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# **\_RHEA**

User manual

EN

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Thank You for the purchase of **\_RHEA**

**Stereo Vari-mu Tube Compressor with digital recall**

With kind regards

Radoslaw Wesolowski and Michal Weglicki

# Stereo Vari-mu Tube Compressor with Digital Recall

As digital footprints become integral to the modern era, the demand for analog warmth has surged like never before. The rich, musical compression of the vari-mu design is hard to surpass. Enter the ng500 series' latest addition, \_RHEA—a true embodiment of where the modern age converges with vintage elegance.

\_RHEA is a fully analog, stereo vari-mu tube compressor with the convenience of digital recall.





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# 1 Overview

\_RHEA is a fully analog unit with digital control, ensuring that all audio processing is handled exclusively through analog components. The digital aspect of the device is dedicated to configuring settings, enabling features like digital recall and remote control.

## 2 Main Features

\_RHEA offers a sophisticated blend of analog audio excellence with digital precision, designed for professionals seeking uncompromising sound quality and versatile control:

- **100% Analog with +24dBu Headroom:** Provides pure analog signal processing with high headroom, ensuring clear, undistorted audio.
- **Stereo Tube “Vari-Mu” Compressor:** Delivers warm, smooth compression using variable gain tubes, ideal for vocals and mix processing.
- **High Voltage Tube Operation:** Operates at 160V for optimal performance, offering more headroom and reduced noise.
- **CARNHILL Transformers:** Adds analog warmth and saturation, enhancing the sonic character.
- **Input/Output Level Control:** Allows precise adjustment of signal levels for tailored sound shaping.
- **Mix Knob for Parallel Compression:** Enables blending of compressed and uncompressed signals for dynamic control.
- **THD with Two Modes:** Offers selectable harmonic distortion (Medium & High) to add richness to the sound.
- **Side Chain Filters:** Provides three high pass filters (60, 90, 150 Hz) for controlling compression response to low frequencies.
- **500 Series and ng500 Compatibility:** Fits standard 500 series racks and ng500 systems, including \_TITAN.
- **Total Recall and Plugin Control:** Saves and recalls settings via DAW integration for consistent session management.
- **Analog Automation in DAW:** Automates parameters like Threshold, Mix, and Make Up directly from your DAW.
- **Digitally Controlled, Isolated Analog Circuit:** Combines digital control with a pure analog signal path for optimal sound quality.
- **Digital Recall via USB or \_TITAN:** Quick recall of settings through front panel USB or within \_TITAN chassis.
- **Touch-Sensitive Encoders:** Four encoders offer responsive control for real-time parameter adjustments.

- **True Bypass:** Completely removes the unit from the signal chain when not in use, preserving signal integrity.
- **Accurate Analog GR Meter:** Displays real-time gain reduction, with matching plugin simulation for consistency.

## 3 Hardware

This chapter will go through all analog features and explain all hardware aspects of \_RHEA.

### 3.1 Specification

<b>Frequency response</b>	10Hz-150kHz (-3dB)
<b>THD+N &lt; 0.03% (1kHz, 0dBu)</b>	No compression
<b>THD+N &gt;= 1%</b>	At maximum compression level
<b>Input Impedance</b>	20kohm
<b>Output Impedance</b>	< 100ohm
<b>Max Signal Level</b>	+24dBu
<b>Crosstalk</b>	< -80dB
<b>THD (MID switch)</b>	1%
<b>THD (HIGH switch)</b>	3%
<b>Attack</b>	0.5, 1.3, 10, 30, 50 (ms)
<b>Release</b>	0.1, 0.3, 0.6, 0.9, 1.8, 3.6 (s)
<b>SC Filter</b>	60, 90, 150 Hz
<b>Power Consumption</b>	190mA per rail
<b>Dimensions</b>	76x133x158mm
<b>Box Dimensions</b>	105x162,234mm
<b>Unit Weight</b>	0.95 kg
<b>Box Weight</b>	1,2 kg
<b>Warranty</b>	2 years

The unit must warm up for approximately 5 minutes before use. Tubes need this time to reach their optimal operating temperature, which ensures consistent performance and sound quality.

## 3.2 Installation and Compatibility

WesAudio \_RHEA equalizer module is intended for installation in:

- An **API™ 500 Series** compatible rack
- \_TITAN or any other **ng500** compatible chassis,

WesAudio's \_RHEA module isn't standalone; it needs power from the rack system to function.

When unpacking, check for any damage caused during shipping. If there's a problem, contact your dealer immediately!

### **Module installation walkthrough:**

Select the slot in the rack for the module and insert it, aligning the edge connector with the rack's matching connector. Gently slide the module into place until it is securely seated. Secure the front panel to the rack using screws provided by the rack manufacturer for stability. Be careful not to overtighten to avoid damaging the threads. Power it up, perform a quick test to ensure everything's functional, and most importantly, enjoy!

