

USER MANUAL

VLA-252A: Analog Modeling of the Langevin 252A Utilizing Wave Digital Filters

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Table of contents

1. Introduction	1
2. Installation and Setup.....	2
2.1 Python prototype.....	2
2.2 Supercollider.....	2
3. User interface.....	2
3.1 EQ sliders.....	2
3.2 Choose input file vs choose output file.....	2
3.3 Original vs resulting sound comparison.....	2
3.4 Process	2
3.5 Play.....	2
4. Configurations.....	3
4.1 Frequency bands.....	3
4.2 Loading and saving.....	3
4.3 Original vs resulting sound comparison.	3
5. Troubleshooting FAQ.....	3
6. Support and resources.....	4
6.1 Plugin developers.....	4
6.2 Online Forums and Communities:	4
7. Updates and version history.....	4
8. Legal and Licensing Information.....	5
8.1 Affero General Public License (AGPL)	5
8.2 Rights and Permissions.....	5
8.3 Source code availability	5
8.4 Warranty and Liability.....	5
9. Acknowledgments.....	6
10. Contact.....	6

1. Introduction

The VLA-252A is an EQ plugin that aims to simulate the characteristics of the Langevin 252A EQ using analog modeling techniques and wave digital filters. This plugin allows users to apply EQ adjustments to their audio signals to shape the sound according to their preferences.

The VLA-252A EQ plugin offers a range of features and controls that emulate the functionality of the original hardware unit. These features typically include:

Equalization Bands: The plugin provides multiple bands of equalization, allowing users to adjust specific frequency ranges of the audio signal. Each band typically includes controls for frequency, gain, and bandwidth (Q).

Analog Modeling: The VLA-252A plugin aims to recreate the sonic characteristics and response of the original Langevin 252A hardware EQ through analog modeling techniques and wave digital filters. This modeling approach aims to provide users with a vintage or classic EQ sound.

User Interface: The plugin typically features a graphical user interface (GUI) that displays the EQ bands, controls, and visual representations of the EQ adjustments being applied to the audio signal. The user interface allows for intuitive control and precise adjustments.

Presets and Automation: The VLA-252A EQ plugin often supports preset management, allowing users to save and recall their favorite EQ settings. Additionally, the plugin may support automation within a digital audio workstation (DAW), enabling users to automate EQ adjustments over time.

2. Installation and setup

To set up and install the Python prototype, please follow the instructions provided below:

1. Begin by downloading the source code from the designated GitHub repository.
2. Install all the necessary libraries by executing the following command in your terminal:

pip install -r requirements.txt.

This command will utilize the requirements.txt file to automatically install all the required libraries.

3. Once the installation process is complete, you are ready to run the code and start utilizing the prototype.

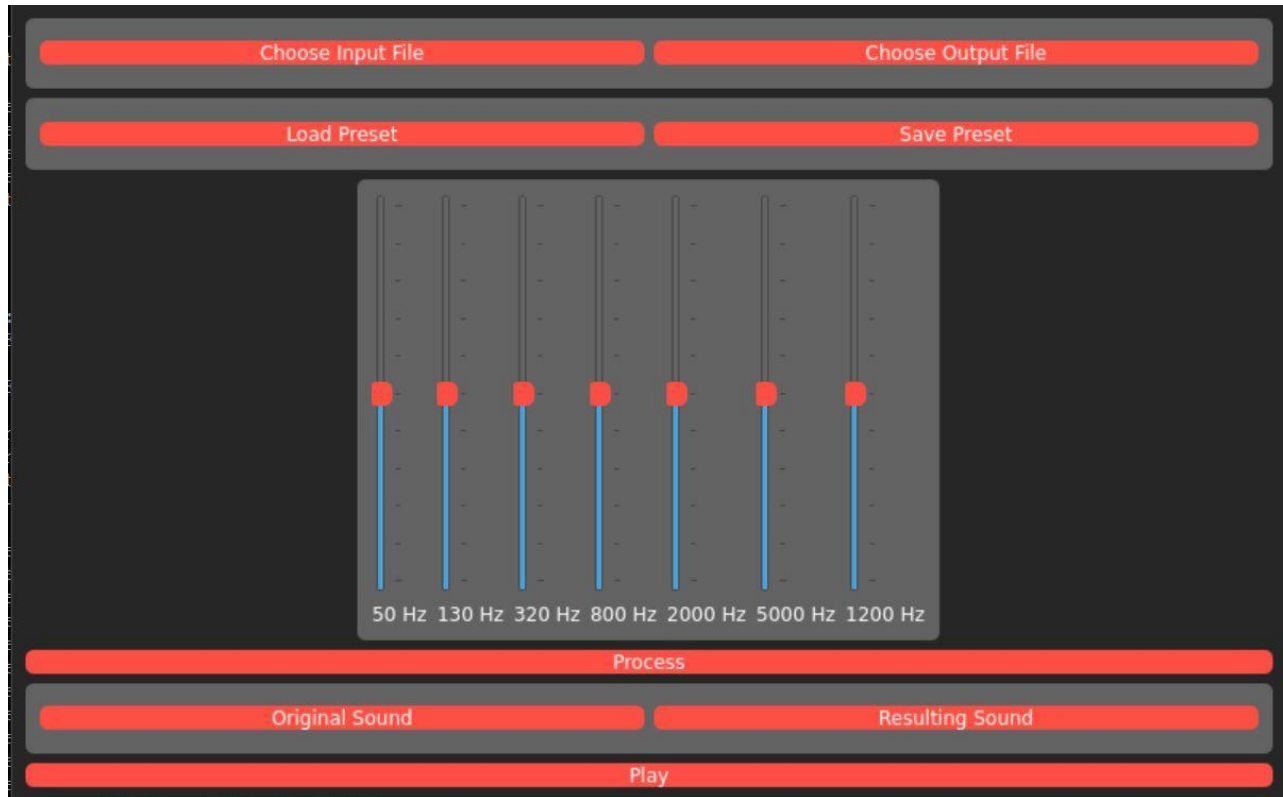
To set up and install the Supercollider (SC) plugin, please follow the instructions provided below:

1. Copy the folder named "Langevin252A" to the "Extension" folder of your SuperCollider installation on your computer.
2. To find the location of the extension folder, open SuperCollider and evaluate the following line of code: Platform.userExtensionDir.
3. Inside the extension folder, you will find the plugin file, an audio file for the tutorial, and a tutorial named "langevinTest".

4. For the final part of the tutorial (VarGui), you need to install the "MiSCellaneous" library from the Quarks system.

3. User interface

The VLA-252A EQ plugin offers a user-friendly interface designed to provide intuitive control over the EQ adjustments. Here is an overview of the various elements and controls available in the plugin:



3.1 EQ Sliders: The plugin features seven sliders, each representing a specific frequency band of the Langevin EQ: 50Hz, 130Hz, 320Hz, 800Hz, 2000Hz, 5000Hz, and 12500Hz. These sliders allow users to boost or cut the selected frequency range by up to 12dB or -12dB, with precision increments of 1dB.

3.2 Choose input file and choose output file: The plugin includes a dedicated button for loading audio files into the plugin's processing buffer. This allows users to work with their desired audio material. Additionally, there is a choose output file button that enables users to save the processed audio output for future use or reference.

3.3 Original sound / Resulting sound: The original and resulting sound buttons facilitate quick and easy comparison between the original sound loaded and the processed.

3.4 Process: This function button triggers the processing of the audio signal with the configured EQ settings. Clicking this button applies the EQ adjustments to the input signal, allowing users to hear the modified output.

3.5 Play: This button allows the user to play the sound without saving it.

The VLA-252A EQ plugin's interface is designed to streamline the EQ adjustment process, providing users with a comprehensive set of controls to shape the audio according to their preferences. Familiarity with these interface elements will enable users to efficiently utilize the plugin's capabilities and achieve their desired sonic results.

4. Configurations:

The VLA-252A EQ plugin offers users a range of settings, options, and customization features to tailor the EQ adjustments according to their preferences. Here is a step-by-step guide on accessing and modifying the configuration settings:

4.1 Frequency Bands:

The plugin provides seven EQ sliders, each representing a specific frequency band: 50Hz, 130Hz, 320Hz, 800Hz, 2000Hz, 5000Hz, and 12500Hz.

Users can adjust the sliders to boost or cut the corresponding frequency range.

The available range for boosting or cutting is up to 12dB or -12dB in 1dB increments.

Experiment with different settings to find the desired tonal balance and sonic enhancement.

4.2 Loading and Saving:

To load an audio file into the plugin for processing, locate and click the "Load" button within the plugin's interface.

A file browser will appear, allowing users to select the desired audio file to be loaded into the plugin's processing buffer.

To save the processed audio with the applied EQ adjustments, locate and click the "Save" button. This will prompt a file-saving dialog where users can choose the desired file name and location for saving the processed audio.

4.3 Original vs resulting sound comparison:

Users can set up one configuration on the A setting and another on the B setting, allowing for seamless switching between the original sound and the resulting sound configurations.

This feature helps users evaluate and compare different EQ settings to choose the one that best suits their needs.

By leveraging the available settings, options, and customization features of the VLA-252A EQ plugin, users can finely adjust and tailor the EQ parameters to suit their specific audio requirements. Experimentation and careful listening will allow users to achieve optimal results and effectively enhance the sound according to their preferences.

5. Troubleshooting / FAQ

For common questions and problems related to the VLA-252A EQ plugin, please refer to the following troubleshooting and frequently asked questions:

Q: The plugin is not loading in my DAW. What could be the issue?

A: Ensure the plugin is installed correctly and compatible with your operating system and DAW version. Restart your DAW and check if the plugin is recognized. If the issue persists, consult the plugin's documentation, or contact the plugin's developer for further assistance.

Q: How do I activate or authorize the VLA-252A plugin?

A: The activation or authorization process can vary depending on the specific plugin and its developer. Generally, you might need to enter a license key or activate the plugin online. Refer to the plugin's documentation or the developer's website for detailed instructions on how to activate the VLA-252A EQ plugin.

