Pro-Ject

AUDIO SYSTEMS

INSTRUCTIONS FOR USE
Amp Box RS2

Dear music lover,

Thank you for purchasing a power amplifier from Pro-Ject Audio Systems.

In order to achieve maximum performance and reliability you should study these instructions for use carefully.

⚠️ *Warning of a hazard for the user, the unit or possible misuse*
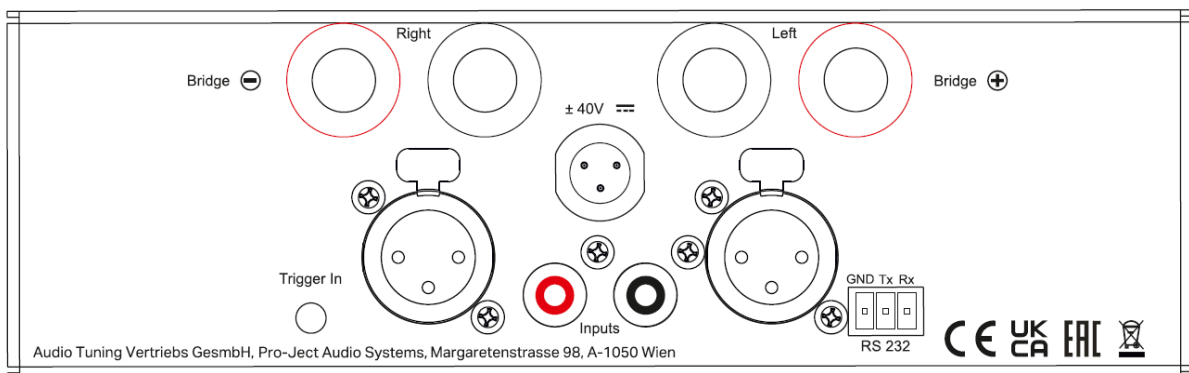
👉 *Important notice*

Safety instructions

AC outlet voltages vary from country to country. Before connecting to the mains, make sure that the voltage in your area meets the voltage requirements printed on the power supply.

⚠️ *The power supply is used to connect/disconnect the unit from the mains. Make sure that the power supply is easily accessible at all times. Never handle the device, the power supply while your hands are wet or damp. Avoid letting liquids enter the device or the power supply. Never place any item containing liquid, such as a flower vase on or near the device. Never spill any liquid on the device or the power supply. Never place any naked flame sources, such as lighted candles on or near the device. The product shall not be used in damp or wet locations, next to a bathtub, sink, swimming pool or any other similar conditions.*

Connectors

1. *Make all connections whilst the unit is disconnected from the mains.*

2. *Never connect or disconnect the power supply to or from the unit whilst the power supply is connected to the mains. Never use any other power supply than the supplied one, with the exception of dedicated Power Boxes which can replace original power supplies.*

3. *Take care to connect the left and right channels of RCA inputs correctly. The right channel is usually marked red, the left channel black or white.*

4. *Speaker connections for the left speaker are located on the right-hand side of rear view above, connections to right speaker are located on the left side. Speaker connectors marked red represent + according indicators on speaker terminal.*

Mains power connection and methods to switch the unit on and off

Connect the low voltage plug from the power supply to the **Power 40V DC** socket of the unit **before** connecting the power supply to the mains. Amp Box RS2 can be switched on and off by using 3 different methods which are equal in priorities.

1. Using front switch to turn the unit on or into standby

The switch on the left-hand side of the front panel turns the unit on or back into standby. The blue LED above the stand-by switch shows that the unit is switched on.

⚠️ *After switching on, the tubes need a short time to reach the correct operating temperature. During warm up the blue LED above the stand-by switch is blinking.*
We recommend to set the pre amplifies volume control to 0, prior to switching on.

2. Remote power on - triggers

Amp Box RS2 can be switched on via other Box Design components when a 12V trigger voltage is present at the 2.5mm socket marked **Trigger Input.** Special power-on cables (polarity ⁻─◉─⁺) in diverse lengths are available as accessories. When the 12V trigger signal is switched off, Amp Box RS2 will also switch off.

☞ RS232 on/off or front panel button on/off can override trigger commands.

⚠️ *Trigger cables may only be plugged into the sockets when the amplifier is disconnected from the power supply and from the mains. Failure to do so may result in damage of the unit.*

3. RS232

RS232 is a widely used control protocol used in custom integration to remotely control and integrate devices into a larger system. Home theatre, public address systems, lobby background music, hotels, ….
The RS232 documentation can be downloaded on the product website:

https://www.project-audio.com/en/product/amp-box-rs2/#downloads

Connection to the speakers

The output terminals accept loudspeaker cables terminated with 4mm ⌀ Banana plugs, spades connectors or naked wire.
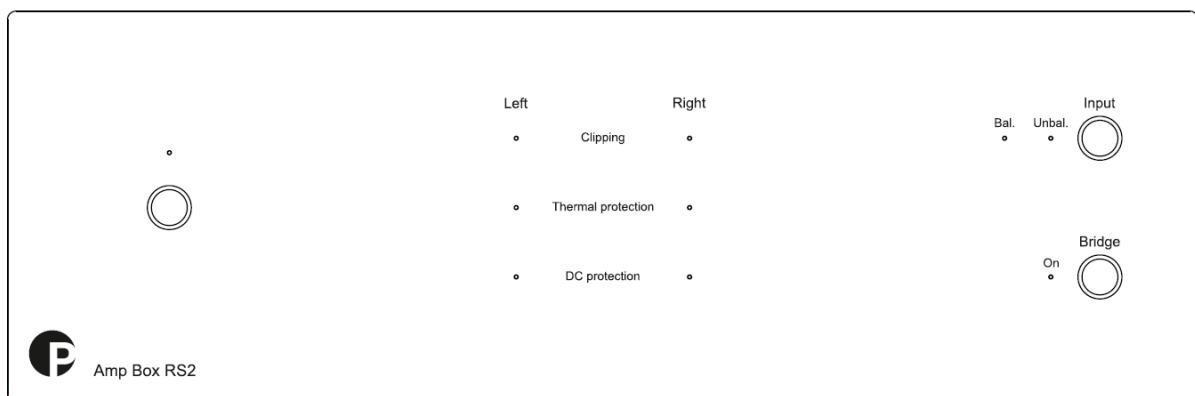
Preamplifier input

Amp Box RS2 offers RCA and XLR inputs. You can switch select the desired source by pressing the **Input** button on the front panel.

