

ROKSAN

Caspian Series 4G

Caspian Power Amplifier

Product Manual

EN

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Welcome to Caspian Series 4G

Thank you for purchasing Caspian Series 4G, you're now ready to start your journey to breathtaking sound.

Caspian Series 4G is built for the user. Two distinctly sleek, modern, and ultra-minimal Roksan designs, house advanced feature sets aimed at delivering true, high-fidelity audio.

In this product manual, you'll find information about setting up your system and how to maintain your products for a lifetime of enjoyment.

If you need any further assistance, please contact our technical team at: roksan.com/support

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Before you unpack your product, please make sure that there is plenty of clean surface area available.

Inside the box

1. Caspian Power Amplifier
2. Mains Power Cord
3. Quick Start Guide
4. Safety Instructions
5. Stereo RCA Cable

AC Mains Supply

This product operates with an auto-ranging supply. The mains power cord supplied with this product has an IEC C13 mains plug which is inserted into the mains input socket on the unit's rear panel. The other end is a moulded plug appropriate to that of your country.

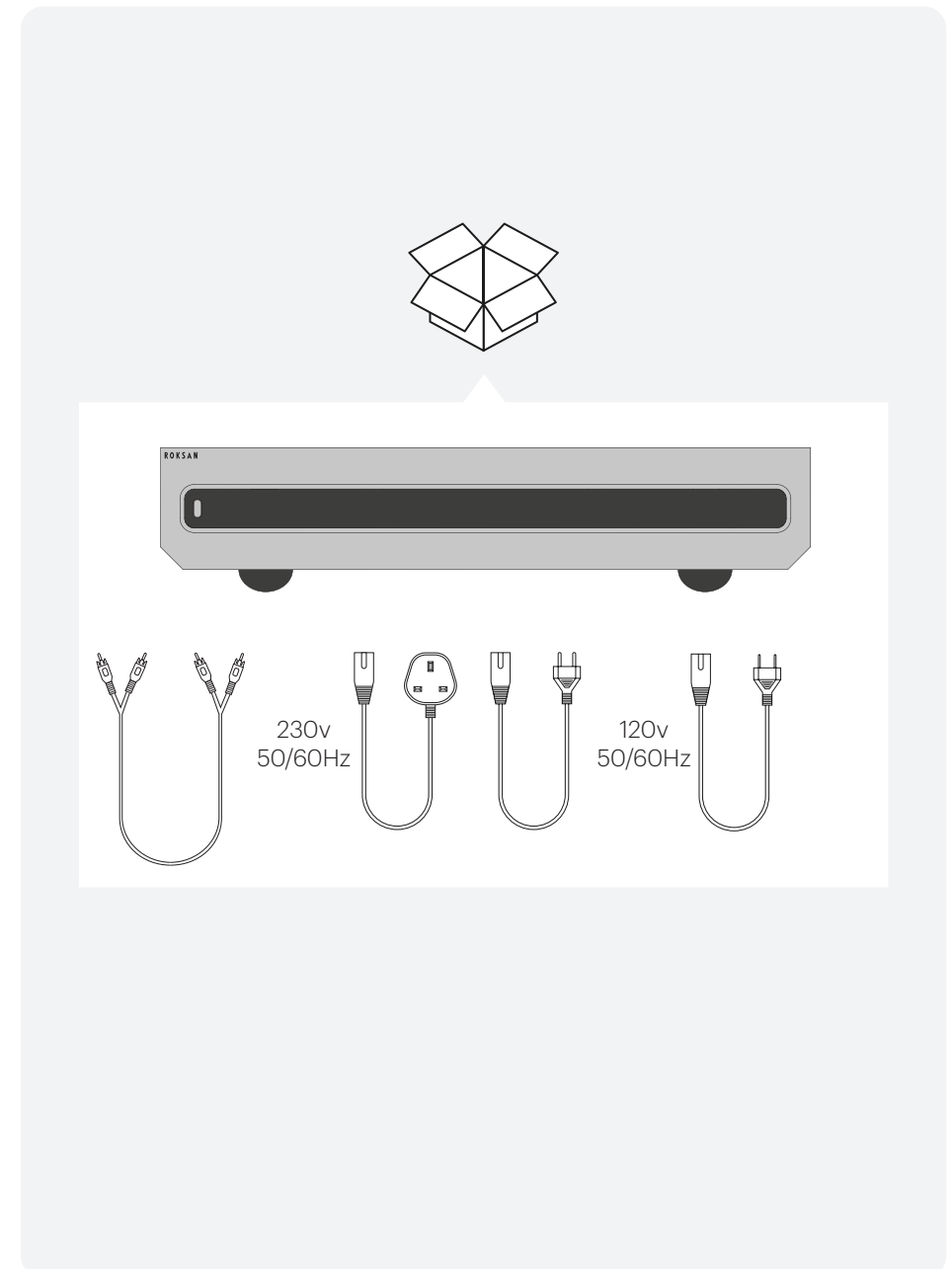
If your mains power cord has been damaged, please obtain a replacement cord from your Roksan Authorised Specialist.

