of a particular environment or gear, capturing everything from the reflections and reverberations of a room to the unique tonal qualities of a speaker cabinet.



In the context of guitar amps, an IR file is typically used to emulate the sound of a speaker cabinet. When a guitarist plays through an amp model in software like THU, the IR file processes the sound to make it feel and sound as if it's coming through a real speaker cabinet, adding depth, realism, and character to the tone.

THU takes this a step further with its "Rig Model" files. These files not only contain the impulse responses of various guitar amp cabinets but also include the impulse responses of the amplifiers themselves. This means that a Rig Model in THU provides a highly detailed and accurate simulation of both the

amp and the cabinet, offering a complete and authentic reproduction of a real guitar rig.

By using Rig Models, guitarists can experience the exact sound of their favorite amps and cabinets, meticulously recreated down to the finest details, without needing the physical gear. This makes it incredibly easy to switch between different setups and find the perfect tone for any musical style.

The Rig Model list displays the contents of a folder on the system's disk, similar to a file browser. To open a folder, double-click it. To close it, click the up arrow on the left side of the list header. Also in the list header, clicking the current folder's name will open a menu showing the hierarchy of containing folders, allowing you to navigate to a different location if needed. The last item in the menu, "Reveal directory...", opens a system file browser window to the current folder of the Rig Model list, for example, to organize its contents.

Files in the Rig Model list have an icon that indicates the gain level of the file with a color, making it easy to choose between high (red), middle (yellow) or low (green) gain Rig Models at a glance.

Once you have selected the desired Rig Model, simply drag the file into the Sound Chain to insert the THU Rig Player with that Rig Model already loaded and ready to use. To change the Rig Model from within the Rig Player, click on the display containing the name of the Rig Model.

Licensing filter

THU Rig Models can be in one of three distinct states: licensed, unlicensed, or evaluating. Licensed and evaluating models are available for loading.

In the header of the list, there is a padlock icon that indicates the current filter applied to the list. You can change the filter by clicking on the icon.


Show all models without any filter


Show licensed and evaluating models


Show only evaluating models


Show only unlicensed models

Favorite filter

The list supports a favorites filter. Each item in the list has a star icon that can be used to mark it as a favorite. The list can then be filtered to show: all items, only favorite items, or only non-favorite items.


Show all Rig Models without any filter


Show licensed and evaluating Rig Models


Show only evaluating Rig Models

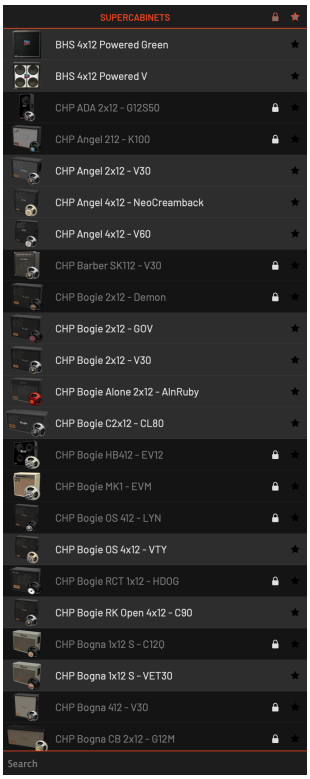
Search filter

At the bottom of the list, there is a Search field where you can type one or more words to apply as a text filter on the names of the list items, excluding all items that do not contain the desired text.

The Search filter is extremely effective for finding a particular model based on its name or part of its name.

SUPERCABINETS

The THU SuperCabinet is a powerful cabinet IR (Impulse Response) processor. It can simultaneously play up to 4 IRs mixed together with various customization options. Alternatively, it can play up to 3 IRs by dividing their action into three frequency bands: low, mid, and high.



Each SuperCabinet file is a multi-audio capture of a specific cabinet with various combinations of microphone models, positions, distances, and angles. As a result, you will have numerous variables for each cabinet capture to tweak and achieve the desired tone.

The list of SuperCabinet files contains all installed libraries, and the applicable filters are the same as those used for other THU content categories.

Dragging an item from the list into the Sound Chain will insert a SuperCabinet component with the file already loaded and ready in the first of the 4 slots. Double-clicking the SuperCabinet in the Sound Chain will open the control window, allowing you to customize the cabinet by modifying the loaded file and/or adding additional SuperCabinet files.

Licensing filter

THU SuperCabinets can be in one of three distinct states: licensed, unlicensed, or evaluating. Licensed and evaluating cabinets are available for loading.

In the header of the list, there is a padlock icon that indicates the current filter applied to the list. You can change the filter by clicking on the icon.

 Show all SuperCabinets without any filter

 Show licensed and evaluating SuperCabinets

 Show only evaluating SuperCabinets

 Show only unlicensed SuperCabinets

Favorite filter

The list supports a favorites filter. Each item in the list has a star icon that can be used to mark it as a favorite. The list can then be filtered to show: all items, only favorite items, or only non-favorite items.

 Show all SuperCabinets without any filter

 Show licensed and evaluating SuperCabinets

 Show only evaluating SuperCabinets

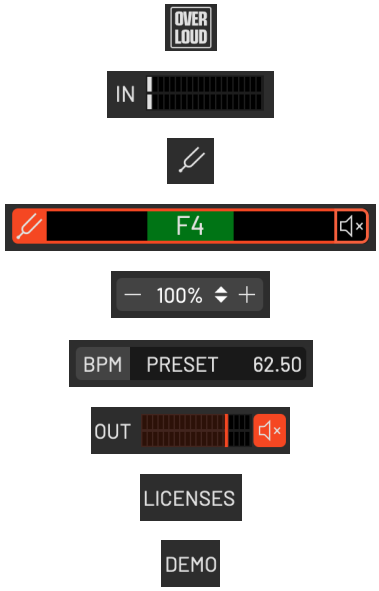
Search filter

At the bottom of the list, there is a Search field where you can type one or more words to apply as a text filter on the names of the list items, excluding all items that do not contain the desired text.

The Search filter is extremely effective for finding a particular cabinet based on its name or part of its name.

6. BOTTOMBAR

On the bottombar, there are several monitoring elements and general control features for THU.



Overloud Logo

Input Level Meter

Shows/Hide Tuner

Tuner on with Mute control

Zoom controls

BPM controls

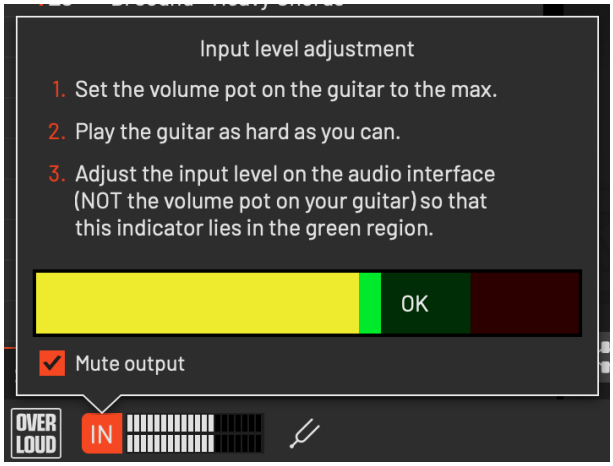
Output Level Meter + Fader + Mute

Licenses button

Demo button

INPUT LEVEL ADJUSTMENT

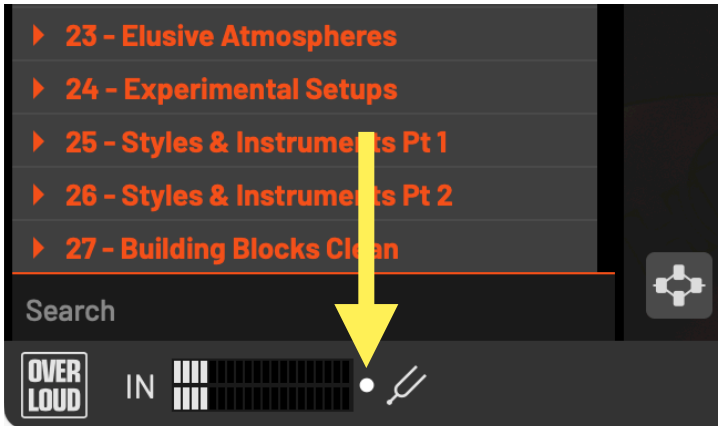
The **Input Level Meter** shows the real-time level of the incoming signal. This indication is useful for adjusting the gain on the connected guitar and the volume of the audio interface. To facilitate this adjustment, you can open the Input Level Adjustment panel by clicking the IN button.



The three steps to follow for this adjustment are:

1. Turn the guitar's volume control to its maximum position.

2. Play the guitar strings as intensely as possible to achieve the loudest sound.
3. Adjust the volume on the audio interface so that, while playing at maximum intensity, the level indicator stays within the green area.



On the right side of the IN level indicator you might see a flashing white circular indicator. This is the MIDI activity indicator, useful to check if THU is receiving MIDI messages from a connected MIDI foot controller or other MIDI source.

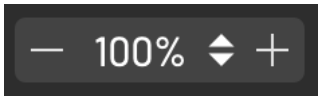
TUNER

With the **Tuner**, you can easily tune a guitar or bass. THU automatically detects the pitch of the incoming sound and displays the name of the note closest to the detected pitch. The Tuner's indication is very clear: if the orange marker is to the left of the central zone containing the note name, the string needs to be tightened. Conversely, if the orange marker is to the right of the central zone, the string needs to be loosened.

By plucking an open string and adjusting the tuning peg while observing the Tuner, you can achieve the condition where the central zone turns green and displays the name of the note the string is tuned to. Repeating this process for the remaining strings will result in a fully tuned instrument.