☞ RS232 input switching commands only work when power switch on the frontpanel is in the ON position.

Front panel controls

Bridge Mode

The Amp Box RS2 can be configured to work as a mono amplifier (Bridge Mode) which offers a higher output power.

- Connect your speaker to the marked "Bridge +" and "Bridge –" speaker outputs.
- Connect the input cable to the left channel XLR input on Amp Box RS2
- Activate Bridge mode by pressing the "Bridge" button

⚠️ *Minimal speaker impedance in bridge mode is 8 ohms.*

Clipping

The clipping indicator shows that the amplifier starts to clip or overdrive at its output, which can damage loudspeakers, and degrade the sound.

➔ Turn down the volume of your preamplifier.

Thermal protection

When the operating temperature gets too high, the amplifier will shut off & the "Thermal protection" indicator lights up. Over temperature can be caused by high listening levels and wrong placement.

➔ Let the amplifier cool down. It will return into normal operation mode automatically.

☞ The Amp Box RS2 uses a convection cooling system to regulate the operating temperature. Air enters through the vents on each side and the bottom of the amplifier chassis and exits through the sides and top of the chassis.

Make sure that there is enough space around the amplifier to allow the heated air to exit. If the Amp Box RS2 is mounted in a rack, please do not use the doors as this could cause a heat buildup. Whatever type of rack you are using, make sure that the heated air can escape freely.

DC protection

The DC protection protects speakers from constant DC voltage. Although it is a rare fault, it can destroy your speakers if happening.

➔ The amplifier will return into normal operation mode automatically. If the fault occurs, please contact your dealer.

Technical specifications Pro-Ject Amp Box RS2

Stereo Power Amplifier

Power output:	2x 130W / 2x 80W at 4 Ohms / 8 Ohms (1% THD)
Peak power:	2x 160W / 2x100W at 4 Ohms / 8 Ohms
Noise floor:	- 73dBV (-76dBV - 'A' weighted)
Frequency response (20Hz-20kHz):	<- 0,2dB
Channel separation:	- 58dB at 10kHz at 4 Ohms
Signal to noise ratio:	97dBV (100dBV - 'A' weighted)
THD:	< 0,08% at 20W / 4 ohms
Gain:	27dB
Line input sensitivity:	1V
Input impedance RCA/XLR:	47k/20k Ohms

Bridge

Load	8 Ohms
Power output:	280 W (1% THD)
Peak power:	350 W
Noise floor:	- 80dBV (-83dBV - 'A' weighted)
Frequency response (20Hz-20kHz):	<- 0,2dB
Signal to noise ratio:	106dBV (109dBV - 'A' weighted)
THD:	< 0,07% at 50W
Gain:	27dB
Line input sensitivity:	2V
Input impedance:	20 kOhms

Line level inputs:	1 pair RCA - unbalanced, 1 pair XLR - balanced
Speaker connectors:	4mm banana plugs, spades connectors or naked wire
Trigger IN:	12V DC switching voltage, 2-pole co-axial 2,5mm jack
RS232:	Pluggable 3-PIN Terminal Block
Outboard power supply:	± 40V/5A DC, suitable for your country's mains supply
Power consumption:	<0,5W in standby
Dimensions W x H x D (D with sockets):	206 x 85 x 200 (227) mm
Weight:	2660 g without power supply

Service

Should you encounter a problem which you are not able to alleviate or identify despite the above information, please contact your dealer for further advice. Only when the problem cannot be resolved there should the unit be sent to the responsible distributor in your country.

Warranty

The manufacturer accepts no responsibility for damage caused by not adhering to these instructions for use. Modification or changes to any part of the product by unauthorized persons release the manufacturer from any liability over and above the lawful rights of the customer.

Should a problem be encountered, which cannot be identified or resolved, please contact point of purchase/dealer for further advice. Only if the problem cannot be resolved there, the unit should be sent to the responsible distributor in your country. Warranty is valid in *country of purchase and for original purchaser only* and is not internationally nor personally transferable.

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Declaration of Conformity

We, **Canor spol. s r.o**.
Družstevná 13925/39
08006 Prešov
Slovakia
(manufacturer)

and

Pro-Ject Audio Systems a division of Audio Tuning GmbH

Margaretenstrasse 98

1050 Vienna,

Austria
(distributor)

declare under our responsibility that the product is in conformity with the provisions of Directives:
2014/35/EU including amendments
2014/30/EU including amendments

STN EN 55035:2018 - Electromagnetic compatibility of multimedia equipment - Immunity requirements
STN EN 55032:2015 - Electromagnetic compatibility of multimedia equipment – Emission requirements

and the EC regulation 1275/2008 and its framework directive 2009/125/EC for energy related products
(ErP) according to the test performed under the following technical standard
EN 50564:2011

Pro-Ject Audio Systems a division of Audio Tuning GmbH

1050 Vienna, Austria, Margaretenstrasse 98

info@project-audio.com