**!Ensure the rack is powered down completely to avoid potential module damage!**



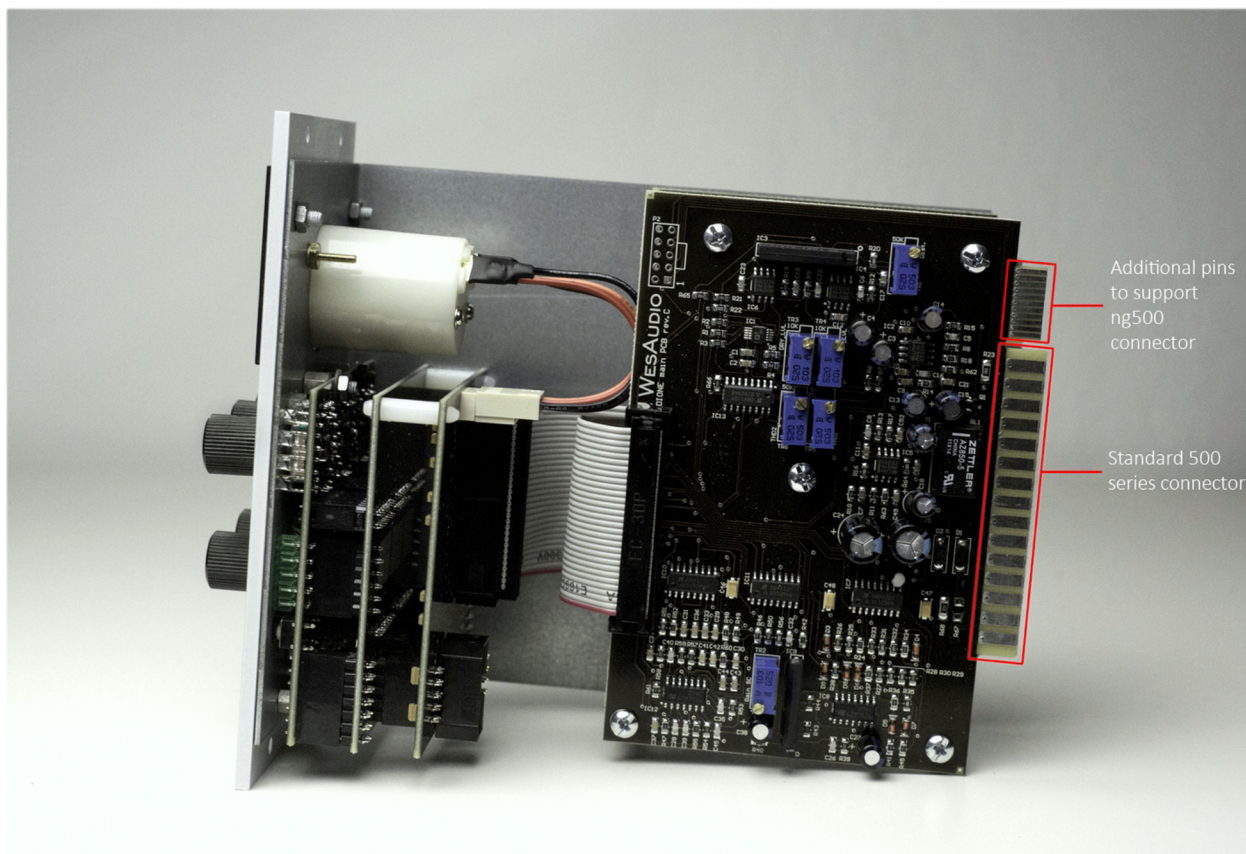
**Danger**  
High voltage

### **WARNING: HIGH VOLTAGE!**

**DO NOT TOUCH** any internal components when the chassis is powered on.

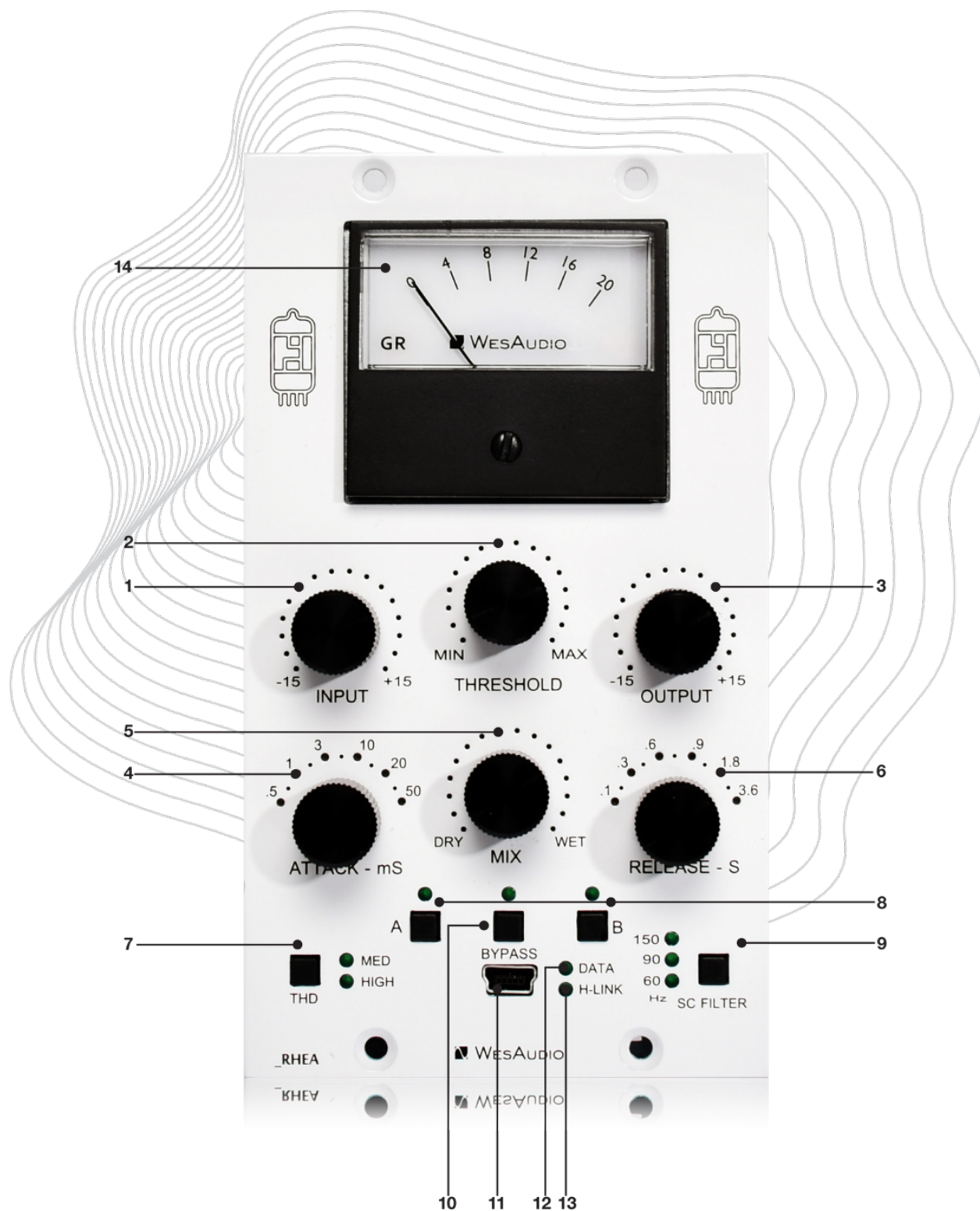
**500 series compatibility note:**

Each WesAudio device within the ng500 (Next Generation 500 series) lineup comes with a unique connector. This specialized connector serves as an extension to the standard 500 series, enabling your device to be controlled and recalled using the specialized GCon protocol. For instance, this connector allows compatibility with the \_Titan 500 series 10-slot frame.



This extension is designed to work with the standardized plug type in the 500 series. Yet, some manufacturers use large screws on the plug, hindering device compatibility. Research indicates that over 90% of 500 series racks are compatible. For more information, please visit: <https://wesaudio.com/ng500/>.

### 3.3 Front Panel and Main Functions





- 1) **INPUT** – Adjusts the input signal level, with a range from -15dB to +15dB.
- 2) **THRESHOLD** – Sets the threshold level where the compressor begins to act. The threshold is fully adjustable.
- 3) **OUTPUT** – Adjusts the output signal level, with a range from -15dB to +15dB.
- 4) **ATTACK** – Controls the speed of the compressor's response to incoming signals, with six selectable attack times: 0.5, 1, 3, 10, 20, and 50 milliseconds.
- 5) **MIX** - Mixes wet and dry signals for parallel compression.
- 6) **RELEASE** – The release time can be switched between 0.1, 0.3, 0.6.
- 7) **THD** – Controls the harmonic distortion applied to the wet signal, with two selectable modes: MED (1% THD) and HIGH (2.5% THD).
- 8) **A/B** – Two memory slots that allow you to compare different compressor settings.
- 9) **SC FILTER** - This button selects between three side-chain high-pass filter frequencies (60Hz, 90Hz, 150Hz).
- 10) **BYPASS** – Bypass Switch.
- 11) **USB socket** – Module control USB port.
- 12) **DATA LED** – Indicates that data is being transmitted from the DAW to the device.
- 13) **H-LINK LED** – Shows the status of the connection between the host and the module.
- 14) **GR METER** – Analogue GR meter indicating current gain reduction.