The Tuner also includes a Mute button to silence THU's output. This is particularly useful in live situations to prevent the sound of the strings from being heard during tuning.

ZOOM CONTROLS



The Sound Chain view is interactive. You can drag the floor of the Sound Chain, for example. You also can scroll the view vertically by using the mouse wheel while the cursor is in an empty area of the Sound Chain (e.g., not over a knob). To scroll horizontally, hold down the SHIFT key while using the mouse wheel, or simply scroll horizontally on track-mice or trackpads.

To range between an overview of the Sound Chain and the detailed view of a single model, you can adjust the zoom level within the 25-200% interval. The controls for changing the zoom include the + and - buttons, and a popup menu (accessible by clicking on the current zoom value) to directly select a new scale factor.

BPM CONTROLS

Some modulation and delay effects in THU have parameters that control the periodicity of an event. The repetition rate can be expressed in Hz (cycles per second) or in milliseconds (the duration of a cycle in milliseconds).

These cycles can be free, but most of the time, you may want them to be synchronized with the BPM of the project or song. Since THU can function as both a plugin and a standalone application, multiple modes are supported for syncing to the BPM. To select the mode, click the BPM button.

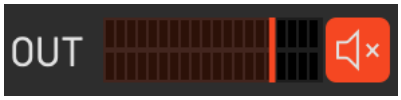
INTERNAL: The BPM is generated internally by THU. To set a new BPM, double-click the number and type in the value, or hover over the BPM number to reveal a TAP control, and click TAP in the desired rhythm. This is especially useful when THU is used as a standalone application.

HOST: The BPM is obtained from the host. When THU is used as a plugin in a DAW, it can receive the BPM in real time from the song in which it is

instantiated. The major advantage is that if the song includes BPM changes, THU will stay updated. Manual modification is not allowed in this mode.

PRESET: In this mode, the BPM is also generated internally by THU, but its value is saved with the current preset along with other parameters. When the preset is reloaded, the BPM value will be restored. You can specify a new value by double-clicking the number or using the TAP control that appears when you hover over the current BPM value.

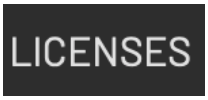
OUTPUT LEVEL METER



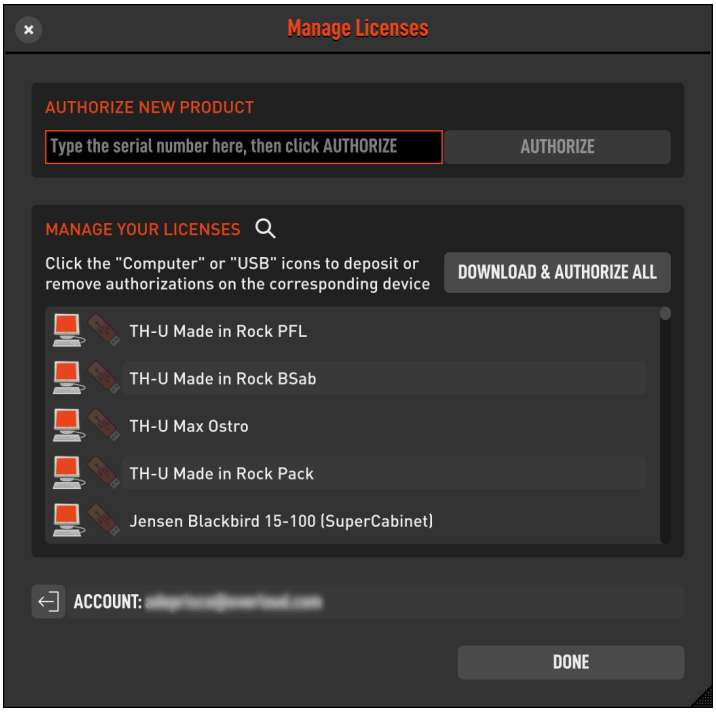
Corresponding to the Input Level Meter, there is also an Output Level Meter that displays the output sound level. Hovering over the meter will reveal a slider that allows you to adjust the output level value.

TIP: For both input and output levels, it is advisable to aim for the highest level possible without reaching excessive saturation, as this will result in clearly audible distortion.

LICENSES



To manage THU licenses, click on the LICENSES button. This will open the Manage Licenses dialog window.



Authorize and Deauthorize Licenses

The Manage Licenses dialog window is linked to your user account. If you haven't logged in to your Overloud account yet, the first step is to log in.

THU is an application available in various Editions or as the full Premium version. Both THU Edition(s) and Premium require a license for activation. Additionally, THU can load extra content known as Extensions. THU Extensions can include: Signature Model Packs, Rig Libraries, and SuperCabinet Libraries. All THU Extensions require a license for activation.

THU licenses are managed by Overloud's online servers, allowing you to handle your licenses with ease. The Manage Licenses dialog window lists all the licenses associated with your Overloud account, showing the name of the content each license refers to.

To use these licenses on your device, they need to be stored on a storage device. The fastest and most convenient option is the computer you're currently using with THU. Alternatively, you can save one or more licenses to a USB drive for portability, such as when working in a separate studio.

In the license list, each row contains two icons: a computer and a USB drive. When a license has not yet been deposited, the icons appear dimmed. Clicking on one of the icons will deposit the license and activate the associated content.

To remove a license from storage, hover over the corresponding icon (it will turn into a trash can) and click.

When a license is deposited, the Overloud server decreases the count of available authorizations for that license. When it is removed from storage, the server increases the count.

There are two limits regarding Overloud licenses: the maximum number of authorizations per license is 3 computers (meaning a license can be authorized on up to 3 different computers), plus 1 USB drive. The second limit concerns the number of authorizations/deauthorizations possible within a calendar year, which is set at 10 authorizations, with exceptions possible.

Authorize THU Slate Edition

The Slate Edition of THU, like other Slate Digital products, uses the iLok licensing system. Therefore, you do not need to authorize the Slate Edition of

THU separately, as long as the license information has been stored following Slate Digital's instructions.

Upgrading from THU Slate to THU Premium

The Slate Edition provides a selection of THU models. Upgrading to the Premium version is straightforward. To upgrade from the Slate Edition to the Premium version, simply obtain a license for the models not included in the Slate Edition.

Once you have the upgrade license, follow these steps:

1. If you don't have an Overloud account yet, create one at: www.overloud.com.
2. Launch THU Slate.
3. Access the Authorization panel via THU Slate's LICENSE menu.
4. Register the upgrade serial number. If you've just created a new Overloud account, you will be prompted to enter your Overloud account information in the authorization panel.

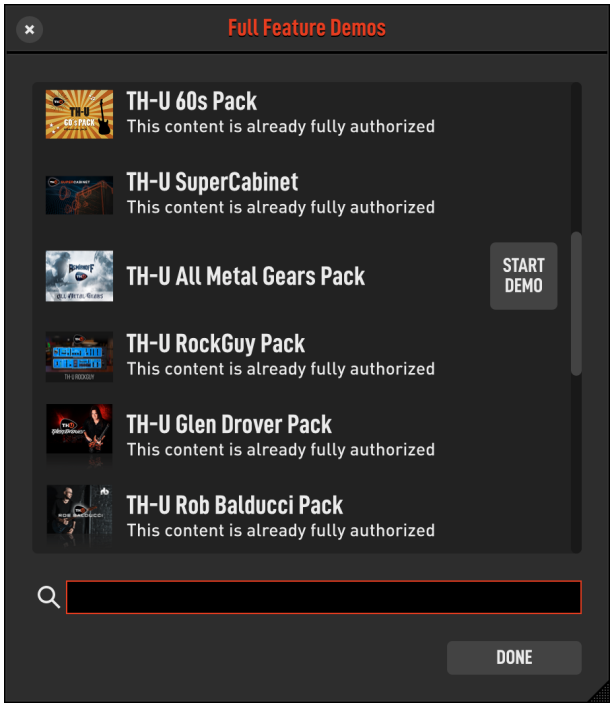
Install and Authorize a Rig Library

To install and authorize a Rig Library, begin by dragging the Rig Library (.riglib file) directly onto the THU graphic interface. Then follow the guided procedure.

For a step-by-step guide on installing and authorizing a Rig Library, refer to this tutorial:
www.overloud.com/node/353

DEMO

To manage THU's additional content demos, click the DEMO button, and a summary window will open displaying authorized licenses, currently active demos, expired demos, and demos that can be activated.



THU ADDITIONAL ELEMENTS

MASTER PANEL

The Master Panel contains controls for adjusting the operation of THU. You can modify the input mode and sensitivity, the Noise Gate level, equalization, the quality of cabinet processing and the general Transpose.

TIP: When one of the Master parameters that affect the timbre of the sound is not set to its default value, the parameter's Label turns yellow and, when the Master panel is closed, a yellow indicator appears superimposed on the Master button on the toolbar.

Input Source allows you to choose how to handle the input channels of THU. You can treat two inputs as a stereo pair or select one of the stereo inputs as a single left or right channel.

Sensitivity changes the input sensitivity similar to how it works in a real amplifier. Low is recommended for single-coil pickups, while High is suitable for humbuckers.

Noise Gate adjusts the threshold level of the Noise Gate. The threshold level functions as a combination of an Expander and Gate to maximize efficiency. Adjust this setting to reduce any potential noise, for example, if the pickups are noisy or if you are working with high gain levels.

Low and High are controls for a general equalizer that acts on the output sound downstream of THU's processing. Adjusting the general equalization shifts the sound relative to the output from THU's presets. This feature is very useful for making global adjustments, for example during a live performance, to compensate for acoustic imbalances.

