



Thank you for choosing EMM Labs

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Safety Instructions

Prior to Installing your new EMM Labs product please read the following safety instructions:

- Read and follow all instructions.
- Keep these instructions.
- Do not use or install product near any sources of water, rain and/or moisture.
- Clean using only a dry cloth.
- Install only in accordance with the manufacturer's instructions.
- Refer all servicing to approved service personnel.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not install product outdoors or in direct sunlight.
- Leave at least 10cm or 4 inches around product to ensure proper ventilation.
- Do not place product near strong electrical or magnetic radiation/emissions or near a power amplifier.

This EMM Labs product must be connected to a mains socket outlet with a protective earthing connection (grounding pin).

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO WATER OR MOISTURE.

EEC: This product has been designed and tested to comply with the limits set out in EN55013, EN55020 and EN 60065:2009 (electrical safety).



Warranty

EMM Labs warrants the DS-EQ1 against defects in material and workmanship under normal use and service for a period of time specified by the product's serial number from the date of purchase. The warranty time period is 5 years. Warranty is limited to the original owner and is non-transferable.

EMM Labs agrees to pay return shipping charges back to the owner when the product is sent to EMM Labs within the first 90 days after purchase (US and Canada end-users only). Otherwise, owner will be responsible for all shipping charges to and from EMM Labs.

For all warranty claims, a copy of the original invoice must accompany the product.

Opening the product or modifying it in any way by the owner, including but not limited to cryogenic treatment, will void any warranty.

Please contact EMM Labs (support@emmlabs.com) for RMA number and shipping instructions before shipping any product to EMM Labs.

EMM Labs products are sold worldwide through authorized dealers with restricted territories. EMM Labs products purchased from non-authorized dealers or from a dealer selling outside his / her authorized territory will automatically void product warranty.

DS Audio cartridges used with the DS-EQ1 is fully warranted by DS Audio against defects or issues, as per DS Audio's original manufacturer's warranty.

Introduction

The DS-EQ1 is designed with an obsessive desire to lower noise and distortion, and to extract every bit of detail and information from any DS Audio optical cartridge. The DS-EQ1's circuits are all Meitner designed in-house, including its power supply, and are optimized for short and direct audio paths. EMM uses a custom made ceramic PCB for the equalization and amplification stages, which allow for the superior extraction of low level details in the audio.

From its proprietary equalization, class A amplification, and power supply systems, to its touch panel buttons and sophisticated aluminium chassis, the DS-EQ1 is the ultimate partner to any DS Audio optical cartridge.

The DS-EQ1 OPTICAL EQUALIZER features:

- Proprietary & discrete equalization specifically designed for all DS Audio optical cartridges
- Ultra low distortion
- Custom designed discrete class A amplification
- Front panel user selectable standard 50Hz RIAA response or with added 2nd order 15Hz high pass filter
- Optimized short audio paths throughout
- Latest generation custom made power system
- Custom aerospace-grade ceramic circuit board
- Power and filter touch buttons
- Precision-machined aluminum chassis

Features & Specifications

Analog Inputs

- 1 Stereo sets of Un-Balanced (RCA)

The DS-EQ1's inputs are optimized for use exclusively with all DS Audio Cartridges.

Analog Outputs

- 1 Stereo set of Balanced (XLR) - Output Impedance: 300Ω
- 1 Stereo set of Un-Balanced (RCA) - Output Impedance: 150Ω

Output Levels

XLR outputs: 1V (+2.2dBu)

