Introduction

Thank you for purchasing the new Brio amplifier, the 6th generation of Rega's best-selling amplifier.

The Brio has a completely new case to house its improved circuits and parts. It now sits in a fully aluminium two part case which boosts the Brio's heatsinking capabilities and improves on Rega's already solid build quality and reliability. The sleek and minimal look was designed to bring elegance to Rega's classic style but still harks back to the swooped features hidden away in Rega's past amplifiers. Combining all these aspects makes this Brio case a unique standpoint amongst the competition.

Key improvements have been made to the circuits. The PCB layout has been fully upgraded to handle higher specifications for all critical parts. A second raw power supply has been added to provide further isolation between output stage and the driver stage/line and phono amplifiers. This improves the isolation between high and low level signal stages of the amplifier. Higher specification MUSES operational amplifiers have been used in the line and phono amplifier.

For convenience the Brio has the capability to drive standard hi-fi headphones from the internal amplifier. Adding a headphone socket was only possible by finding a way to reduce its impact on the main signal path so it doesn't disrupt the overall sound quality. We have paid special attention to the switch that deactivates the main speakers. This is achieved by the same relay used in Rega's other amplifier models.

Throughout the design process the Brio has been meticulously improved in every aspect, from the quality of materials to the manufacturing process, to make this new Brio a step ahead in Rega's engineering and design for amplifiers.

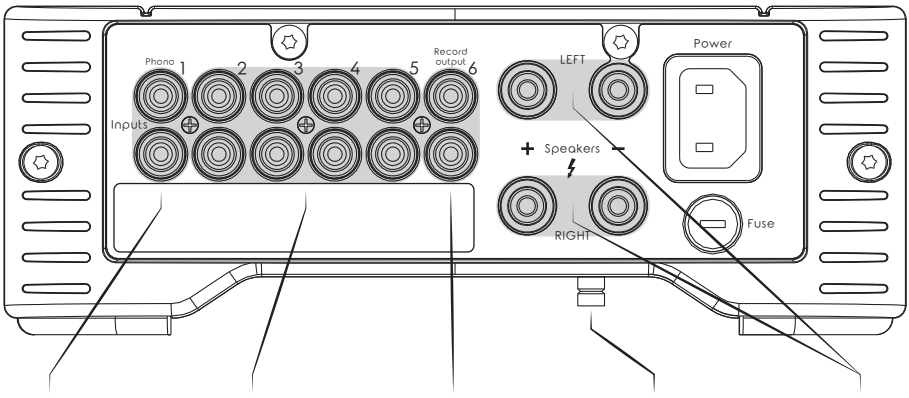
Setting up

The Brio will work well on most surfaces, such as a shelf or table, provided there is sufficient air around the amplifier to prevent overheating. If using a turntable, magnetic interference can be avoided by positioning the amplifier as far away from the cartridge as the tonearm lead will allow. It is recommended not to stack other hi-fi equipment directly on top of the amplifier. Never place it on fabric or carpet.

WARNING: CASE CAN GET HOT.

Connectivity

All line level inputs and outputs are made via RCA (phono) connectors.



1. Phono stage input
This input is a phono stage that can be used with moving magnet (MM) or specifically high output moving coil (MC) cartridges.

2-5. Line level input
Line inputs enable the connection of any additional sources such as CD players, BluRay players, streamers etc. Note the record output is disabled when input 5 is selected.

6. Record output
For connection to any recordable device. The output is a 'record signal' as selected by the main input selector 1-4. This output is not affected by the volume control.

Earthing nut
For earthing tonearms, located on bottom of Brio.

Loudspeaker output
Top row: Left speaker Red and Black.
Bottom row: Right speaker Red and Black.

Earthing

The Brio is fully earthed, but you may need to earth your turntable via the tonearm. For Rega turntables, earthing is achieved via the Phono lead ground therefore a separate earth is not necessary. If your tonearm has a separate earth lead it will need to be connected to the earthing nut located on the underside of the amplifier. You can use the nut to clamp down onto the earthing wire, but ensure that the turntable and Brio are as far away as possible whilst ensuring the safety of both products.

Loudspeakers

The Brio is capable of driving all normal hi-fi loudspeakers. Rega recommends using loudspeakers with a nominal impedance of 8Ω. It is possible to run speakers as low as 4Ω however such units may cause the case to exceed 40° C above the ambient temperature.

If in the event that the speaker leads are shorted, the fold back short circuit protection will protect the output stage from excessive currents. This protection circuit is not placed in the audio signal path and therefore does not affect sound quality.