## 4 Analog Processing

\_RHEA is true stereo compressor – that means that detector circuits of each channel are working on a summed signal in the side chain circuit. This makes it impossible to work in dual mono mode – we can't process two independent tracks on each channel simultaneously – like kick and snare for example. However, it is entirely possible to work with only one mono channel at a time.

This Chapter in depth describes the analog nature of \_RHEA.

### 4.1 Sound

Vari-mu style compression offers a very natural and musical sound. This characteristic often tempts users to apply high levels of gain reduction, which is perfectly fine. However, there's a tradeoff to consider: pushing the compressor too hard can lead to tube overload, especially with highly dynamic content, resulting in audible distortion. While this effect can be desirable for certain material, like drums with high peaks and fast transients, it may not suit other sources. It's important to note that this distortion occurs with very aggressive settings and is due to the behavior of the tubes, not the unit's headroom. Be mindful of this when applying extreme compression.

### 4.2 THUMP?

"Thump" or "thumping" in vari-mu compressors is a distinctive effect that occurs when side-chain control voltage leaks into the audio signal, typically due to a slight imbalance in the tubes. This can introduce additional low-end artifacts to the processed signal, which might be desirable in certain situations as it enhances the low-frequency content. However, for quieter or more delicate material, this effect can become noticeable and potentially unwanted. Although all our tubes undergo thorough pairing and parameter checks, minor differences can still result in this effect. In such cases, we recommend increasing the input signal and experimenting with the attack and release settings to manage the thumping effect.

### 4.3 INPUT, OUTPUT and THRESHOLD?

\_RHEA offers control over three key parameters: the input level (Input), the amount of compression applied (Threshold), and the final output level (Output). This setup provides excellent flexibility in shaping the source material. The Threshold control can be subtle in effect, but if more compression is needed, the Input knob can be adjusted to achieve this. Additionally, all of these parameters are automatable, allowing you to make dynamic changes throughout different sections of a song.

## 4.4 THD – Total harmonic distortion

The THD switch activates a proprietary circuit that overloads the output stage of the compressor. This circuit is a common feature in many of our units, and it adds a unique presence to the source material that is difficult to achieve through other methods.

## 4.5 Saturation mode

Release 12.2 introduces a new analog feature that transforms \_RHEA into a saturation box. This mode allows you to soften the compression (\*), or entirely disable it (\*\*), and implement different gain staging to use the tube stage as a saturation circuit. When this mode is activated, the DRIVE control adjusts the INPUT and OUTPUT potentiometers to achieve the saturation effect while maintaining as close to unity gain as possible. The TRIM knob compensates for any clipping loss.

When saturation mode is active, the following changes occur on the hardware front panel:

1. **INPUT knob** becomes the **DRIVE knob**.
2. **THRESHOLD knob** is inactive.
3. **OUTPUT knob** becomes the **TRIM knob**.
4. **ATTACK** and **RELEASE knobs** are inactive, and a LED pattern will appear on their LED rings.
5. **SC Filter** becomes inactive.

### Notes on Analog Board Revisions:

- (\*) **Analog Board REV E:** In this revision of the \_RHEA main board, compression is softened, and the gain staging is pushed forward to produce the desired amount of saturation. Please note that some compression artifacts may still be audible, as compression is not entirely disabled.
- (\*\*) **Analog Board REV F:** This revision of the \_RHEA main board disables compression entirely and pushes the gain staging forward when saturation mode is active. The effect is highly dependent on the input signal level—the higher the input signal, the more pronounced the saturation effect.

### How to Engage Saturation Mode:

Saturation mode can be enabled or disabled either from the GUI (via a dedicated button) or directly from the front panel:

- **To enable saturation mode:** Press and hold the SC Filter button for 2 seconds.
- **To disable saturation mode:** Simply press the SC Filter button once.

**Gain Staging:**

The saturation effect in saturation mode is highly dependent on the input signal level. A higher input signal level makes it easier to achieve an audible saturation effect. Without proper gain staging, the saturation effect can be very subtle. However, the signal always passes through the tubes, so listen carefully to detect the nuances!

## 5 Software Setup

The WesAudio software package is accessible for download to all purchasers of the corresponding hardware unit at <https://www.wesaudio.com/download>.

<https://www.wesaudio.com/download>



*For information on supported plugin types and platforms, please refer to the provided link.*

### 5.1 Installation Process

To initiate the installation of the WesAudio software package, navigate to <http://www.wesaudio.com/download> and download the latest version of the software.

#### 5.1.1 For Windows Users

- **Initial Installation:** Before beginning the installation, ensure that all WesAudio devices are disconnected from your computer.
- **USB Driver Installation:** Upon installing the USB driver, a notification will prompt you to connect all WesAudio devices. Please connect the devices as instructed.
- **Computer Restart Request:** Installation of the USB driver may necessitate restarting your computer. Although restarting is generally inconvenient, it is a crucial step to ensure successful installation of the USB driver.
- **Post-Restart:** After restarting, the installer should automatically resume. If the installer does not restart on its own, please manually reopen the same installer to continue the process.

#### 5.1.2 For OSX Users

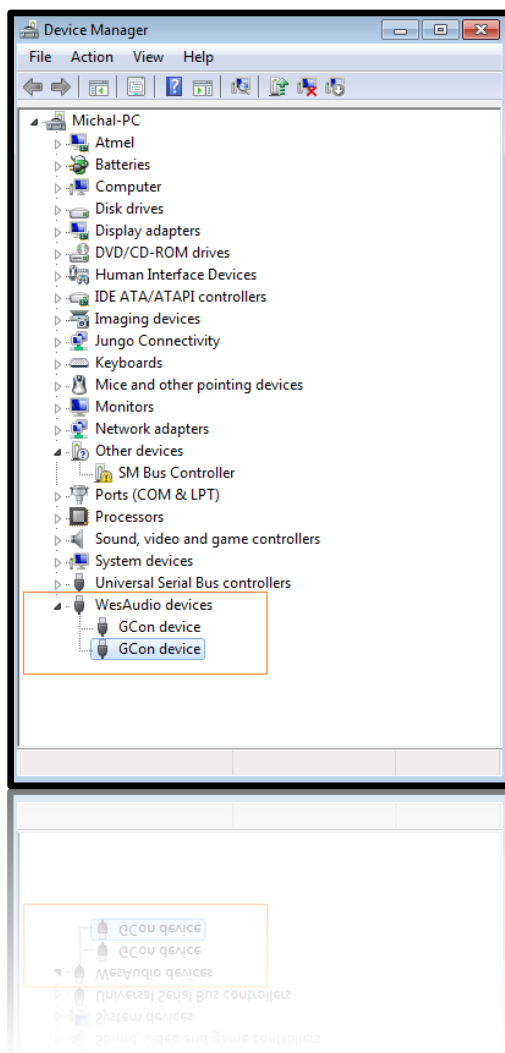
Due to the simpler nature of OSX architecture and its handling of USB devices, the primary consideration is to ensure all devices are connected before beginning the installation process. Once you initiate the installer application, you might encounter system warnings regarding the installer. In such cases, please disregard these warnings\*. If necessary, you can bypass these warnings by accessing the context menu through an 'Option' click (or right mouse click) and initiating the installation process again.