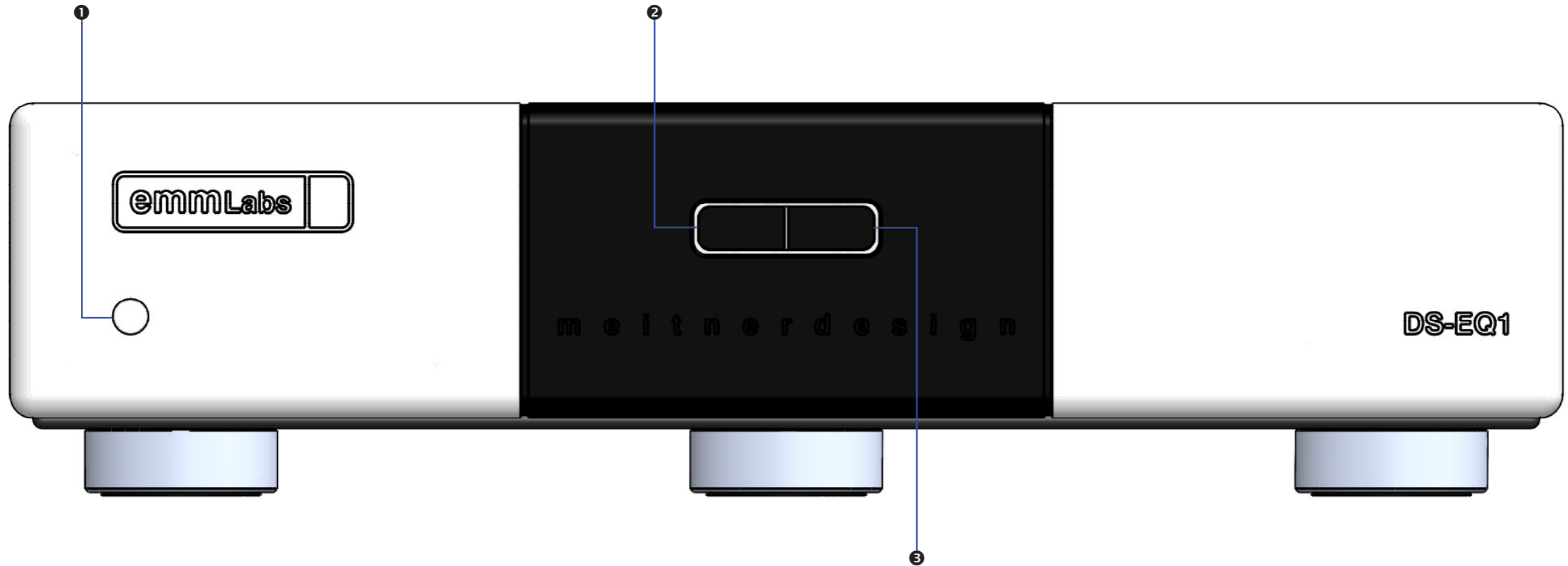
RCA outputs: 0.5V (-3.8dBu)

Power Supply

- Power factor corrected
- Universal 85V-260V, 50/60Hz
- Power consumption: max. 50W