⚠ NOTE: Ensure correct connection of the live (L), neutral (N), and earth (PE) conductors in your mains supply

The mains fuses are located on the rear panel below the IEC mains input socket. These must only be replaced by the fuse type and rating as described on the fuse rating label on the rear panel of the unit.

If the equipment is likely to be unused for some time, unplug it from the mains power supply.

⚠ NOTE: This unit contains no user serviceable parts. Do not remove any panels or attempt to service it yourself. Unauthorised servicing will void the warranty.



Placement

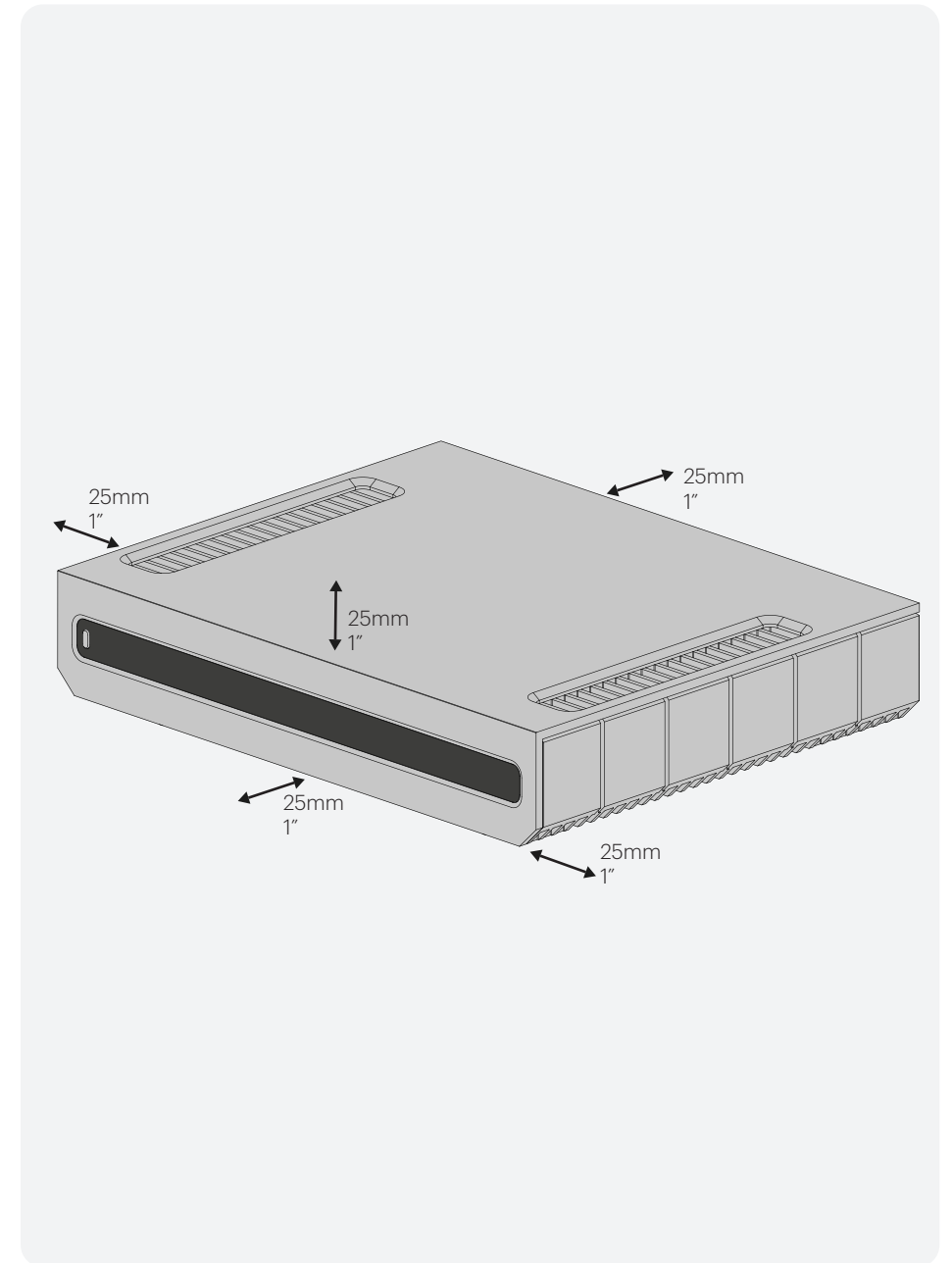
Your amplifier should be located in a well ventilated area and kept away from sources of heat, dust, humidity and direct sunlight.