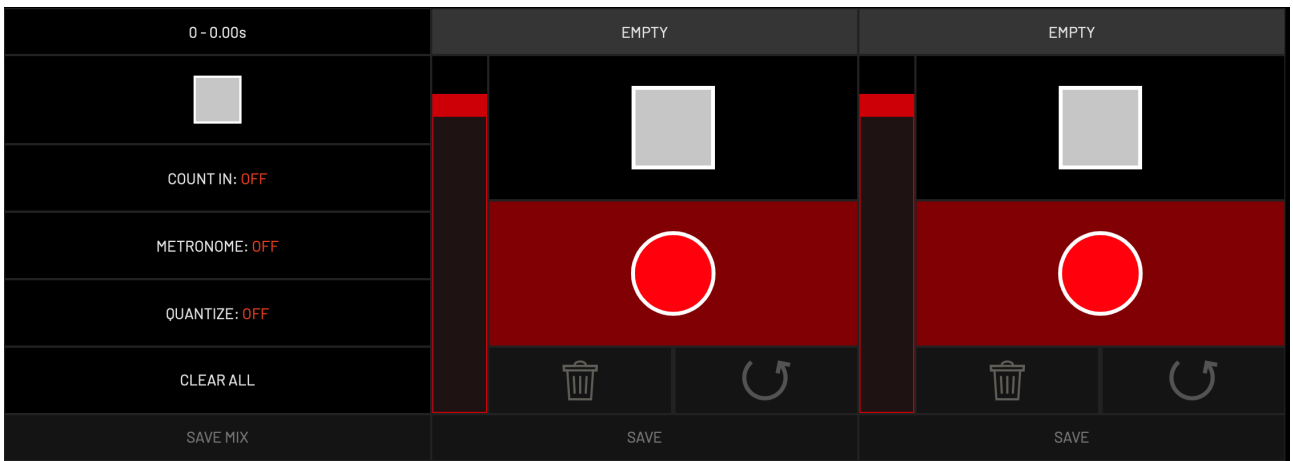
Reverb and Delay are general controls that affect the corresponding effects if they are present in the THU presets being played. The values of these parameters are added to or subtracted from the values in the presets. This is very useful for making global adjustments, for example during a live performance, if the acoustic environment requires it.

Remastered Cab: THU can utilize an advanced version of cabinet processing that enhances clarity and presence. This parameter can be set to three values: OFF to disable the Remastered Cab, ON to always enable it, or AS IN CABINET to choose whether to use the Remastered Cab through the properties panel of individual cabinets in the Sound Chain.

Transpose is a global transposer that adjusts the pitch of the sound processed by THU. It is a polyphonic transposer with a range from -5 semitones to +3 semitones.

LOOPER

In the THU menu, which opens by clicking the button on the right side of the toolbar, there is an option to open and close the Looper.



The Looper appears at the bottom of the THU window.THU includes a multi-track Loop Station that allows you to record and overdub on two tracks. The user interface of the Looper has two sections: the Transport section and the Tracks section.

TRANSPORT

PLAY/STOP button controls the Looper's playback.

COUNT IN sets the number of quarter beats to play before starting the first recording.

METRONOME is an option to play quarter beats. The BPM used is the one displayed on THU's BottomBar.

QUANTIZE is an option to end the first recording ensuring that its length matches the nearest quarter beat, even if you stop recording slightly before or after the end of the previous recording.

CLEAR ALL clears the recordings on both tracks, restoring the Looper to its initial state.

SAVE MIX saves the current audio content of the Looper, the mix, into an audio file.

TRACKS

There are two columns containing controls for each track of the Looper. The level fader is on the left, followed by the **STOP**, **REC/PLAY/OVERDUB**, **DELETE**, and **UNDO** buttons.

The column header indicates the real-time status of the track. The initial status is **EMPTY**.

USAGE

Starting with the looper in its initial status, you can set the **COUNT IN**, **METRONOME**, and **QUANTIZE** options according to your needs.

To begin recording, click the **REC** button on one of the tracks. After the count-in beats (if enabled), the recording will start.

You will see the loop length values, in beats and seconds, increasing and displayed at the top of the transport area. This display helps you determine

the actual loop length, which will be set when you stop the recording. If **QUANTIZE** is enabled, the loop length will be instantly set and adjusted to the nearest beat boundaries.

Once the initial recording is complete, you can play the loop and either overdub on the same track or record on the other track.

UNDO allows you to discard the last recording.

DELETE lets you remove the current track's audio content.

SAVE enables you to save the audio content of the single track to a file.

By using these controls, you can efficiently manage your recordings, ensuring a smooth and precise looping experience.

TUTORIAL: USING THU

Once the authorization for THU and any additional extensions is complete, THU will be ready to use.

Let's follow a step-by-step tutorial to see a fairly common way to use THU.

CREATING AND SAVING A NEW PRESET IN THU

STEP 1: Start with an empty Sound Chain

Run THU: by following the setting on the initial preset, THU will start with the Sound Chain empty, or one that contains models. You can click the trash icon, at the bottom right, to empty the sound chain.

THU emulates a real guitar rig by incorporating many of the models typically found in an actual guitar setup:

- Stomp boxes
- Expression pedals
- Amplifiers
- Cabinets & Microphones
- Rack effects

And some special ones like:

- Rig Player
- SuperCabinets

You can mix and match these models in any combination you like, even those that might be impractical or impossible to achieve in a physical guitar rig. This versatility not only makes THU a precise tool for guitar rig modeling but also a highly creative one.

STEP 2: Add Models to your Sound Chain

1. **Select Models**: from the MODELS or any relevant library list, drag and drop your desired Models (such as amplifiers, cabinets and effects) , Rig Models or SuperCabinets into the Sound Chain area.

   1.1. **Alternatively** you can open one of the ready-made presets from the left column. Double click a preset to load it.

STEP 3: Move models over the Sound Chain

To reposition a model within the Sound Chain, click on an empty area of the model—meaning a part that does not contain any knobs, switches, or other controls—and then drag it to the desired location within the Sound Chain view.

STEP 4: Remove a model from the Sound Chain

There are two methods for removing a model:

1. **Drag and Drop**: Drag the model over the trash can icon, in the bottom right corner of the Sound Chain view.
2. **Context Menu**: Right-click on an empty area of the model (one that does not contain any knobs, switches, or controls) and select the "Remove" command from the context menu.

STEP 5: Copy/Paste a model

Models can be copied and pasted within the Sound Chain. To copy a model, right-click on it and select "Copy" from the context menu. Next, right-click on another model and choose "Paste > Before" or "Paste > After," depending on where you want to place the copied model relative to the clicked model in the Sound Chain.

TIP: Once you have copied a model to the clipboard, you can paste its settings onto another model of the same type by right-clicking the new model and selecting "Paste > Settings." This action will apply the copied parameter settings to the selected model without adding a new one. This feature can be used within the same preset, another preset, or when creating a new preset.
For example, if you have a delay setting configured that you want to use in a different or existing preset, this feature allows you to transfer those settings efficiently.

STEP 6: Configure your Models

1. **Adjust Settings**: double click on models having an additional settings panel. Here, you can tweak specific parameters according to your preferences.

2. **Fine-Tune the Sound**: use the controls to adjust the gain, tone, effects, and other attributes of your components. You can hear the changes in real-time as you make adjustments.

STEP 7: Set Up the routing

1. **Check Signal Flow**: ensure that the signal flow is set up correctly from the input to the output. The sound chain should flow from left to right.
2. **Test the Chain**: play your instrument or input source to verify that the sound is being processed as expected through the chain.

STEP 8: Save your preset

1. **To save the preset to a new location without overwriting other presets**: select the bank you want to save it in, click SAVE NEW PRESET button, on the right side of the preset name display, on the toolbar.
2. **To save the preset overwriting another preset**: select the preset you want to overwrite and press SAVE. A confirmation request will appear before overwriting, just choose Yes.

CREATING A PARALLEL SOUND CHAIN

OPTION 1: Start with an empty Sound Chain

1. **Run THU**: by following the setting on the initial preset, THU will start with the Sound Chain empty, or one that contains models. You can click the trash icon, at the bottom right, to empty the sound chain.
2. **Press the splitter button** and you will see two components appear in the Sound Chain: the splitter and the mixer.

3. **You will get a Sound Chain with 4 paths** where you can insert models: one linear path at the beginning, two parallel paths in the middle, and one linear path at the end.

OPTION 2: Start with an existing Sound Chain

1. **Drag and drop the splitter button** over the Sound Chain where you want to split the linear path.
2. **You will get a Sound Chain with 4 paths** inserted where you dropped the splitter button.

GOING BACK TO LINEAR FROM A PARALLEL SOUND CHAIN

STEP 1: Click the Splitter button

1. **If one or both the parallel paths are empty**: the sound chain will be converted to linear keeping all models.
2. **If both parallel paths contain models**: THU will ask you which of the parallel paths should be kept. Models on the other path will be removed.

USING A PARALLEL SOUND CHAIN

A parallel Sound Chain allows you to process the same sound through two separate paths and mix the outputs of both paths. Additional models can be inserted before and after the split in the Sound Chain to further enhance and refine the overall processing.

SPLITTER

The splitter is located at the beginning of the parallel section and its function is to divide the sound from the preceding linear path into the two parallel paths.

SPLITTER CONTROLS

X-OVER MODE: There are three crossover modes available:

- **OFF**: All controls except Balance are deactivated. The Splitter functions as a standard splitter.

- **NORMAL**: The crossover operates as a typical high-pass/low-pass network, allowing you to process lower and higher frequencies separately in the two parallel paths. The X-OVER FREQ and SWAP controls are active in this mode.
- **BANDPASS**: The crossover acts as a band-pass/band-reject filter network, enabling separate processing of mid frequencies and high/low frequencies in the two parallel paths. All parameters are active in this mode.