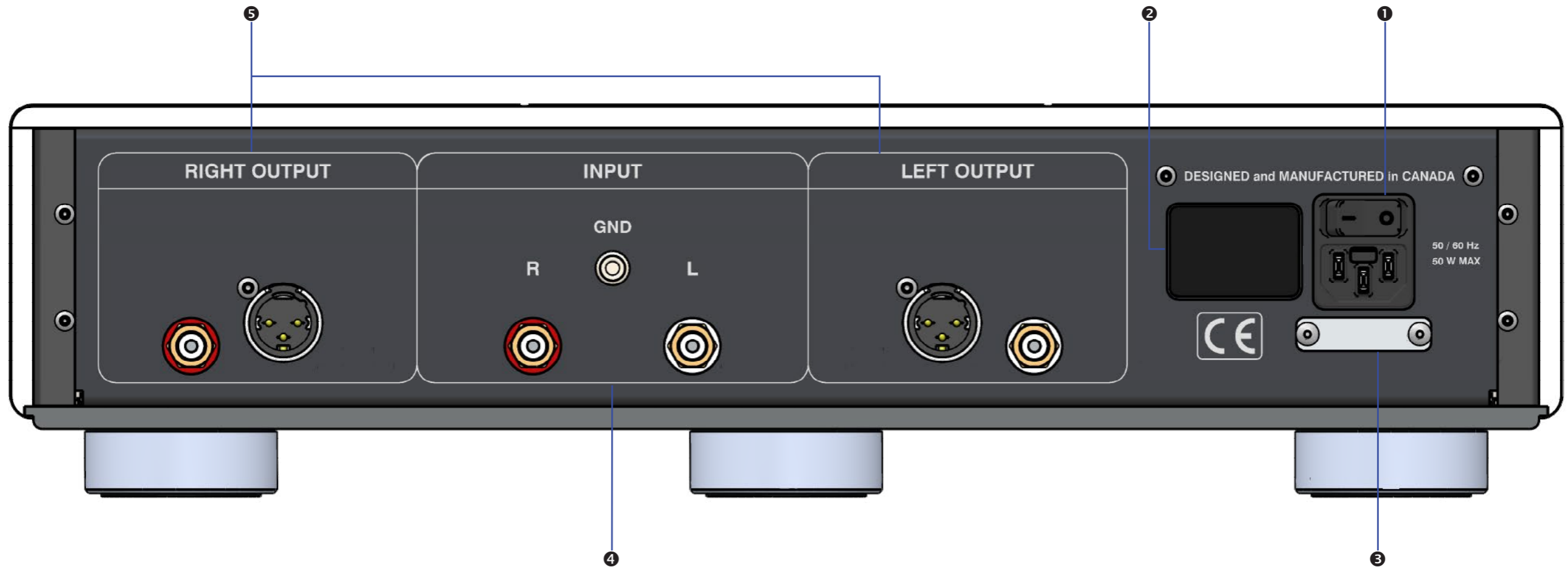
Dimensions W x D x H: 438 x 381 x 102 mm, Weight: 12kg

Front Panel & Functions



1. *Power Off/Standby button*
Turns the DS-EQ1 on from standby.
2. *Cartridge Power On/Off touch button*
Turns the power on/off to the optical cartridge.
3. *Filter Select touch button*
Toggles between standard 50Hz RIAA response or RIAA with added 2nd order 15Hz high pass filter.

Rear Panel & Functions



1. *Mains Power Switch Power Inlet Connector*
2. *Product Model and Serial Number Indicator:*
Warranty void if model/serial number indicator is not attached to unit, missing, or damaged whereby serial number cannot be seen.
3. *Product Universal Voltage Indicator (85V-260V)*
4. *Left and Right Analog Inputs and Grounding Terminal*
5. *Left and Right Balanced (XLR) and Un-balanced (RCA) Outputs*

Main Screen and Button Functions

Please connect provided power cord to DS-EQ1, and attach to an appropriately grounded mains power socket. Attach left and right input audio channels (left and right RCA connectors) plus ground connector from DS Audio cartridge and turntable to the DS-EQ1. Attach left and right output audio channels (left and right XLR or RCA connectors) to your stereo pre-amplifier using the appropriate interconnects.

When turned on using the main power switch on the back of the DS-EQ1, the DS-EQ1 will go into full power on mode. Power will be delivered to the DS Audio cartridge (cartridge will be lit) and the DS-EQ1's left front panel LED indicator will be lit (white).

By default the filter will be set to standard 50Hz RIAA response, and the right front panel LED indicator will not be lit.

You can now start playing records, and listening to music using DS Audio cartridges and EMM Labs DS-EQ1 Optical Equalizer.

1. *Cartridge Power Touch Button (Front Panel Left Button)*

Press the left front panel button to turn the power to the optical cartridge on or off. When power is on, the left button's LED indicator be lit (white). Press again to turn power off to the cartridge when not in use or when changing records. The left button LED indicator will be off and the middle LED indicator will be lit (red) indicating system is in standby and no power to the cartridge. The DS Audio's cartridge will also not be lit when cartridge power is not supplied to it.

2. *Filter Touch Button (Front Panel Right Button)*

The DS-EQ1 has 2 filter settings. Default is the standard 50Hz RIAA response. In this mode, the right button's LED indicator will not be lit. The second setting adds a second order 15Hz high pass filter to the RIAA response. In this mode the right button's LED indicator will be lit (white).