### 5.1.3 Troubleshooting

If you encounter any issues during the installation process, please reach out to our support team at [support@wesaudio.com](mailto:support@wesaudio.com), and we will respond promptly to assist you.

Below is a common issue along with suggestions that might help in diagnosing the problem:

- Issue: "Can't find my device in the plugin dropdown menu"
  - This problem can stem from multiple causes. On Windows, an important step is to verify that the USB device is successfully recognized at the system level. You can check this in the "Control Panel -> System -> Device Manager."
  - **Important for Windows Users:** Installing the USB driver is essential for the hardware units to communicate with the software. This step is mandatory only during the initial installation. The driver installation option will be automatically disabled for any subsequent software updates.



## 5.2 GCon Manager

The GConManager is a versatile application designed for configuration management across compatible devices. It is located within the Application folder data:

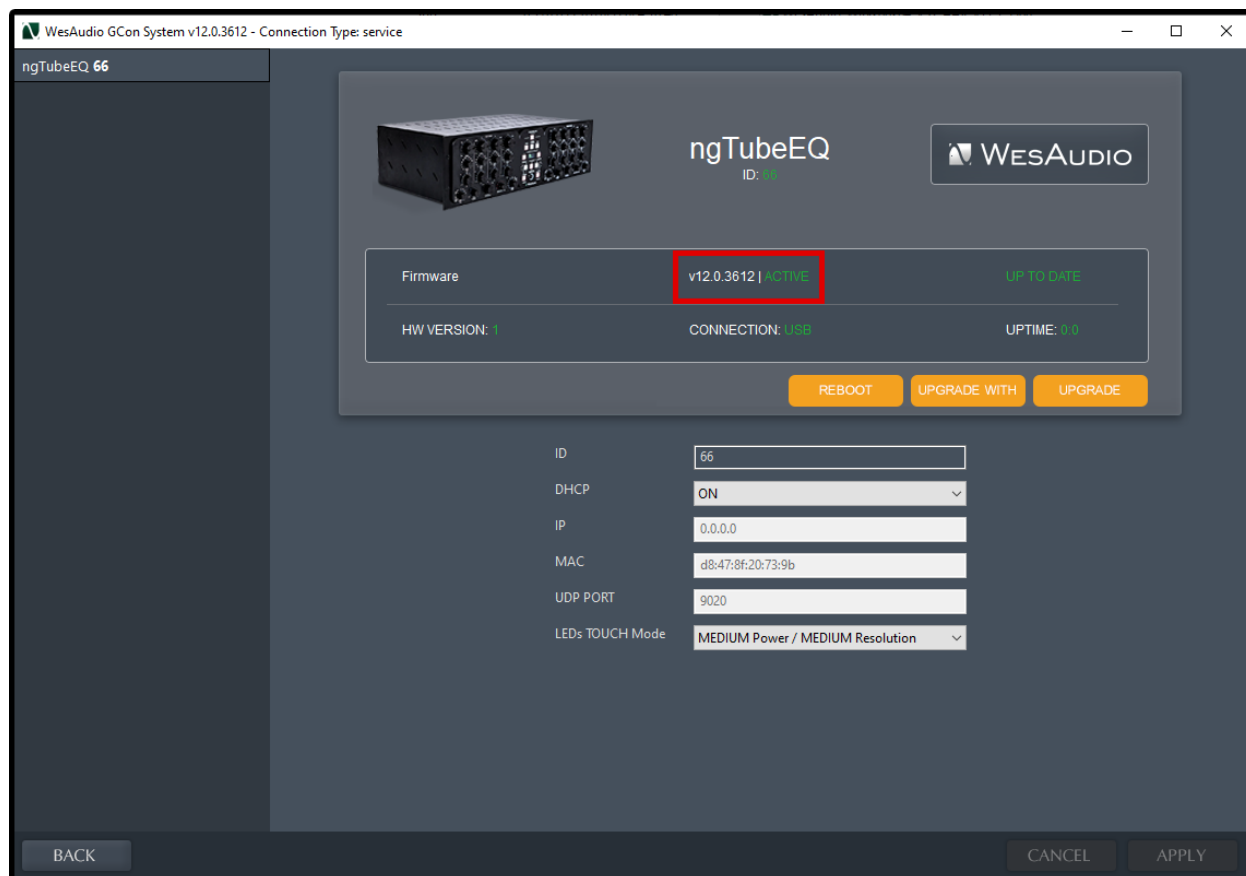
- **For OSX:** Access it at “/Applications/WesAudio/GConManager.”
- **For WINDOWS:** Find it in the folder chosen during the installation phase, typically “c:/Program Files x86/WesAudio/GConManager.exe” by default.

### Main Features:

- **Firmware Updates:** Easily upgrade your device's firmware to the latest version.
- **Configuration Settings:** Modify unit settings, such as IP address configuration, to suit your needs.
- **Diagnostics:** Run diagnostic tests to ensure your unit is functioning correctly.
- **External Controller Setup:** Configure external controllers, for instance, for the ngLeveler.
- **Standalone Operation:** Control units directly without the need for a DAW (Digital Audio Workstation).