SWAP BUTTON: This button swaps the destination paths of the filter networks when the X-OVER MODE is set to anything other than OFF.

X-OVER FREQ: Sets the frequency around which the filters operate.

FREQ SPREAD: In BANDPASS mode, this controls the width of the band-reject filter, allowing for partial overlapping of the signals for added flexibility.

BALANCE: This option adjusts the amount of signal directed to the upper (1) and lower (2) paths.

MIXER

The THU Mixer is located at the end of the parallel processing section and lets you adjust the signal from each path to suit your needs.

PHASE: Adjusts the phase of the input channel.

DELAY: Controls the amount of delay applied to the input channel. This is useful for correcting phase delay issues or as a creative tool for complex comb-filtering effects.

WIDTH: Sets the stereo width of the input channel. A setting of 0 corresponds to mono, 100 to stereo, and -100 to inverted stereo (where the left and right inputs are swapped).

PAN: Adjusts the pan or stereo position of the input channel at the output. For a stereo signal, this acts as a balance control: at minimum, it will only output the left channel signal, and at maximum, it will only output the right channel.

LEVEL: Sets the reference level of the channel.

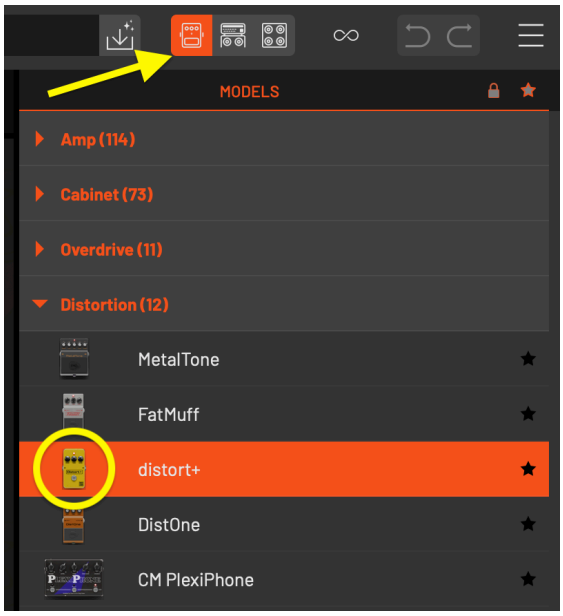
BALANCE: Allows you to adjust the real-time balance between the two mixer channels.

MONO/STEREO: Sets the output mode of the mixer. Mono combines all inputs into a single mono output.

MODELS BY TYPE

The following section will describe some categories of THU models, including their unique features and how to adjust their effects within the Sound Chain.

STOMP BOX



In a typical guitar rig, stomp boxes are positioned at the beginning, before the amplifier. To add a stomp box, first, display the content column and choose to view the list of models (click the Models button on the toolbar). Then, select the desired stomp box from the model categories and drag its icon into the Sound Chain, placing it in the desired position.

The stomp box will appear in the Sound Chain, and its effect will be immediately noticeable when playing the guitar connected to THU. All models in THU are interactive.

TIP: Knobs can be adjusted by clicking them and dragging the mouse, or by hovering over the knob and rotating the mouse wheel (hold SHIFT to reverse the direction of the knob scroll). Cmd-Click (or Ctrl-Click on Windows) will reset the knob to its default value.

TIP: When you click a knob and drag it to adjust its value, a display will appear showing the real-time value (including any unit of measurement). By double-clicking, a cursor will appear in the display, allowing you to type the desired value directly using your computer keyboard.

Replace with a similar model

Replacing a THU model with another from the same category that produces a similar effect is straightforward. For example, to replace one distortion stomp box with another, simply right-click on the model in an area that does not contain controls. From the context menu that appears, select "Replace with...". The submenu that follows will display a list of all distortion stomp boxes, with a marker indicating the currently selected one. Choose a different model from the list, and THU will perform the replacement seamlessly.

Copy / Paste

Models can be copied and pasted within the Sound Chain. To copy a model, right-click on it and select "Copy" from the context menu. Next, right-click on another model and choose "Paste > Before" or "Paste > After," depending on where you want to place the copied model relative to the clicked model in the Sound Chain.

Paste module settings

Once you have copied a model to the clipboard, you can paste its settings onto another instance of the same model by right-clicking the new model and selecting "Paste > Settings." This action will apply the copied parameter settings to the selected model without adding a new one.

This feature can be used within the same preset, another preset, or when creating a new preset. For example, if you have a delay setting configured that you want to use in a different or existing preset, this feature allows you to transfer those settings efficiently.

Save / Load module settings

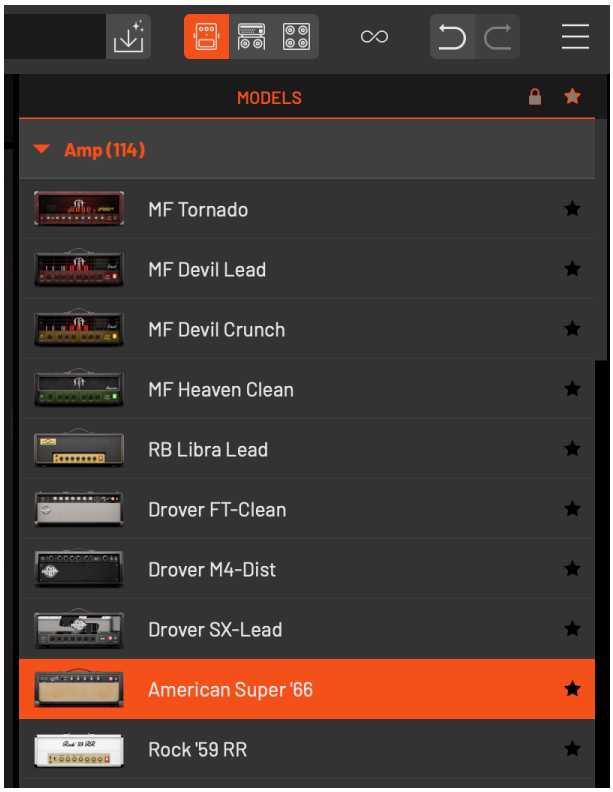
Once you have copied a THU model to the clipboard, you can save its settings to a file for future use. Right-click on the model in an area that does not contain controls and select "Save Settings > Save As…" from the menu. THU will prompt you to specify a name for the preset file, and by confirming with OK, the file will be saved.

To load the settings from a preset file, right-click the model and choose "Load Settings" from the menu. The submenu that appears lists all available preset files. Select one of these files to load its settings.

TIP: Managing preset files for a model is very simple. Just open the contextual menu for the model and select "See files...". This will open a file system window that shows the folder containing the preset files for that model. From here, you can copy, back up, rename, or delete files to better organize your model presets.

AMPLIFIER

To add an Amplifier, open the Amp category in the model list and select the desired amplifier model from the available ones. Then, drag and drop the Amp into the Sound Chain at your preferred position. THU will prompt you with the option to add a matching cabinet after the Amp. This feature is particularly useful when setting up a Sound Chain and you want to use a consistent Amp and cabinet combination.



TIP: At any time, you can add the matching cabinet to an Amp by right-clicking on the Amp and selecting "Add matching cabinet."

TIP: If you choose "NO, AND DON'T ASK AGAIN" when prompted to add the matching cabinet, THU will stop asking this question in the future. To re-enable this prompt, go to THU's Settings from the menu (button in the top-right corner) and activate the option "Prompt for insertion of matching cabinet with amp."

Interacting with the controls of an Amp is similar to how you interact with stomp boxes.

TIP: The POWER control of an Amp behaves differently from a real-life scenario. In THU, an Amp that is turned off ceases to contribute to the Sound Chain. In other words, when the Amp is turned off, it is effectively bypassed.

Tweaking the Amp

When you have found an amp head that provides the right overall tone but still require additional customization, and if the amp model supports it, you can access the AMP TWEAKS panel. To do this, click on the gear icon that appears when the mouse cursor hovers over the amp graphics, and the panel will pop up.

The AMP TWEAKS panel includes a selection of tubes that you can choose to modify the pre-amp and power amp tubes. A white checkmark indicates the default tube for each section of the amp, while the highlighted tube represents the current selection for each section.

The AMP TWEAKS panel also features a VARIAC knob, which controls the tube power supply voltage. Adjusting the VARIAC allows you to lower the voltage and induce earlier tube saturation. When the VARIAC is turned fully clockwise, the amplifier produces its standard harmonic content. Conversely, reducing the VARIAC voltage causes the amp tube to saturate more easily, making the amp's character more aggressive even at lower gain settings.

RIG PLAYER

The Rig Player is a unique THU model designed to reproduce the sound of a complete guitar rig, including pre-amplifier, amp head, cabinet, microphones, and ambient effects.

Rig Models

Rig Model files are created using Overloud's proprietary R2M (Rig to Model) technology, allowing for a faithful reproduction of an entire rig. Overloud uses top-quality tools and procedures to ensure users get the best possible guitar tones. The Rig Player functions as a player for these Rig Models.

The Rig Player accesses a root directory on your file system where RIG (.rig) files are stored. You can browse and load these files by clicking the browse button "…" or directly on the Rig Player display. Double-click a RIG file from the list to load it. Additionally, you can use the arrow buttons to quickly load the previous or next rig model without navigating the list, which is useful for exploring different tones in a creative context.

TIP: Rig model icons feature a small colored circle indicating the gain level: GREEN for CLEAN, YELLOW for CRUNCH, and RED for LEAD. You can also add a different AMP model to the left of the Rig Player and turn off the Rig Player AMP if desired.

The Rig Player has two sections: AMP and CABINET, which can be enabled or disabled independently. Disabling the cabinet allows you to replace it with a different one by adding a new cabinet model alongside the Rig Player.

