

Analog Sound Digital Recall



www.WesAudio.com



SUPERCARRIER II

User Manual

EN

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Thank You for the purchase of **Supercarrier II**

Ng500 compatible frame

With kind regards

Radoslaw Wesolowski and Michal Weglicki

500 SERIES CHASSIS

The WesAudio Supercarrier II is a versatile 500 Series chassis designed to house up to 11 modules, offering flexibility for audio processing in studios. Its robust construction ensures durability and easy access to modules, making it suitable for both fixed and mobile setups. Compatible with a wide range of 500 Series modules, it allows for customized signal chains and features efficient routing capabilities to streamline workflow.

The Supercarrier II delivers consistent power to all modules, ensuring reliable performance. Its sleek design complements any studio environment, providing a professional and organized look for high-quality audio production.



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1 Overview

Supercarrier II is a 500 Series chassis designed to hold up to 11 modules, offering extensive flexibility for studio configurations. Built with a durable frame and equipped with a reliable power supply, it ensures high-quality audio performance and smooth integration into any professional setup. Its intuitive routing options and compatibility with a wide range of 500 Series modules make it an essential tool for engineers looking to customize their sound processing with ease and precision.

2 Main Features

- **Modular Capacity:** Accommodates up to 11 500 Series modules, allowing for extensive customization and flexibility in audio processing.
- **High-Quality Construction:** Built with robust materials to ensure durability and reliability in both studio and mobile environments.
- **Integrated Power Supply:** Provides stable and clean power to all installed modules, ensuring optimal performance and minimizing noise or interference.
- **Efficient Cooling System:** Designed with an effective ventilation system to prevent overheating and maintain the longevity of the modules.
- **Universal Compatibility:** Fully compatible with standard 500 Series modules from various manufacturers, providing a broad range of options for creating customized audio chains.

3 Understanding the 500 Series

The 500 Series protocol is a modular audio processing standard widely used in the professional audio industry. Developed for flexibility and space efficiency, it allows audio engineers to build customized signal processing chains using individual modules like preamps, compressors, and equalizers.

Essential Components:

- **Modules:** Compact audio processing units that fit into a 500 Series chassis. Each module is designed to perform specific tasks, such as amplification or compression.
- **Chassis (Rack Frame):** A housing unit that holds multiple 500 Series modules. It provides the necessary power and connections for the modules and typically supports anywhere from 2 to 11 slots.
- **Power Supply:** Integrated into the chassis, the power supply provides the required voltage and current for all installed modules, ensuring stable and noise-free operation.

Key Benefits:

- **Modularity:** Allows users to easily mix and match different modules to create a tailored audio processing setup.
- **Space Efficiency:** Compact design makes it ideal for studios with limited rack space.
- **Cost-Effectiveness:** Enables incremental upgrades by adding individual modules as needed.
- **Compatibility:** Standardized format ensures interoperability across modules and chassis from various manufacturers.

4 Hardware

This chapter will go through all analog features and explain all hardware aspects of Supercarrier II.

4.1 Specification

Power consumption (empty frame)	5W
Unit dimensions	135x483x182 mm
Box dimensions	274x550x382 mm
Unit weight	3,7 kgs
Power supply weight	1,7 kgs
Box weight	7,3 kgs
Warranty	2 years

4.2 Installation and Compatibility

After unpacking your **Supercarrier II** frame, please check for any visible damage that may have occurred during transit. If there is any problem, please contact your dealer immediately for advice on what to do.

Modules Installation Walkthrough:

- Choose the position in the rack where you will install the module and slide it in so that the edge connector of the module aligns with the matching connector in the rack.
- A gentle push should allow the module to slide securely into the rack connector.
- Attach the front panel of the module to the front of the rack using screws supplied by your rack manufacturer. This is important for mechanical rigidity.
- Do not overtighten these screws to avoid stripping the threads.
- Apply power, test that everything is working properly, and most importantly, enjoy!

!Ensure the rack is completely powered down before attempting module installation to prevent damage to the frame!

4.3 Front Panel

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1. **Power LED:** Indicates whether the rack is powered on or off.
2. **Slots:** 11 individual 500 Series modules, each powered independently through innovative ISP (Independent Slot Power) technology for optimal performance and isolation.
3. **Channel Link Switch:** Allows linking adjacent channels for stereo or multi-channel use, specifically designed for use with certain compressors that support channel linking functionality.