## 5.3 How To Check Firmware Version

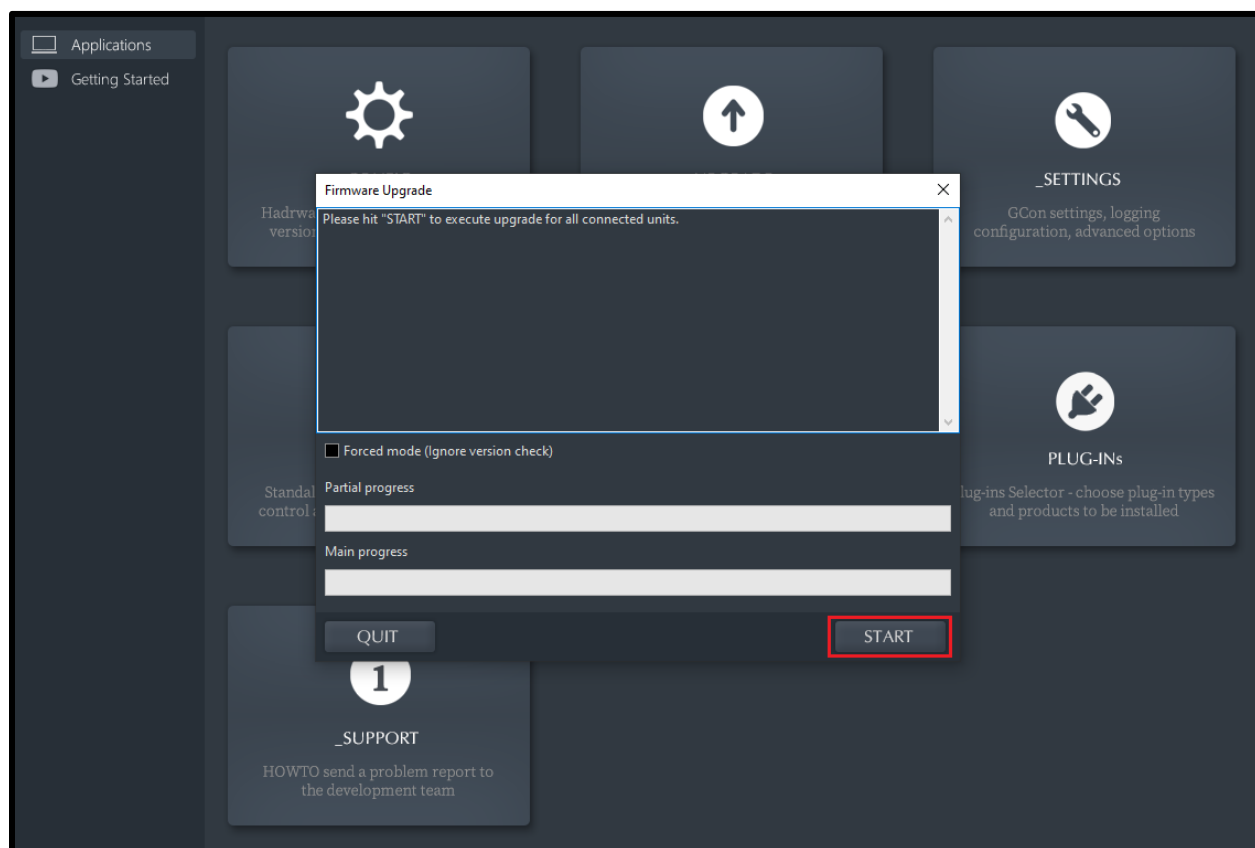
Each device communicates its firmware version to your workstation, establishing compatibility between your host application and the connected device. To verify the firmware version or perform an upgrade, please use the GConManager \_CONFIG application.





## 5.4 How To Perform Firmware Upgrade

To update the firmware, navigate to the GConManager UPGRADE section and press the “Start” button. This starts the update process for any modules that do not have the latest firmware version.



## 6 Digital Control / Recall

This chapter delves into the comprehensive options available for managing \_RHEA and automating its settings. The cornerstone of \_RHEA's automation capabilities is its integration with Digital Audio Workstations (DAW) through a plugin, which is available in all common formats. This seamless convergence between hardware and digital software opens a wide array of creative possibilities and enhances workflow efficiency.

### DAW Plugin Control:

DAW plugin control bridges the analog-digital divide, enabling users to manipulate hardware settings directly from their DAW. This fusion of the tactile and the virtual is not merely convenient but transformative, changing how producers and engineers interact with their gear.

### Benefits of DAW Plugin Control:

- **Precision and Recall:** The ability to precisely recall settings for sessions is invaluable, ensuring mixes can be revisited or altered without manually reconfiguring the hardware. This feature is crucial for those working on multiple projects or needing to maintain consistency across sessions.
- **Automation Capabilities:** Integration with the DAW allows for the automation of every \_RHEA parameter within the digital environment. This feature provides dynamic changes in settings over time, infusing tracks with movement and vitality without manual intervention.
- **Workflow Efficiency:** Manually adjusting settings on hardware units can be cumbersome, particularly in complex setups. DAW plugin control simplifies this process, facilitating quick changes and A/B comparisons without physical interaction with the unit, thereby streamlining the production process.
- **Enhanced Creative Potential:** Merging the analog warmth with digital control flexibility broadens the creative spectrum, enabling real-time experimentation and the achievement of effects that might be challenging or impractical to accomplish on the hardware alone.
- **Accessibility:** DAW plugin control ensures full accessibility and adjustability of \_RHEA features from the workstation, a boon for those with spatial constraints or other limitations preventing direct access to their hardware.

In essence, \_RHEA 's DAW plugin integration marries the rich, analog sound quality with the precision and versatility of digital control. This not only amplifies the functionality of \_RHEA but also elevates the music production process, offering unprecedented control and flexibility in a traditionally analog setup.

## 6.1 DAW Plug-in

The \_RHEA plug-in extends comprehensive control over all parameters of the unit, ensuring seamless integration into any digital audio workstation (DAW) environment. Designed to be versatile and accessible, it supports all common plug-in standards, including VST2, VST3, AU (Audio Units), and AAX, making it compatible with a wide range of software platforms.



## 6.1.1 \_RHEA - Plugin Structure

Analog Sound  
Digital Recall



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For detailed explanations of each control and its functionality, users are encouraged to consult the chapter titled "Front Panel Functions." This section provides comprehensive insights into how to interact with the \_RHEA, whether you're adjusting parameters on the physical unit or via the plug-in.