The cabinet section of the Rig Player includes a display that usually shows the word “<matched>”, indicating that the cabinet model matches the amp section’s rig model.

TIP: When you select a new rig model for the cabinet, the matching between amp and cabinet models is broken. To restore the match, load a new rig model for the amp. To keep the cabinet model unchanged while scrolling through amp models, activate the cab lock (PADLOCK button). This will prevent the cabinet model from changing. However, clicking the cabinet display will open a new list of rig models, allowing you to select an alternate model for the cabinet only, expanding your options for combining amp and cabinet models.

TIP: To evaluate new rigs, click the TRY RIGS… button. A window will appear listing all available Rig Libraries. Click START DEMO to begin a 2-day evaluation license. After the demo expires, you can activate another 2-day evaluation. You can activate a demo for the same item up to twice per year. Rig Libraries (.riglib files) consist of collections of rig models and presets. After purchasing a rig library, you can drag and drop the .riglib file into the THU user interface and authorize it with the serial number when prompted.

TIP: To get more rig models, click the SHOP… button. This will open your default web browser to a page where you can select and purchase new rig libraries. After downloading a .riglib file, drag and drop it into the THU interface and authorize it by entering the serial number when prompted.

Both rig file list windows (rig models and cabinets) include a SEARCH feature. Click the magnifier icon at the top of the rig list window to enter search criteria. The search will traverse all subfolders within the Rig Models root directory, showing results in real-time as you type.

Newly installed items will appear in yellow for two days after installation, making it easy to identify them among existing elements.

Rig Player Knobs

The Rig Player knobs are organized into two rows. The upper row controls the timbre of the model, while the lower row contains typical amp head controls.

Definition: Adjusts the amount of low frequencies cut before the input signal reaches the distortion stage. Lower settings produce vintage tones, while higher settings yield modern tones by filtering out low frequencies and boosting harmonics.

Power Sagging: Simulates the effect of tube saturation, reducing dynamics similar to a compressor. Setting it halfway replicates nominal tube behavior, while higher settings push beyond typical tube response while preserving natural distortion.

Compressor: Adjusts the dynamic range of the clean signal. Balance this with your guitar's volume control to achieve a range from crunchy to clean tones with preserved energy.

Clarity: Enhances the processed sound by adding presence and focus to the clean signal and lightening distortion pressure in mid frequencies for improved clarity.

Tube Shape: Defines the amp's character, from subtle transitions between clean and distorted sounds (lower values) to more aggressive distortions (higher values).

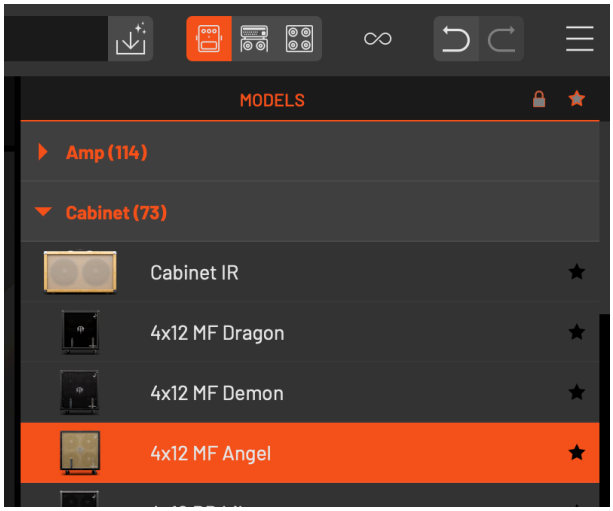
Tube Bias: Adjusts distortion shape asymmetry. Lower settings reflect the reference amplifier's shape, while higher values create a more asymmetric distortion with even harmonics.

Direct Mix: Controls the mix of input clean sound with the processed signal, enhancing dynamics and attack, and adding clean harmonics to the output.

Level: Adjusts the final output level or balances audio levels between different rig models without altering other settings.

CABINET

To insert a Cabinet, open the Cabinet category in the model list and select the desired model from the available options. Then, drag and drop the Cabinet into the Sound Chain at the desired location.



Although cabinet models may seem simple visually, they are actually among the most complex models in THU. Cabinets support several advanced features, including:

- Two frontal 3D positioned microphones
- A rear microphone
- Front microphones tilt from 0° to 45°
- Phase inversion
- Ambience emulation
- ReSPiRe technology
- High and low pass filters

Like other models, the cabinet can be or turned off (bypassed). When you hover your mouse cursor over the cabinet, you'll see a small speaker icon in the bottom-right corner of the cabinet. Click this icon to toggle the cabinet on or off.

THU cabinets come in five types: 1-speaker, 2-speaker, 4-speaker, IR Cabinets, and the SuperCabinet. Details about the latter two types will be provided later.

The process of setting up microphones in front of different types of cabinets is quite similar. THU's modeling of harmonic content considers factors such as the position, distance, and model of the microphones.

After adding the cabinet to the sound chain, you will notice two microphones positioned in front of it. To get a comprehensive view of the cabinet, choose an appropriate zoom level.

While playing your guitar, you can drag the microphones around to hear how the harmonic content changes. To move the microphone along the X-Y axis, click and drag it with the left mouse button. You can also adjust the microphone's distance from the cabinet by right-clicking and dragging the microphone (using the right mouse button). A white line will indicate the Z axis, and the microphone's shadow on the cabinet will help you gauge the distance.

Next, let's explore the cabinet Properties panel. You can access this panel by double-clicking on the cabinet or by clicking the gear icon or by right-clicking and selecting "Properties…".

A & B: Control the two main microphones. If you click on IR, you can load an Impulse Response (IR) instead of using a microphone. When MIC is selected, you can choose a microphone from a list.

Invert: This button inverts the phase of the selected microphone. It can be used to create creative sounds, as 3D positioning will not lead to phase artifacts since all mic processing occurs in phase.

ON: Enables or disables the A/B Mic/IR output.

Level, Pan, and Angle: Allow you to adjust these parameters.

HPF & LPF: These are high-pass and low-pass filters with characteristic frequencies of 65 Hz and 12 kHz, respectively. They can be used to filter out excessive low or high frequency harmonics from the cabinet sound.

ReSPiRe: Stands for Real Sound Pressure Response, a proprietary Overloud technology that simulates the sensation of sound pressure experienced when playing in front of a real cabinet. You might want to turn this off if your mix sounds too muddy.

Remastered: Selects between the original and a remastered cabinet, which offers increased presence and clarity. This option only works if the Remastered Cab setting in the Master Controls is set to "AS IN CABINET". Otherwise, the Master setting takes precedence.

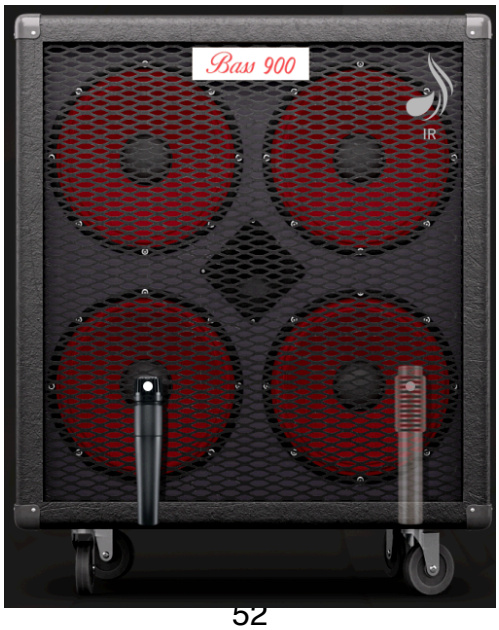
Ambience: Chooses the type of ambience supported. Ambience is relevant when microphones are positioned at a distance from the cabinet, as they capture more of the surrounding sound.

Rear and 45°: These are two additional microphones you can blend with the main two. The rear microphone captures lower frequencies, while the 45° inclined microphone is often used for its aggressive response, especially in hard rock and metal genres.

Master: Provides a global output level control for the Cabinet Properties.

Bass Cabinets

All bass cabinets in THU feature red speakers. The 45° inclined microphone on bass cabinets corresponds to the tweeter microphone level. While the

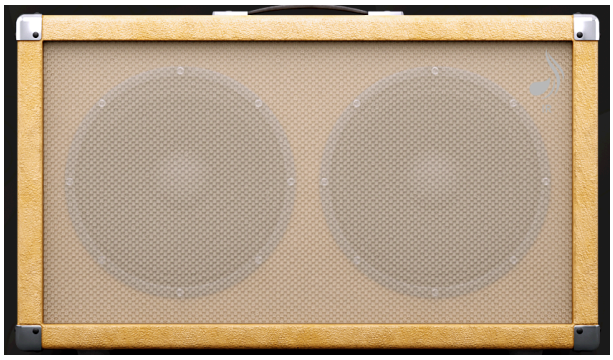


DSP model is specifically designed for bass cabinets, the operational procedures are the same as for other cabinets.

Cabinet IR

A special type of cabinet in THU is the Cabinet IR, which functions as an "open cabinet" capable of loading and playing up to two impulse responses simultaneously.

This cabinet features a distinct graphical appearance and lacks microphones because the tone is derived directly from the IR files provided.



Basic operations, such as turning the cabinet on or off, are similar to those for other cabinets. However, there are notable differences in the properties.

To access the Cabinet IR properties panel, double-click on the Cabinet IR. The properties panel for the Cabinet IR is significantly different from that of standard cabinets.

Importing IRs

IRs are loaded from the file system. THU points to a root directory that contains all available IRs. You can browse this directory from the properties panel and load an IR by double-clicking it.