Example: Detectors Linking with MIMAS pair

Using two MIMAS compressors, you can link their detectors for true stereo compression. This ensures both units compress identically, maintaining balanced stereo imaging and consistent dynamic control.

4.4 Rear Panel

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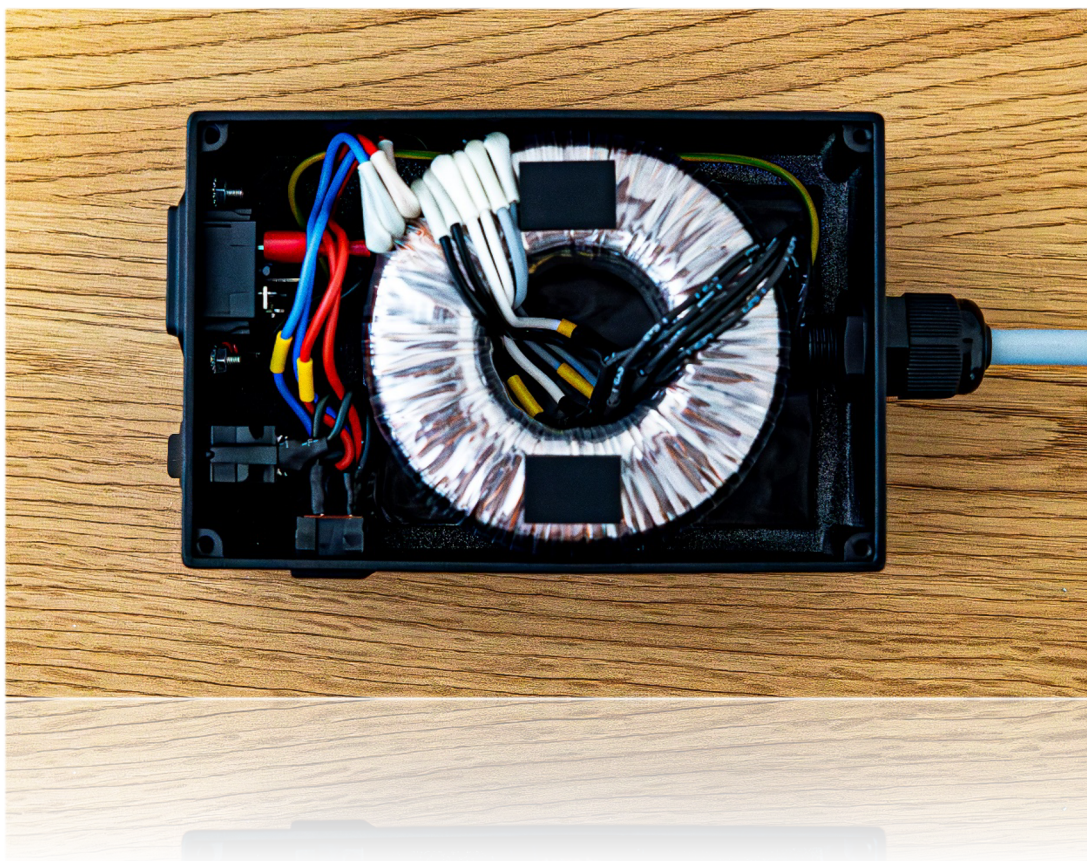
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1. **XLR Inputs and Outputs:** The rear panel has XLR input and output connectors for each slot.
2. **DB25 Connectors:** Provide balanced multi-channel inputs and outputs through a single connection, simplifying cabling and integration with other audio equipment.
3. **Power Input:** Supplies power to the Supercarrier II, ensuring stable and reliable operation for all modules.
4. **Serial number.**

4.4.1 DB-25 and XLR Connections

DB-25 connectors are hard-wired to the XLR connectors, meaning they share the same signal path. Because of this design, both connection types cannot be used simultaneously. When connecting your Supercarrier II to external equipment, you need to choose between using the DB-25 or XLR connectors based on your setup and cabling requirements.