1. **Undo:** The Undo feature in the \_RHEA plug-in allows users to revert to the previous state before the most recent adjustment was made. This function is essential for quickly correcting mistakes or reassessing changes without permanent consequences to the settings.
2. **Redo:** Following an Undo action, the Redo function permits users to reapply the last change that was undone. This feature ensures that no adjustment is final until the user is satisfied, providing an additional layer of flexibility in tweaking the settings.
3. **Previous Preset:** Loads the previous preset from preset database.
4. **Next Preset:** Loads the next preset from preset database.
5. **Preset Name:** The name of the preset currently in use or being modified, which allows for easy recall or sharing of specific configurations.
6. **Preset Selector:** Allows for the selection, viewing, and deletion of presets.
7. **Preset Info:** Displays details of the currently loaded preset.
8. **Preset Save:** Saves currently selected presets.
9. **Preset Save As:** Facilitates saving current settings as a preset providing name and preset details.
10. **Menu:**
  - **Resize:** Adjusts the GUI size (75%/100%/125%/150%/175%/200%), catering to different screen sizes and user preferences.
  - **Reset Parameters to Default:** Resets all plugin parameters to their default states.
  - Shows currently installed plug-in version.
11. **Meter:** Displays the real-time level of the processed signal, providing visual feedback on the signal's amplitude.
12. **Gain Reduction Meter:** Shows the amount of gain reduction being applied to the signal, which is helpful for monitoring compression or limiting.
13. **Input:** Controls the input signal level before processing, allowing for adjustment to optimize signal strength before any dynamic effects are applied.
14. **Threshold:** Sets the level at which the compression or limiting effect kicks in, allowing fine control over dynamic range management.
15. **Output:** Adjusts the final signal level after all processing, ensuring the overall level is appropriate when reintroduced into the signal chain.
16. **Attack:** Defines how quickly the compressor or limiter responds to signals exceeding the threshold, affecting how tightly the effect grabs transients.
17. **Mix:** Balances between the wet (processed) and dry (unprocessed) signal, allowing for parallel compression or blending effects.
18. **Release:** Controls how fast the processor releases gain reduction once the input signal falls below the threshold, affecting the smoothness or punchiness of the compression.
19. **Bypass:** Allows to engage/disable bypass on the hardware unit.
20. **THD:** Toggles harmonic distortion levels OFF/MED/HIGH.
21. **Mode Selector:** Turn on or off Saturation.
22. **SC Filter:** Enables a filter on the sidechain input, allowing certain frequencies to be excluded from triggering the compression. Switches between OFF/60/90/150Hz.
23. **Toggle Connection Button:** This button toggles the connection status ON/OFF. It functions only when a connection ID has been selected using the "Select Connection Button."

24. **The Select Connection Button** within the \_RHEA plug-in serves as a gateway to establishing and managing connections with devices that support the GCon protocol. This feature simplifies the process of identifying and selecting the hardware unit to be controlled, providing a user-friendly interface for seamless integration between the plug-in and physical devices.

**Upon Initiating Connection, It Visualizes the Connection State as Follows:**

- **USB:** This label signifies a connection established through USB, offering a direct link between the hardware unit and the workstation.
  - **SLOT:** This label indicates that the unit is connected through a \_TITAN chassis.
  - **Connection ID:** The unique identifier for the connected hardware unit is displayed, allowing for easy recognition and management of multiple devices. Accompanying this ID, the connection status is visually indicated to inform the user of the current state:
    1. **ON:** A solid white font denotes a successful connection, indicating that communication between the plug-in and the hardware unit is active.
    2. **OFF:** A solid gray font signifies that the connection is not established, alerting the user to a disconnect or other issue preventing communication.
    3. **Connecting:** A gray italic font is used to represent the process of establishing a connection. If this state persists for an extended period (more than 5 seconds) without successful connection, it suggests a potential issue requiring troubleshooting or support consultation
25. **Copy:** Enables users to copy the current parameter state.
26. **Paste:** Enables users to paste the current parameter state, facilitating quick duplication of settings.
27. **Config Bank:** Selects between configuration banks, each containing three configurations. This feature supports automation for changing unit settings within a session or a song
28. **Fast Preset Change (A/B/C):** Quickly toggles between configs A/B/C without affecting connection-related parameters like the Connection ID.
29. **Resize:** Adjusts the display size or layout of the interface.

## 6.1.2 \_RHEA - Plugin Structure (Saturation Mode)

Analog Sound  
Digital Recall



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1. **Saturation Meter:** Displays the current level of saturation applied.
2. **Saturation Graph:** Displays the real-time visualization of the amount of saturation applied to the signal.
3. **Drive:** Adjusts the amount of saturation, increasing harmonic distortion as you turn it up.
4. **Mix:** Blends the processed (wet) signal with the original (dry) signal for parallel processing.
5. **Bypass:** Toggles the saturation effect on or off.
6. **Trim:** Adjusts the output level to maintain consistent volume after saturation.
7. **THD:** Selects the intensity of harmonic distortion, with options for medium, high, or off.
8. **Saturation Mode:** Toggles the saturation mode on or off.



## 7 Other Functions

### 7.1 Memories

In terms of parameter storage:

- The \_RHEA unit offers **TWO** distinct quick-access presets, selectable via the A/B buttons.
- In contrast, the \_RHEA plugin supports saving an **UNLIMITED** number of configurations. Each preset within the plugin provides three rapid configuration changes, labeled A/B/C per bank ID.

#### 7.1.1 Synchronization Upon Connection

When a new plugin instance is loaded into your DAW, it starts with default settings and no modified parameters. Upon establishing a connection to the hardware unit by setting the Connection ID, the plugin downloads the current parameter state from the hardware, including any available fast configuration presets. For example, if the connection between the \_RHEA plugin and the \_RHEA hardware is made while the plugin is in its default state, all parameter states, including A and B presets, will be downloaded to the plugin.

#### 7.1.2 Preset Banks Feature

The Preset Bank feature allows you to configure different parameter states and enables additional parameter configurations (A/B/C) for flexible use. Having multiple memory banks can be particularly beneficial when mixing multiple songs within the same session. The Memory Bank parameter can be automated in the DAW, helping to maintain different settings across various sections of a session or between different songs within a single session. This feature is especially useful during the mastering phase, where multiple songs are often processed in one session.



