

POWERED EURORACK CASE

USER'S MANUAL

Important Safety Instructions

WARNING: WHEN USING ELECTRIC PRODUCTS, ALWAYS FOLLOW THESE BASIC PRECAUTIONS:

- Read all the instructions before using the product.
- Do not use this product near water—for example, near a bathtub, washbowl, or kitchen sink; in a wet basement; or near a swimming pool.
- Make sure that the product is positioned for use in a way that does not interfere with its proper ventilation.
- The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat. No naked flame sources (such as candles, lighters, etc.) should be placed near the product.
- Do not operate in direct sunlight.
- The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
- The power supply cord of the product should be unplugged from the outlet when left unused for a long period of time or during lightning storms
- Care should be taken so that objects do not fall, and liquids are not spilled, into the enclosure through any openings.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Please note that any changes or modifications made to this product not expressly approved by Moog Music, Inc. could void the user's authority granted by the FCC to operate the equipment.

Introduction

The Moog Powered Eurorack Case is a simple and complete solution for hosting your own custom assortment of Eurorack-format synthesizer modules. It provides up to one ampere of clean, well-filtered power for the most demanding applications, and multiple units can be stacked together using our 2-, 3-, and 4-Tier Rack Kits.

Warnings

Only use the power adapter included. Do not touch the power supply board while the unit is powered on. The components will get hot, and there is a risk of electric shock. Make sure to use the included M3 screws for mounting modules. Using screws with a different gauge can strip the sliding nuts.

What's in the Box

60HP

- (30) M3 screws for mounting modules
- (1) 7 inch 10-to-16 pin ribbon power cable

104HP

- (52) M3 screws for mounting modules
- (1) 15 inch 10-to-16 pin ribbon power cable
- (1) 7 inch 10-to-16 pin ribbon power cable

NOTE: Typically, Eurorack modules come with a ribbon power cable for connecting the module to the power supply board. Each Moog Powered Eurorack Case includes an extra cable(s) for powering a Mother-32, DFAM, Subharmonicon, Mavis, or other Eurorack modules.

Features

Modules can be connected to the power supply up to a combined amperage of the following for each voltage rail:

- 1 Amp @ +12V
- 1 Amp @ -12V
- 1 Amp @ +5V
- **DO NOT** connect more than a total current draw of 1 Amp to any single voltage rail of the Powered Eurorack Case—this could damage your power supply and/or connected modules under extreme conditions. Check manufacturers' websites for different module current draw information, if unavailable, modulargrid.net is a useful tool for adding up total amperages in your case.
- The top and bottom row of connectors are filtered and protected separately. For best noise performance, install high-noise modules (digital modules, for example, can sometimes produce relatively large amounts of noise) on a separate row from noise-sensitive modules (such as VCOs, VCAs, and other analog audio generators and processors where noise bleed is undesirable).
- While you may add flying bus boards to increase the amount of available power connections, the current limit of 1 Amp per rail is still the limit, so be mindful and do not exceed that limit when adding modules. Adding additional connectors may reduce the noise performance of the system.
- The Moog Powered Eurorack Case can be mounted with other Moog Eurorack format cases of the same width, as well as Mother-32, DFAM, and Subharmonicon, using Moog's Multi-Tier Rack Kits.

LED Behavior

Power In LED: LED near the DC input jack that indicates power into the device.

Rail Voltage LEDs: Three LEDs located in the center of the board, below the Moog logo and in between the Eurorack power connectors, that show the status of all three power rails.

- An incorrectly installed power cable, short circuit, or power supply failure will cause one or more LEDs to turn off or dim.
- If you notice one or more of the rail voltage LEDs are not illuminated or are noticeably dimmer than the others, power off the Eurorack Case immediately by pressing the power button on the rear, and check your power cabling for correctness.