To reveal the IR root directory, select IR and open the drop down panel by clicking the current mic or IR name, then click "Manage IRs…" in the list header. You can copy your own IR files into this directory to make them available for use with Cabinet IR.

THU accepts WAV files of any resolution (24-bit or 32-bit floating point is recommended) and sample rate. The Cabinet IR module is mono, meaning it only accepts mono IR files (as each cabinet speaker is mono by definition).

Current creations of IR cabinet files, are WAV files. TIR (.tir) files are also supported for backward compatibility.

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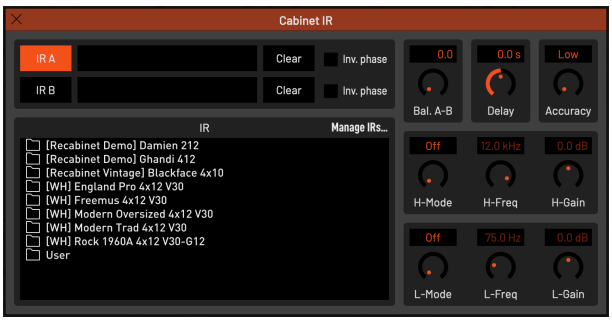
Using the IRs



Click the IR A button to select the first IR. Then, browse the IR list below and double-click the IR file to load it.

You can do the same for IR B.

Clear: Empties the corresponding IR slot.

Invert Phase: Optionally inverts each IR, useful for preventing phase artifacts when IRs come from different sources.

Balance A-B: Adjusts the mix between IR A and IR B.

Delay: Sets a delay between the two IRs to simulate different distances of virtual microphones from the speakers, introducing comb-filtering.

Accuracy: Sets the overall accuracy of the IR in the lowest frequencies (below 80 Hz). Typically, Low (L) is good for CPU overhead, but for a more faithful bass response, choose Mid (M) or High (H).

H-Mode: Adjusts the high-frequency filter mode. Options include Off, H-Cut, and H-Shelf.

H-Freq: Adjusts the frequency of the high-frequency filter.

H-Gain: Adjusts the gain of the high-frequency filter.

L-Mode: Adjusts the low-frequency filter mode. Options include Off, L-Cut, and L-Shelf.

L-Freq: Adjusts the frequency of the low-frequency filter.

L-Gain: Adjusts the gain of the low-frequency filter.

SUPERCABINET

Introducing a groundbreaking new addition to the Cabinet model category: the SuperCabinet.

The SuperCabinet significantly expands on the Cabinet IR concept by providing access to a diverse range of popular and highly sought-after cabinet impulse responses (IRs) captured by expert sound engineers. With the SuperCabinet, you can blend up to four separate IRs simultaneously or process three distinct IRs, each targeting a specific frequency range.

Once you've achieved your ideal cabinet sound, you can export the processed sound as a WAV file. This WAV file can then be used with your preferred software applications, such as THU or IR loaders, or with IR-based hardware digital amplifiers.

Inserting the SuperCabinet

Adding the SuperCabinet to your setup is similar to inserting any other THU model: simply select the SuperCabinet component from the Model list and drag it into the Sound Chain view.

TIP: Another very convenient way to insert a SuperCabinet is to display the SuperCabinet list in the contents column. Each item in the list represents a specific capture of a cabinet. Dragging an item from the SuperCabinet list into the Sound Chain will insert

the SuperCabinet in the desired position with the corresponding capture already loaded and ready.

To access the SuperCabinet settings panel, double-click the SuperCabinet model.

The SuperCabinet properties panel has two modes: Standard and XOVER (see .

Standard Mode

This mode features four slots where you can load up to four IRs. The slots are displayed in the top left corner of the panel, with the current slot highlighted by a lighter grey background. Controls for selecting the IR for each slot are located to the right of the highlighted slot. By default, the SuperCabinet will start with an IR loaded in Slot 1.

In Standard Mode, you can adjust the selected IR using the following controls:

POWER: This control determines the overall impact of each IR on the final output sound.

PHASE: Inverts the phase of the IR.

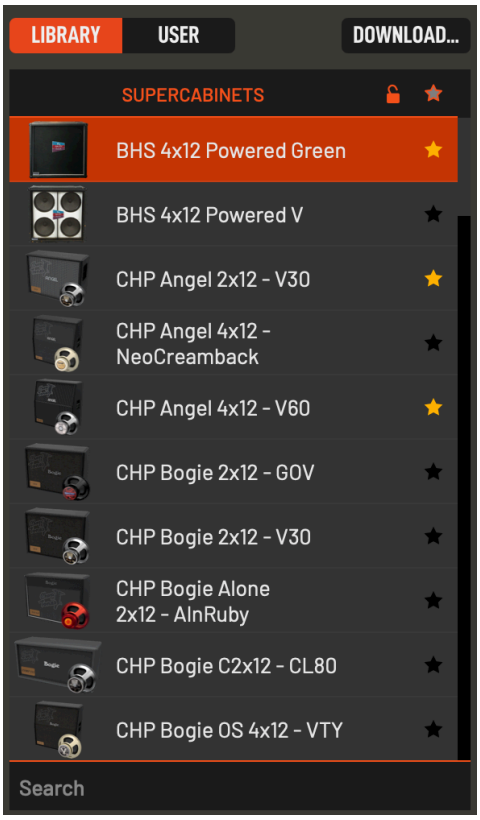
SOLO: Temporarily mutes all non-soloed IR slots, allowing you to listen only to the soloed IR slots. This can help assess the effect of the soloed IR on the overall sound. SOLO can be applied to a single IR slot or multiple slots (using SHIFT-click).

REMOVE: Clears the selected slot.

Experiment with these settings to fine-tune your cabinet sound and achieve the perfect tone for your needs.

Next, you will find the **VOLUME** control, which lets you to adjust the volume of the IR slot.

The IR that can be loaded into each slot of the SuperCabinet can either reside in one of TH-U's libraries or be a user IR stored in the system. The two buttons **LIBRARY** and **USER** allow you to choose the source for the IR for the slot (USER is explained later).



The SuperCabinet list allows you to quickly load a new library with just a double-click. The list displays all installed libraries, highlighting the authorized and favorite ones, and allows you to apply filters by clicking the icons in the list header.

There is also a search field where you can type names or parts of them to further filter the content of the list.

Now that we discussed the IR slot controls, we will consider the various controls on the right side, where you will discover the more interesting and powerful controls of the settings panel.

The default installation of THU comes with three, free **OVL Factory Libraries**.

SOURCE indicates the name of the IR file loaded into the slot. The specific loaded file depends on the settings of the parameters in the lower part of the panel.

Library Options

Each library was captured using one or more of the following: MIC PREAMP, POWER AMP, or SPEAKER. The drop-down list displays the current selection and any available options to choose from.

Next is the MICROPHONE. You can easily change the mic model used in the current slot. The makes and models of microphones vary depending on the specific library.

POSITION allows you to adjust the microphone's position using one of two methods:

- Select from the available microphone positions in the drop-down list.
- Click on one of the positions shown on the speaker image.

Available positions are:

- CAP
- CAP EDGE
- CONE
- CONE EDGE

Most libraries allow changes to the mic orientation between ON AXIS and OFF AXIS:

- ON AXIS: The microphone is positioned directly in front of the speaker cabinet.
- OFF AXIS: The microphone is rotated 45 degrees relative to the front of the speaker cabinet.

To the left of the orientation selector, the microphone's acoustic pattern is displayed. The current pattern shown is CARDIOID. The three microphone acoustic patterns available are:


•CARDIOID:


•OMNIDIRECTIONAL:


•FIGURE-8:

To the right of the speaker image is the DISTANCE selector. The effect of the DISTANCE selector depends on how the IR library developer positioned the microphone during the capturing process. Available options are:

- CLOSE
- NEARBY
- FAR

Additional Controls

Located in the bottom right-hand corner of the IR Library properties pane are six additional controls:

PAN: Adjusts the stereo position of the slot IR signal.

Z-CURVE: This parameter adjusts the electrical coupling between the amplifier and the speaker. Each speaker has its own impedance curve, which affects the timbre depending on the power amplifier circuit and its saturation level. Since the IRs in the SuperCabinet are captured with a neutral power amp setting, you can use the Z-CURVE knob to tweak the impedance curve effect on the tone. You can adjust the curve for each IR individually or link the settings for all IRs by clicking the link button. With multiple IRs loaded, this is like having different speakers in a cabinet with the amplifier loaded with an average impedance curve. The parameter also works for custom IRs without impedance curve information; the SuperCabinet analyzes their frequency response to determine the natural resonance placement.

HPF (High Pass Filter): Attenuates low-frequency harmonics.

LPF (Low Pass Filter): Attenuates high-frequency harmonics.

DELAY: Introduces a delay for this IR, useful for correcting phase issues.

STEREO: Adds a delay between the left and right channels, widening the overall stereo image.

LIBRARY / USER IR selector

In addition to using IRs from specific libraries, the SuperCabinet model also supports 3rd party IRs, such as those from OwnHammer, Redwirez, Celestion, and others.

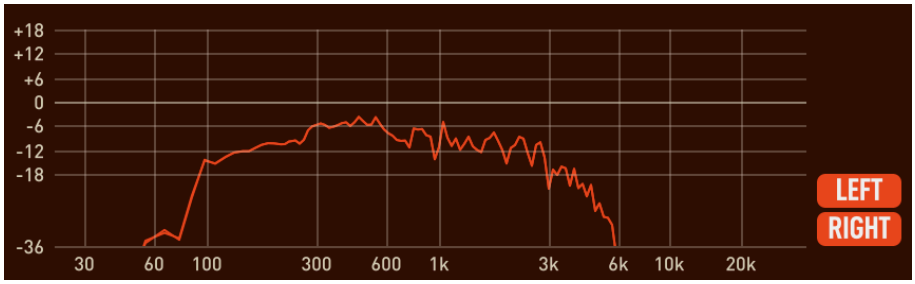
You can use both library and 3rd party IRs simultaneously, enhancing the flexibility and usability of the SuperCabinet. Besides the controls for selecting IRs from a library, all other IR controls are also available for 3rd party IRs.