Q: I'm experiencing audio glitches or latency when using the plugin. How can I resolve this?

A: Ensure that your computer meets the minimum system requirements for running the plugin. Adjust the buffer size in your DAW's settings to minimize latency issues. If the problem persists, try disabling any unnecessary plugins or processes running in the background. Updating your audio drivers or using a lower-latency audio interface may also help improve performance.

Q: Are there any specific recommendations for using the VLA-252A plugin?

A: Experiment with different EQ settings and parameters to achieve the desired tonal balance and sound enhancement. It can be helpful to start with subtle adjustments and gradually increase the effect to avoid excessive processing. Refer to the plugin's manual or explore online tutorials for additional guidance and tips on effectively utilizing the VLA-252A EQ plugin.

6.Support and resources:

We understand that users may have questions or require additional assistance while using the VLA-252A EQ plugin. Here are some options for seeking support and accessing additional resources:

6.1 Plugin Developer:

If users encounter technical issues or have specific inquiries about the plugin, they can reach out to the plugin developer directly.

Contact information for the developer, such as an email address can be found at the end of this manual.

Users can send a detailed description of the issue or question to the provided contact and expect a response from the developer's support team.

6.2 Online Forums and Communities:

Participating in online forums and communities related to audio production or plugin usage can be an excellent way to seek support and connect with fellow users.

Websites and platforms such as Gearsplatz, KVR Audio, or Reddit's audio production subreddits often host dedicated threads or sections where users can discuss plugin-related topics, share experiences, and ask questions.

Users can search for relevant discussions or create their own posts to seek assistance from the community.

7. Updates and Version History:

The VLA-252A EQ plugin is currently in its initial release version. As the first version of the plugin, there have been no updates or previous versions available. However, it is important to keep an eye on future updates to ensure you have the latest features, improvements, and bug fixes.

As the plugin developer continues to refine and enhance the VLA-252A EQ plugin, it is possible that updates and new versions will be released in the future. These updates may bring additional features, performance optimizations, compatibility improvements, and other enhancements to enrich the user experience.

To stay informed about updates and version history, we recommend staying up with the developer's GitHub. The developer provides a dedicated section on their GitHub to inform users about the latest updates, version history, and any associated release notes.

By actively staying informed about updates and version history, you can ensure that you have the most recent version of the VLA-252A EQ plugin, benefiting from any improvements and new features that may be introduced in the future.

8. Legal and Licensing Information:

The VLA-252A EQ plugin is currently released under the Affero General Public License (AGPL).

Here is some important legal and licensing information regarding the plugin:

8.1 Affero General Public License (AGPL):

The AGPL is a free software license that ensures users have the freedom to use, modify, and distribute the VLA-252A EQ plugin.

This license emphasizes the importance of providing access to the source code of the plugin, even when it is used over a network or in a web-based environment.

The AGPL ensures that users can enjoy the benefits of the plugin while maintaining transparency and promoting the collaborative nature of open-source software.

8.2 Rights and Permissions:

Under the AGPL, users are granted the right to use, copy, modify, and distribute the VLA-252A EQ plugin, both in its original form and in modified versions.

Users are encouraged to contribute their modifications and improvements back to the community, fostering the growth and development of the plugin.

8.3 Source Code Availability:

As per the AGPL, the source code for the VLA-252A EQ plugin is available to users.

The source code can be accessed on GitHub, a popular platform for hosting and sharing open-source projects.

By making the source code available, users can study, modify, and contribute to the development of the plugin.

8.4 Warranty and Liability:

The VLA-252A EQ plugin is provided "as is," without any warranty or guarantee of its performance or suitability for specific purposes.

Users are responsible for their use of the plugin, and the developer disclaims any liability for any damages or issues that may arise from its use.

It is essential to review and understand the terms of the Affero General Public License (AGPL) before using the VLA-252A EQ plugin. For specific details regarding the license and any associated legal information, please refer to the license file or documentation provided with the plugin's distribution.

Please note that while this information provides a general overview of the licensing terms, it is always recommended to consult the actual license and seek legal advice if you have any questions or concerns about the licensing of the VLA-252A EQ plugin.

9. Acknowledgments:

We are proud to acknowledge and express our gratitude to all those who have contributed to the creation and success of the VLA-252A EQ plugin. Their dedication and expertise have been essential in bringing this powerful audio-processing tool to fruition.

10. Contact:

If you have any questions, or feedback, or need assistance with our plugin, we encourage you to get in touch with us. We are here to help and provide you with the support you need. You can contact us through the following emails:

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Tommaso Settimi tommsett@gmail.com

Please provide as much detail as possible when contacting us, including the version of the plugin you are using, any error messages you encountered, and steps to reproduce the issue. This information will assist us in diagnosing and resolving your problem quickly.

We value your feedback and strive to continuously improve our plugin based on your suggestions and needs. Don't hesitate to reach out to us. Your input is invaluable in making our plugin even better.

Thank you for using our plugin!

Github repository can be found at: <https://github.com/duduOliver/VLA-252A>