## 7.2 Metering

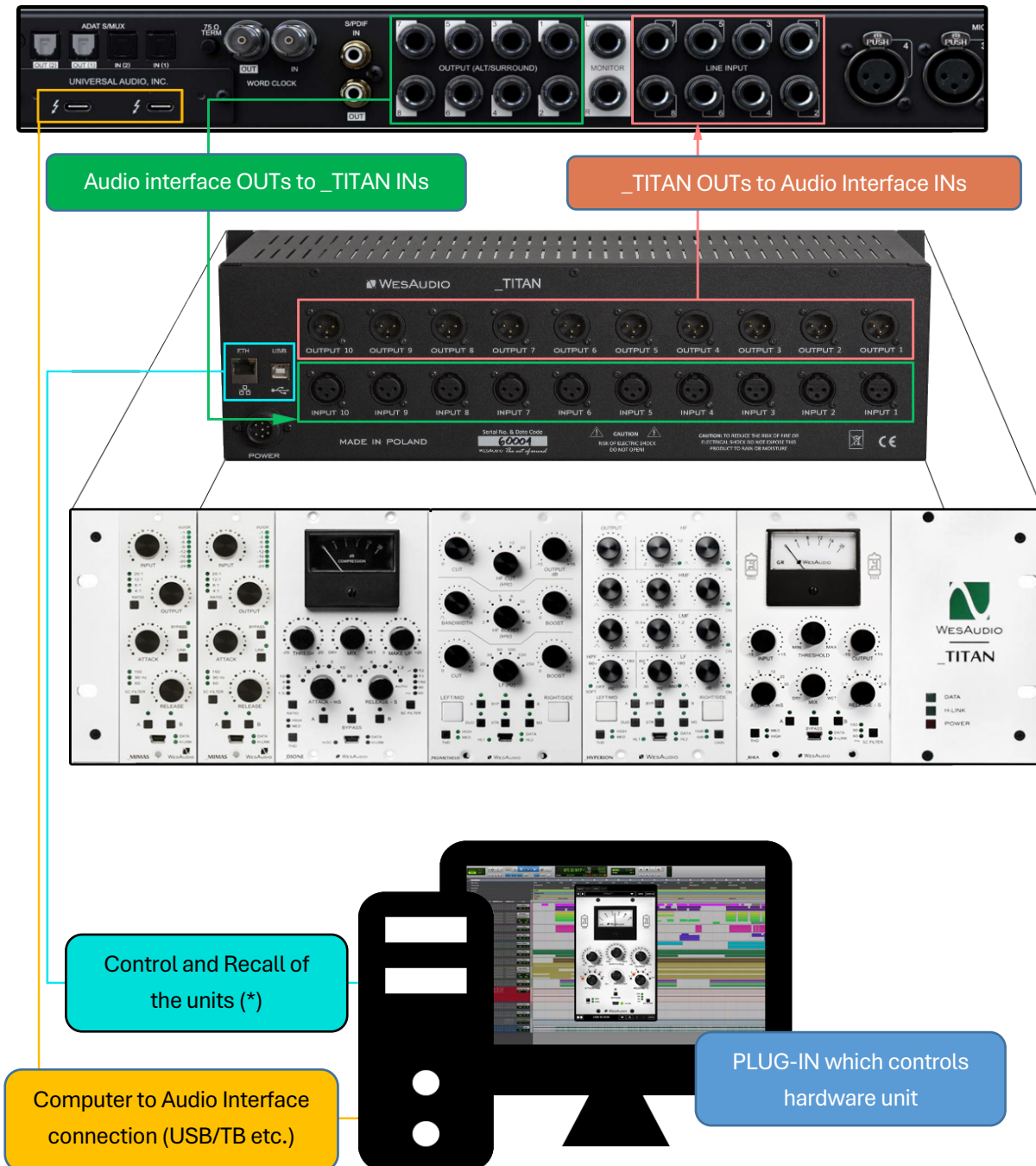
\_RHEA unit features an analog Gain Reduction (GR) meter that provides real-time visual feedback on the amount of compression being applied. This meter is essential for monitoring the dynamics of your signal, allowing you to see how much gain reduction is occurring as you adjust the compressor's settings. The meter is highly accurate, ensuring that you can make precise adjustments to achieve the desired compression effect. Additionally, the metering is also mirrored in the plugin interface, giving you consistent visual feedback whether working with the hardware or within your DAW.



## 8 Hookup diagrams

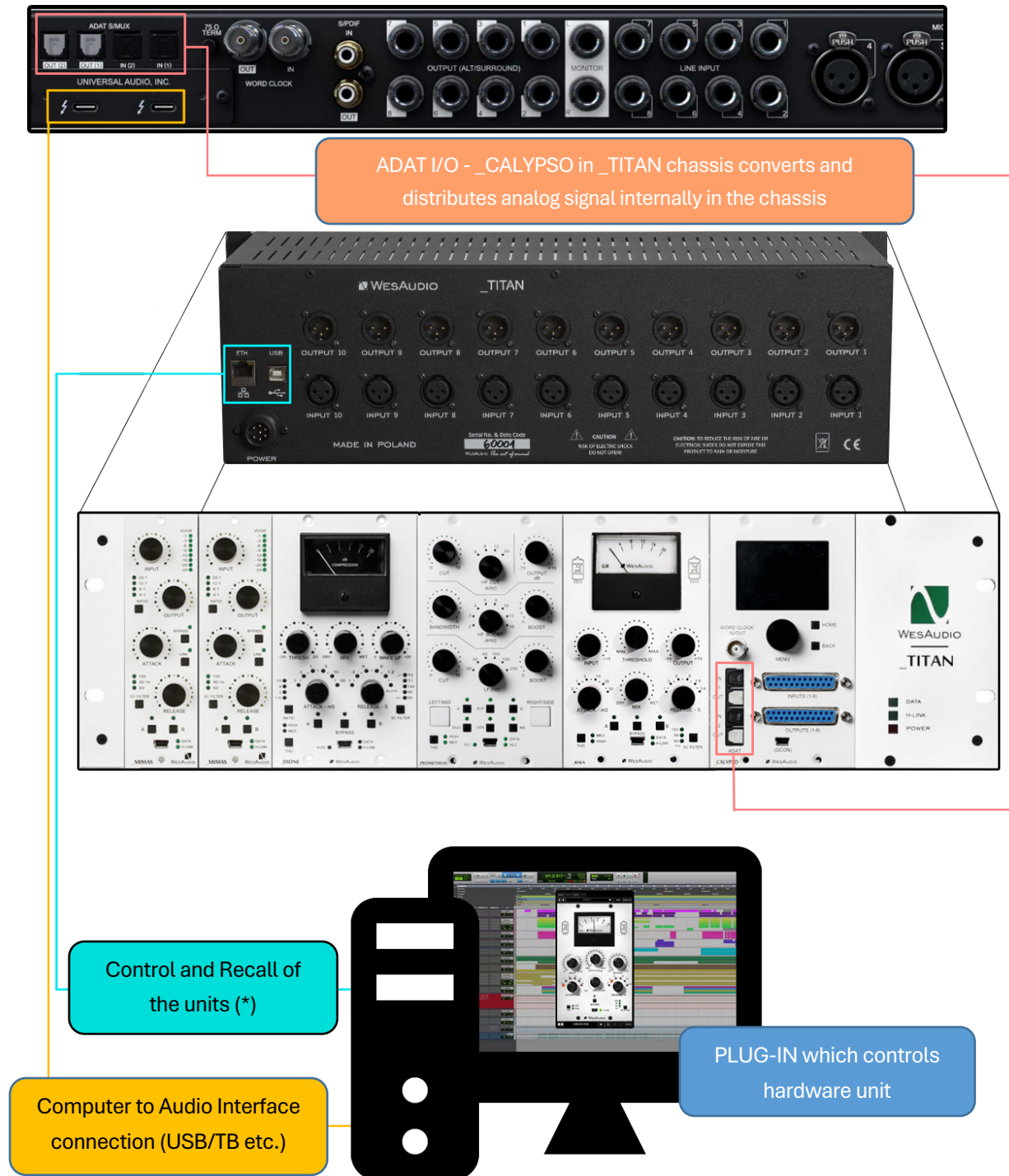
Below chapter shows possible hookup of the WesAudio devices and audio interface.

### 8.1 Hookup diagram – analog cables with \_TITAN



(\*) Please note that \_TITAN Ethernet connection doesn't require direct connection with the PC/MAC – You can also plug in the \_TITAN directly to the router and use your local network to access and control all units inside \_TITAN.