By selecting the USER button, the IR library panel switches to a file browser. Here, you can navigate through your folders and load your own WAV files. The location of the IR folder is the same as the folder location used by the existing Cabinet IR model, making it easy to access these IRs.

Clicking Manage IRs… will open a system file browser window pointing to the current IR folder. As with the Cabinet IR model, 3rd party IRs can be conveniently organized within the file system, allowing you to manage and arrange them to better meet your needs and preferences.

Graphic Display

Regardless of the mode, the resulting IR is always displayed on the graphic interface. This frequency graph helps in adjusting the VOLUME and PAN parameters to keep the various frequency curves within specific dB/Freq ranges. You can choose which curves to display (or both) using the LEFT and RIGHT buttons. When you hover over these buttons, the corresponding curve is highlighted in white.



The graphic display is useful for fine-tuning levels and panning to maintain curves within the desired dB/Freq ranges.

Next to the frequency graph, there is a two-band parametric EQ that allows further adjustment of the IR's harmonic content. The EQ controls include POWER, GAIN1/2, FREQ1/2, and Q1/2.

The global LEVEL control adjusts the overall IR level. To manage level adjustments more conveniently, especially when adding or removing IRs or changing IR volumes, you can activate the AUTO option. This feature automatically adjusts the resulting IR level based on the current position of the LEVEL knob.

Below the LEVEL control is the EXPORT button. One of the standout features of the SuperCabinet component is the ability to export the resulting IR to a WAV file once you've achieved the desired cabinet sound. This exported WAV file can then be used with your preferred software or with an IR-based hardware digital amplifier.

NOTE: If you are evaluating a library that is currently in use, the EXPORT function will be unavailable.

XOVER Mode

The SuperCabinet operates in two modes: STANDARD and XOVER. In STANDARD mode, you can blend up to four IRs together, much like mixing. In XOVER mode, three separate IRs are processed, each focusing on a specific frequency range. Once you master XOVER mode, you'll wonder how you ever worked without it!

To activate XOVER mode, click the XOVER button. In this mode, three separate IRs are processed, each focusing on a specific frequency range. The LO, MID, and HI IRs are distributed across the frequency spectrum.

Within the frequency graph, two vertical white lines allow you to adjust the frequency crossover points. Simply drag these lines to set the desired crossover frequencies.

Unlike STANDARD mode, where IRs are blended together, XOVER mode's primary purpose is to combine the outputs of the three IRs, each dedicated to a specific frequency band, into a single new IR.

For instance, in XOVER mode, you might have one IR handling low frequencies, another for mid frequencies, and a third for high frequencies. This setup combines the outputs of these IRs into a unified IR.

Additionally, you can enhance the stereo image by adjusting the STEREO control to the right, but this will only affect the low and mid-frequency IRs. This adjustment widens the stereo image while maintaining high-frequency definition and brightness, thus creating a more pronounced stereo effect "out front."XOVER mode

RACK EFFECT

In the Models list, unfold an effects category and scroll until you find a Rack Effect you like. Drag the Rack Effect icon into the Sound Chain to the desired position.

Rack effects are typically placed after the cabinet in the signal chain. The effect you’ve just added is a spring reverb.

In a typical setup, you might need multiple rack effects. THU organizes them in stacks of up to three, keeping the signal chain concise while still allowing you to view and adjust all models.

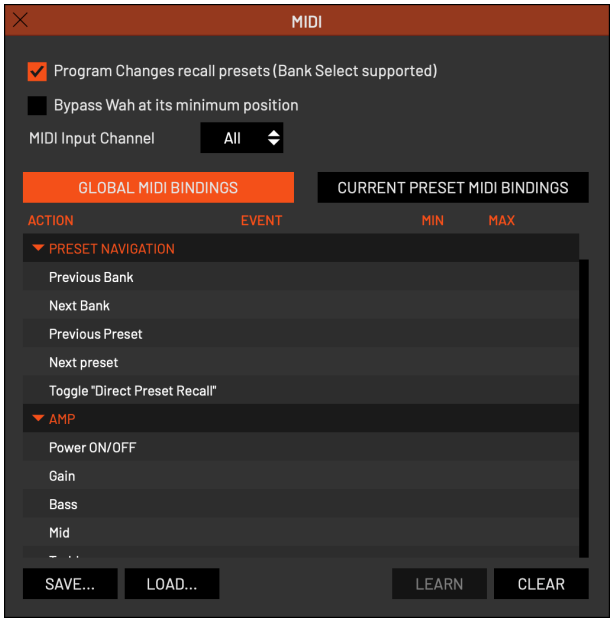
Almost all rack effects have an OVER indicator that lights up when the effect's output level is too high. If this happens, adjust the Level knob until the OVER light turns off.

CUSTOMIZING THU

MIDI

THU offers a straightforward MIDI implementation, allowing you to easily connect virtually any type of remote MIDI controller, whether it's a keyboard, a tabletop controller, or a foot controller.

All MIDI settings are managed in the MIDI Preferences panel, which can be accessed selecting MIDI from the THU menu on the right side of the toolbar.



Program Changes

Program Changes manage how presets are recalled within the current bank. If enabled, each Program Change (PC) event immediately recalls the corresponding preset in the current bank. If disabled, and you still need to change presets, you can bind MIDI events to the Previous/Next preset loading operations as described below.

Bank Changes

In addition to supporting standard MIDI bank change messages, THU allows you to link MIDI events to Previous/Next bank loading, as described below.

Bypass Wah at Minimum Position

When enabled, this option automatically turns off the Wah effect when the Wah expression pedal reaches its minimum position (fully up).

MIDI Input Channel (THU Standalone)

This setting allows you to select the MIDI input channel. The default setting is All.

MIDI Bindings for Current Preset

This feature provides a dynamic list of MIDI bindings. You can bind a parameter of a THU model by right-clicking that parameter in the Sound Chain view and selecting LEARN MIDI FOR CURRENT PRESET. These bindings are specific to the current preset, allowing for different binding configurations for each preset.

Global MIDI Bindings

Global MIDI Bindings are retained across preset changes. Each entry in the GLOBAL MIDI BINDINGS list represents a connection between a MIDI Trigger Point (e.g., a stomp switch on a foot controller) and a THU parameter.

To create a new global binding, select the desired row and click LEARN, then activate the MIDI trigger on the external device. To remove an existing binding, select the desired row and click CLEAR.

You can also set a new binding by right-clicking a control in the Sound Chain view (e.g. a power switch). A popup menu will appear with two commands related to MIDI bindings: Learn Global MIDI and Learn MIDI for Current Preset.

The Global MIDI option sets a new global MIDI binding in the GLOBAL MIDI BINDINGS list. This command will not be available if you select a control that is not included in the GLOBAL MIDI BINDINGS list.

> TIP: GLOBAL VS PRESET MIDI BINDINGS
> When you have both a global binding and a preset binding assigned to the same control, the preset binding will take precedence over the global binding. Think of global bindings as setting the standard behavior, while preset bindings serve as exceptions or specific adjustments for individual presets.

The preset-related command will add a new item to the top of the CURRENT PRESET MIDI BINDINGS list. After installing THU, you'll find that some MIDI bindings are pre-configured and ready to use. Here is the predefined binding list:

Preset Navigation

- CC 7: Output Level
- CC 11: Volume Pedal
- CC 16: Go To Previous Preset
- CC 17: Go To Next Preset
- CC 18: Go To Previous Bank
- CC 19: Go To Next Bank
- CC 20: Load Scene A
- CC 21: Load Scene B
- CC 22: Load Scene C
- CC 23: Load Scene D
- PC 7: Toggle Direct Preset Recall

FX On/Off

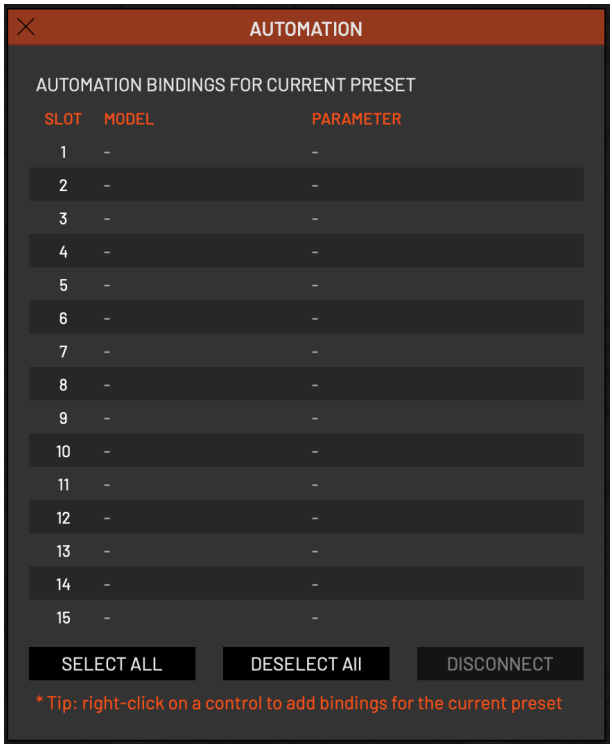
- CC 33: Amp On/Off
- CC 34: Distortion On/Off
- CC 35: Overdrive On/Off
- CC 36: Chorus On/Off
- CC 37: Delay On/Off
- CC 38: Wah On/Off
- CC 39: Reverb On/Off
- CC 40: Flanger On/Off