4.5 External Power Supply

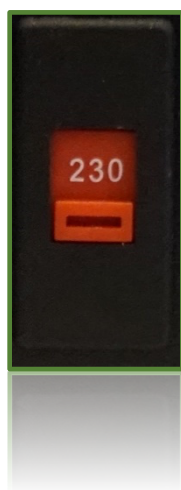


This power solution is a highly advanced, high-end linear system built around a toroidal transformer. As a linear power supply, it delivers exceptionally stable and clean voltage, crucial for minimizing noise and interference. The toroidal transformer further enhances its performance, making it an ideal choice for achieving the highest audio quality in professional setups. This ensures reliable and consistent power delivery to all connected audio modules, maintaining the integrity of the sound throughout the system.

4.6 Voltage Selector and Fuses

4.6.1 Voltage Selector

The Supercarrier II can be configured to operate at either 230V or 115V. Please note that your unit is pre-configured for the specific sales region, including the appropriate fuse setup for either 230V or 115V. If you need to change the voltage configuration using the power selector, make sure to also use the correct fuse for the new voltage setting.

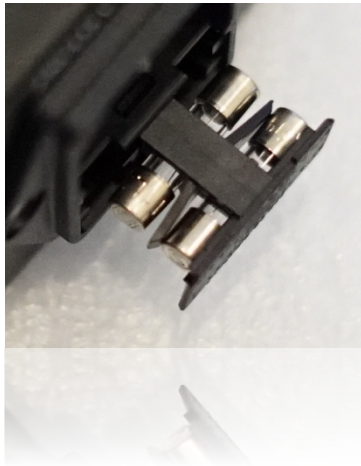


For proper operation, you can change the voltage and ensure the correct fuse is installed based on your voltage setting. Use:

- **2A fuse for 115V**
- **1A fuse for 230V**

Important: Incorrectly setting the voltage selector can cause severe damage to the unit and result in the fuse blowing. For example, if the voltage selector is set to 115V while connected to a 230V supply, the unit may experience overloading, leading to a blown fuse and potential harm to the device.

4.6.2 Spare Fuses



A spare fuse is included in the power supply, allowing you to quickly swap it with the primary fuse when needed.

4.6.3 Replacing the Fuse

In the event of a blown fuse, follow the instructions below to safely access and replace it.

Important: Ensure that the unit is powered off and the power cord is disconnected from the power source before proceeding.

4.6.3.1 Opening Fuse Holder

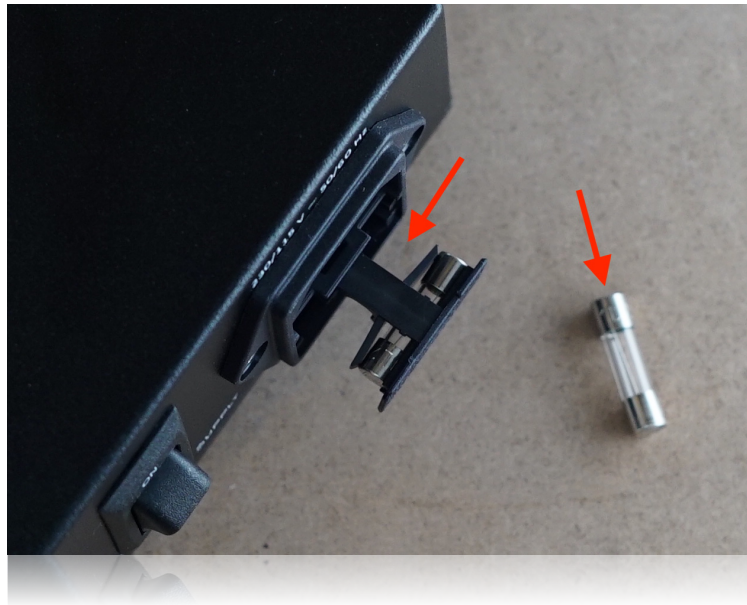
To open the fuse holder, use a small flat-head screwdriver.

1. Insert the screwdriver into the slot of the fuse holder.
2. Gently pull the fuse holder open, as illustrated in the image below.



4.6.3.2 Changing the Fuse

Once the fuse holder is open, proceed with the following steps:
Remove the blown fuse (marked with indicators) by gently pressing on it until it disengages and drops out of the holder, as shown in the picture below.



Take the spare fuse located in the adjacent slot and insert it into the position of the removed fuse.



Close the fuse holder securely.

Your device is now ready for use.

5 Troubleshooting

If you encounter any of the following issues:

- No Sound Output or Signal Loss
- No power to the modules.
- Blown fuse after switching voltage settings.
- Intermittent power to certain slots.
- External power supply overheating.

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

6 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.