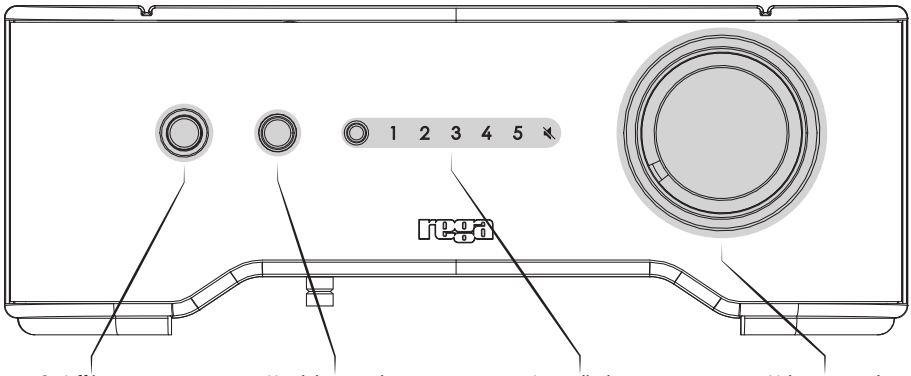
WARNING: ALWAYS TURN OFF THE AMPLIFIER WHEN CHANGING LEADS AND SPEAKER CABLES.

Headphones

The Brio is capable of driving all standard hi-fi headphones. The headphone output has been characterised to match most commonly used headphones. See specifications for the output levels.
When a headphone is inserted into the socket, the speakers will automatically be turned off. However it is recommended to reduce the volume of the Brio before connecting any headphones to ensure they are not damaged and prevent any hearing damage.

WARNING: TO PREVENT POSSIBLE HEARING DAMAGE, DO NOT LISTEN TO HEADPHONES AT HIGH LEVELS FOR LONG PERIODS OF TIME.

Input selection



On/off button
To turn the Brio on press the silver power button. After a few seconds you will hear a relay 'click' and the Brio will be operational.

Headphone socket
The Brio has been set up to drive the most common hi-fi headphones. When a headphone jack is inserted into the headphone socket, the loudspeaker output will automatically be turned off.

Input display
To change between inputs, press the small black button located next to the row of input digits to cycle through 1-5. The selected input is highlighted by the number lighting up in red. Input selection can also be changed with the remote.

Volume control
The volume control has a minimum and maximum value which is indicated by the notch. The volume does not reset after each use. Before plugging in headphones make sure the volume is reduced.

Warnings

Recommended ambient operating temperature 5 to 35°C
Allow adequate air circulation around the whole of the Brio especially its sides as this is where most of the heat is dispersed, this is crucial when the amplifier is running at high listening levels and for extended periods of time. This unit is intended for use in moderate climates.
To reduce the risk of fire, electric shock or product damage, do not expose the unit to rain, moisture, dripping or splashing and ensure that no objects filled with liquids, such as vases, shall be placed upon it. Do not remove the case covers. There are no user serviceable parts inside.
No naked flame sources, such as lit candles, should be placed on the apparatus.

Specifications

Input sensitivities for rated output level:
Input 1 (phono) input sensitivity = 2.1mV at 47KΩ in parallel with 220pF.
Maximum Input 1 (phono) input level = 100mV
Input 2-5 (line) input sensitivity = 210mV at 47kΩ
Maximum input 2-5 (line) input level = 10.25V

Power outputs at 230/115V supply voltage:
50Watts RMS both channels driven into the rated load of 8Ω
58Watts RMS one channel driven into the rated load of 8Ω
73Watts RMS both channels driven into the rated load of 4Ω
93Watts RMS one channel driven into the rated load of 4Ω
Continued high level use into 4Ω may cause the case to exceed 40° C above the ambient temperature.

Headphone output:
No load = 8V
32Ω = 1.8V
54Ω = 2.6V
300Ω = 5.9V
Source impedance = 109Ω

Power consumption:
195Watts at 230V/220V/115V/100V into the rated load of 8Ω

Record output level:
Record output level (with rated input levels) = 210Mv.
Record output impedance = 470Ω

Frequency response:
Phono 15Hz to 40KHz (-3dB Points) / 27Hz to 20.5KHz (-1dB Points)
RIAA accuracy (100Hz to 10KHz) ± 0.4dB typically better than ± 0.3dB
Line 12Hz (-1dB points) to 43KHz (-3dB points)
Remote control batteries included – 2 x AAA Alkaline.

Fuse ratings:
T2AL 250V - 230V/50Hz and 220V/60Hz
T3.15AL 250V - 115V/60Hz and 100V 50/60Hz

Manufacturer:
Rega Research Limited
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Southend-On-Sea
Essex
SS2 5TE