Looper Control

- CC 48: Open Looper
- CC 49: Track 1 Start
- CC 50: Track 2 Start
- CC 51: Track 1 Stop
- CC 52: Track 2 Stop
- CC 53: Start/Stop
- CC 54: Track 1 Undo
- CC 55: Track 2 Undo
- CC 56: Track 1 Clear
- CC 57: Track 2 Clear
- CC 58: Clear All

AUTOMATION

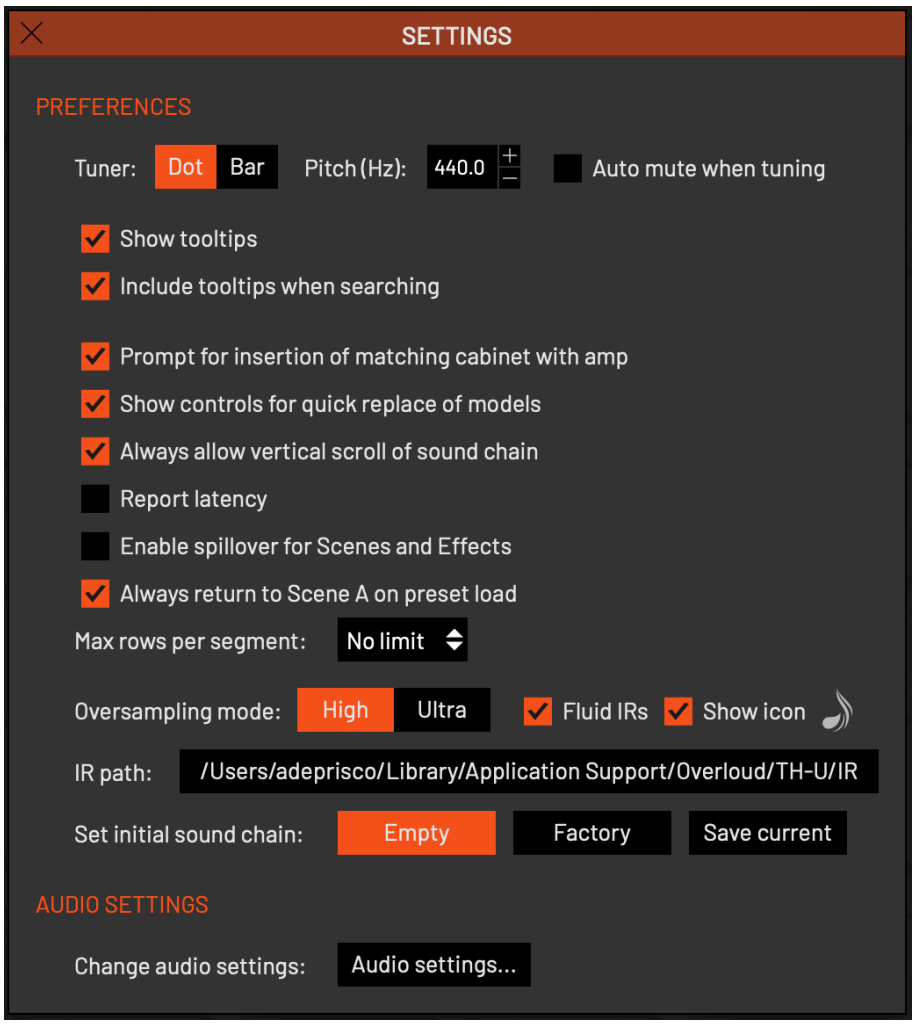
THU provides automation for a range of parameters, similar to MIDI global bindings. Automated parameters are automatically linked to controls within the current sound chain. For instance, the automation parameter named Amp Gain will be associated with the Gain control of the first amplifier in your setup, if an amp is present. Changes in the DAW's automation value for this parameter will adjust the Gain control on the amplifier, and vice versa.



This automation binding applies to the main parameters of all effect categories. Associations are updated instantly when the sound chain changes, such as when a new preset is loaded.

Additionally, THU features 15 automation slots that can be manually assigned to any control in your chain, similar to MIDI preset bindings. To bind a control to an automation slot, right-click the desired control—such as a knob—and select the automation slot from the menu that appears.

These slots are labeled as Slot ## (with ## representing a number from 1 to 15) and their assignments are saved with each preset. To review the automation slots for the current preset, click the AUTO button at the top of the THU window.



SETTINGS

Tuner: Choose between DOT or BAR to determine how the tuner displays the detected pitch on its scale.

Pitch: Adjusts the reference pitch for the Tuner, specifically the pitch of the A4 note. Default value is 440.

Auto Mute When Tuning: Enables or disables the automatic MUTE function that follows the power of the Tuner.

Show Tooltips: When enabled, brief descriptions will appear when the mouse cursor hovers over elements in the user interface.

Include Tooltips When Searching: THU models display additional information in tooltips (hovering over a model in the list will show the tooltip),

such as the name of the original instrument that the model replicates. If you want the search field below the model list to also search within these tooltip texts, enable this option.

Prompt for Insertion of Matching Cabinet with Amp: When enabled, THU will prompt you to add a matching cabinet each time you add an amp to the sound chain.

Show Controls for Quick Replace of Models: If enabled, two arrows will appear when the cursor hovers over a component, allowing you to quickly replace it with another model from the same category.

Always Allow Vertical Scroll of Sound Chain: When enabled, you can scroll vertically through the sound chain even if the viewport is taller than the chain. If disabled, the sound chain will be centered vertically in the viewport.

Report Latency: Enables THU to report its latency to the DAW. This setting does not affect the stand-alone application. THU may introduce a 4-sample latency with Ultra Oversampling mode enabled. If your DAW has issues handling latency information, you may need to disable this option for compatibility.

Enable Spillover for Scenes and Effects: When enabled, effects with tails (such as reverbs) will continue to emit sound until they fade out after being turned off or when changing scenes. If disabled, effects will bypass instantly when turned off.

Always Return to Scene A on Preset Load: When enabled, loading a preset will automatically jump to Scene A within that preset. If disabled, the current scene selection will be preserved if the new preset also has a scene saved in the same position. Otherwise, it will default to Scene A.

Oversampling Mode: Oversampling helps reduce aliasing and increases processing accuracy. The “High” setting reduces aliasing to an inaudible level for guitars without overloading the processor, while “Ultra” is intended for more demanding situations, such as processing synths or other instruments that generate more aliasing.

Fluid IRs: Fluid IRs are enhanced impulse responses that capture more detail than standard IRs, including dynamic response and harmonics. They provide a more balanced, realistic tone with a controlled low end. Starting

from THU 1.4.26, all cabinets and SuperCabinet libraries have been updated

to Fluid IRs and are available as a free update.

Show Icon: Optionally hide the Fluid IR logos displayed throughout the user interface that indicate the current state of the Fluid IR setting.

IR Path: Specifies the folder on disk where User IRs can be selected and loaded into Cabinets.

Set Initial Sound Chain: Selects the default sound chain for new instances of the plug-in. Options include:

- **Empty**: Starts with no effects loaded.
- **Factory**: Starts with a basic Amp + Cab setup.
- **Save Current**: Saves the current sound chain for use as the default. The button will change to Custom. To change the stored Custom initial sound chain, prepare the new chain, select Empty or Factory, and then click Save Current again.

AUDIO SETTINGS

This section allows you to configure the audio settings for THU when running it as a standalone application:

Output: Select your output audio interface.

Input: Select your input audio interface.

Active Output Channels: Choose the output channels you wish to use.

Active Input Channels: Choose the input channels you wish to use.

Sample Rate: Set the sample rate for your audio interface. Many audio interfaces support various sample rates, with the default typically being 44.1 kHz or 48 kHz.

Audio Buffer Size: This setting is influenced by your computer's configuration and the audio device used. A buffer size of 256 samples is usually a good starting point, but you may be able to lower it to 128 or even 64 samples if your hardware supports it. Be cautious, as too low a buffer size

can negatively impact performance, causing issues like clicking or crackling, known as buffer dropouts.

Active MIDI Inputs: Select the physical or virtual MIDI inputs you wish to use for remote control of THU. THU listens to MIDI input on all channels of the selected ports, simplifying control.

THU MODEL LIST

The complete list of models available in THU is continually evolving as we regularly add new models and updates. Due to this ongoing process of expansion and enhancement, maintaining an up-to-date list within the manual itself would be challenging, as the list could become outdated almost immediately following the release of the document.

Instead of providing a static list that may quickly become obsolete, we offer a more dynamic solution. We have created an online resource where you can access the most current and comprehensive list of THU models. This webpage is continuously updated to reflect the latest additions and changes to our product lineup.

To ensure you always have access to the most recent information about all available models in THU, please visit the following link to the THU online page. This resource will provide you with the complete and most up-to-date list, ensuring you stay informed about the full range of options available for your THU experience.

www.overloud.com/thu

TECHNICAL SUPPORT

If you require technical support, we encourage you to first explore our comprehensive FAQ pages available online at www.overloud.com/faq. These pages are designed to address a wide range of frequently asked questions and provide solutions to common issues you may encounter. By reviewing these resources, you might find the answers you need to resolve your problem quickly and efficiently.

However, if you find that the FAQ pages do not fully address your specific concerns or if you need further assistance, you can still access additional support. We offer free technical support online, which you can access by visiting www.overloud.com/contacts/support. There, you will be able to submit a support request and get in touch with our dedicated team of experts who are ready to help you with more complex or unique technical issues.

By utilizing both our FAQ resources and our dedicated technical support service, you can ensure that you receive the help you need to fully resolve any challenges you may be facing with our products.