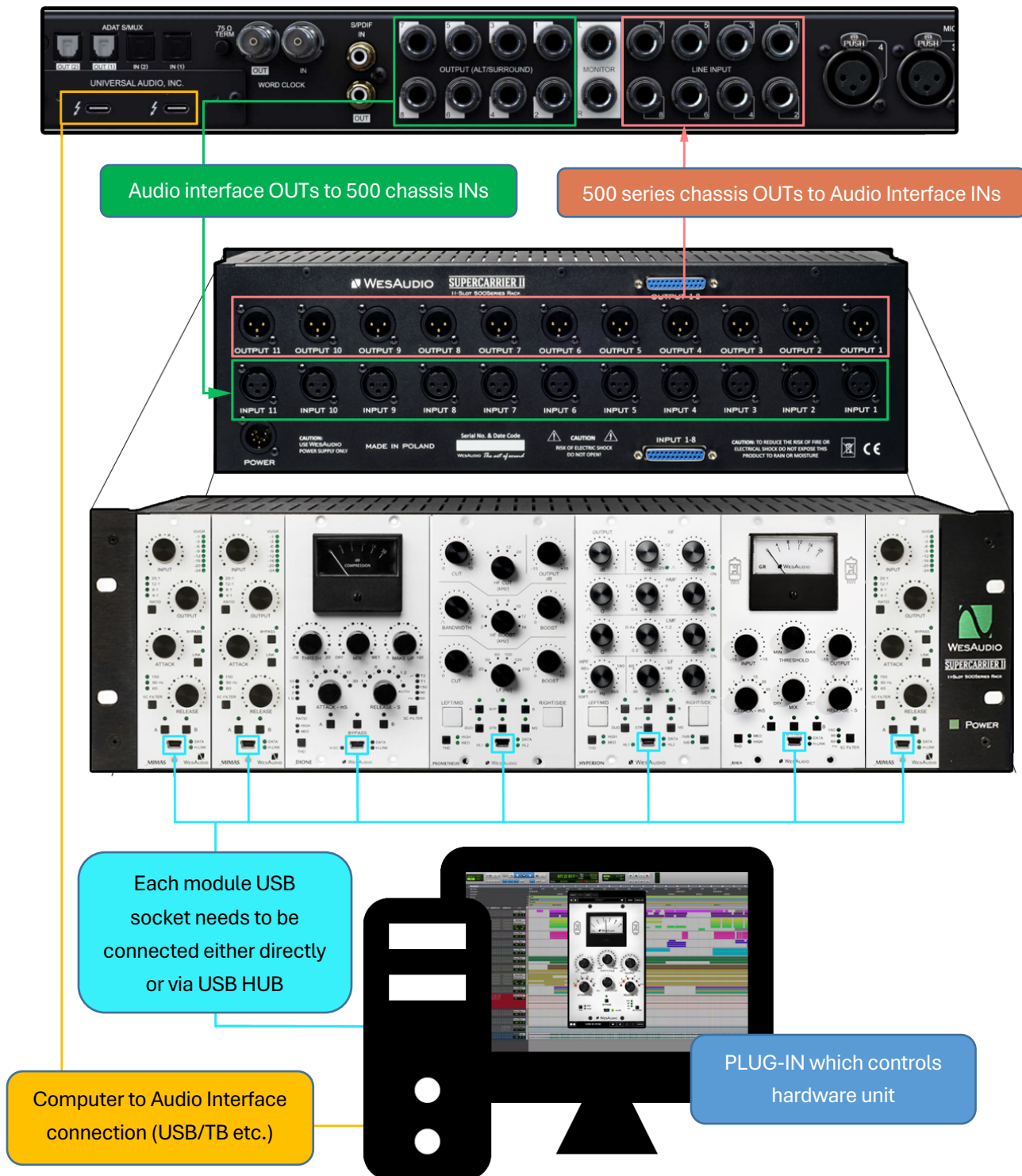
## 8.2 Hookup diagram - \_CALYPSO and \_TITAN



(\*) Please note that \_TITAN Ethernet connection doesn't require direct connection with the PC/MAC – You can also plug in the \_TITAN directly to the router and use your local network to access and control all units inside \_TITAN.



## 8.3 Hookup diagram – 500 Series Chassis



## 8.4 Other examples

Please note that all WesAudio units, despite their digital recall and control capabilities, remain fully analog and can be utilized at any stage of the production process, including recording and post-processing. For instance, like any other units, WesAudio modules can be seamlessly integrated during tracking.

## 9 Troubleshooting

If you encounter any of the following issues:

- No Sound Output or Signal Loss
- Unexpected Distortion
- Thumping or Low-End Artifacts
- Inconsistent Compression
- No Response to DAW Automation
- Excessive Heat

Please visit the WesAudio FAQ site <https://wesaudio.com/faq/> for detailed troubleshooting steps and solutions.

## 10 Abbreviations and terms

**GCon** is a high-speed communication protocol developed to enable complete management and recall of analog devices. It's important to note that GCon is solely focused on device control and management; it does not facilitate the transfer of audio signals. This protocol is instrumental in bridging the gap between analog warmth and digital convenience, allowing users to enjoy the best of both worlds without compromising on sound quality or control flexibility.

**NG500** represents the next generation in the 500 series format, offering advancements in technology and integration capabilities for audio processing hardware. This evolution maintains compatibility with existing standards while introducing improvements in power, connectivity, and digital control.

**The NG500 connector** is a specialized extension of the standard 500 series connector, incorporating additional pins to support enhanced features. These include digital control signals facilitated by the GCon protocol, power management improvements, and potentially other functionalities that exceed the capabilities of the traditional 500 series format. This connector ensures that NG500 series modules can leverage advanced digital control and management while maintaining the character and quality of analog audio processing.



## 11 Warranty

WesAudio is committed to delivering products of the highest quality, designed for durable and reliable performance over many years, assuming proper care, usage, transport, and storage. Our products come with a two-year warranty covering defects in parts and workmanship from the original date of purchase. This warranty is extendable to any future owner within the warranty period, ensuring uninterrupted coverage.

### **Warranty Coverage:**

- The warranty is valid for two years from the date of the original purchase.
- It is transferable to any subsequent owner within this period.

### **Exclusions:**

- The warranty does not cover normal wear and tear.
- It excludes damages due to misuse, negligence by the customer, accidental impacts, unauthorized modifications or repairs, cosmetic issues, and damages from shipping.

### **Warranty Service:**

- Should a product exhibit defect in parts or workmanship during the warranty period, WesAudio will, at its discretion, repair or replace the defective components at no charge, assuming the customer provides valid proof of purchase.
- The product must retain its original factory serial number to be eligible.
- Customers are responsible for shipping costs to WesAudio for warranty service. WesAudio will cover the return ground shipping costs.

This comprehensive warranty underscores our dedication to quality and customer satisfaction, ensuring your WesAudio products perform flawlessly for years to come.