Installing Modules

- Determine which side of the case you would like to install your module in. You can use free websites such as modulargrid.net to create mockups of your intended system and play around with each module's placement.
- 2. Shift the sliding nuts to the opposite side of the case where you intend to install your module.
- 3. Slide the appropriate number of mounting nuts over for installing the module.
- 4. Attach the ribbon cable to one of the power headers, minding the orientation and ensuring the red line of the ribbon cable aligns with the -12V marking next to the power header.
- 5. **IMPORTANT!** Orient the ribbon cable so that the red strip of the ribbon cable is closest to the white line indicator, "-12V" marking, or any other orienting marker on the module's circuit board. If in doubt, double check the module's manual to ensure your power cable is oriented correctly. Improper orientation risks permanently damaging the module!
- 6. Briefly power on the Eurorack Case and check the three rail voltage LEDs to ensure there are no short-circuits and the power cable is installed correctly.
- 7. Loosely tighten the mounting screws.

Specifications

Dimensions

60HP Size (WxDxH): 12.7" x 5.5" x 3.7" (32.3 cm x 14 cm x 9.4 cm)
60HP Weight: 2.2 lbs (1 kg)
104HP Size (WxDxH): 21.5" x 5.5" x 3.7" (54.6 cm x 14 cm x 9.4 cm)
104HP Weight: 3.4 lbs (1.5 kg)

Power Supply (included)

Style: IEC Wall Adaptor; barrel connection; center-pin positive Input: 100 – 240VAC; 50Hz – 60Hz Output: +15VDC; 3340mA

Power Consumption

Typical: ~14.5 Watts Maximum: 30 Watts

Eurorack Specs

Current Draw: 1A @ +12V, 1A @ -12V, 1A @ +5V Case Width: 60HP/104HP Module Depth: 44mm (over connectors) / 48mm (elsewhere)

Rear Panel

Power: Power Supply connection **Security:** Kensington Lock slot Power Switch

Service & Support Information

Moog's Standard Warranty

Moog warrants its products to be free of defects in materials or workmanship and conforming to specifications at the time of shipment. The Warranty Period is one year from the date of purchase. If, in Moog's determination, it has been more than five years since the product shipped from our factory, it will be at Moog's discretion whether to honor the warranty without regard to the date of the purchase. During the Warranty Period, any defective products will be repaired or replaced, at Moog's option, on a return-to-factory basis. This warranty covers defects that Moog determines are no fault of the user. The Moog Limited Warranty applies to USA purchasers only. Outside the USA the warranty policy and associated service is determined by the laws of the country of purchase and supported by our local authorized distributor. A listing of our authorized distributors is available at www.moogmusic.com. If you purchase outside of your country, you can expect to be charged for warranty as well as non-warranty service by the service center in your country.

Returning Your Product to Moog Music

You must obtain prior approval in the form of an RMA (Return Material Authorization) number from Moog before returning any product. Email techsupport@moogmusic.com for the RMA number or call us at +1 (828) 251-0090. All products must be packed carefully and shipped with the Moog supplied power adapter. The Powered Eurorack Case must be returned in the original inner packing including the cardboard inserts. The warranty will not be honored if the product is not properly packed. Once you have received the RMA number and carefully packed your Moog Powered Eurorack Case, ship the product to Moog Music, Inc. with transportation and insurance charges paid, and be sure to include your return shipping address.

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What We Will Do

Once received, we will examine the product for any obvious signs of user abuse or damage as a result of transport. If the product was abused, was damaged in transit, or is out of warranty, we will contact you with an estimate of the repair cost. If warranty work is performed, Moog will ship and ensure your product to your United States address free of charge.

How to Initiate Your Warranty

Please initiate your warranty online at www.moogmusic.com/register. If you do not have web access, please call +1 (828) 251-0090 to register your product.

Caring for Your Powered Eurorack Case

Clean your Powered Eurorack Case with a soft, dry cloth only—do not use solvents or abrasive detergents. Heed the safety warnings at the beginning of the manual. Do not drop the unit.

Important Note About Safety

There are no user serviceable parts in the Powered Eurorack Case. Refer all servicing to qualified personnel only.

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Powered Eurorack Case User Manual Version 1 For the most up-to-date user manual and firmware updates, visit www.moogmusic.com

Phone: +1 (828) 251-0090 | Email: info@moogmusic.com Website: www.moogmusic.com