The amplifier may be positioned either as a free standing unit or alongside other audio/video product(s). Never place the amplifier under other electronic equipment, on carpet or on any surface likely to hinder normal ventilation.

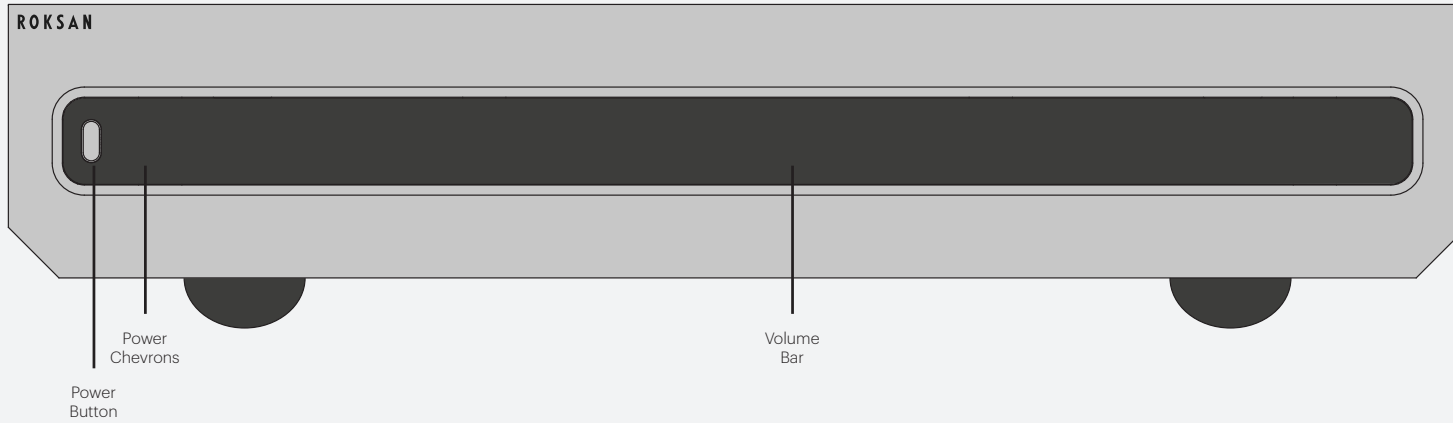
Never allow liquids or other objects to fall into the unit.

We recommend a minimum of 25mm air space all around the amplifier.

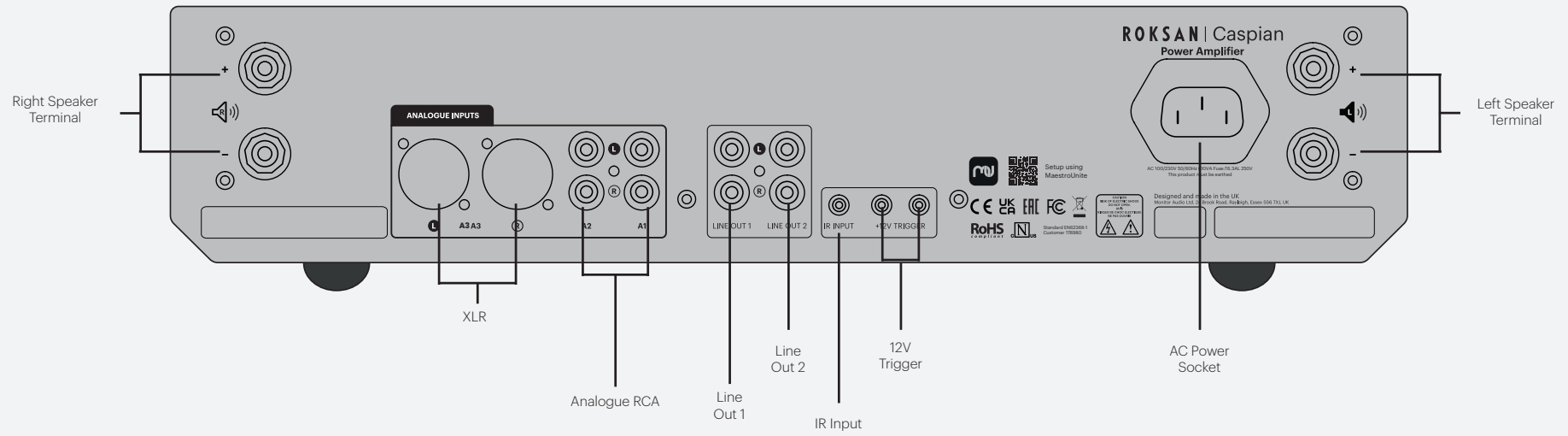
If you have an Integrated or Streaming Amplifier/ Pre Amplifier and Power Amplifier(s) do not place them on top of each other. They should be sited on different shelves of the equipment rack, or side by side.



Front



Rear

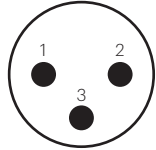
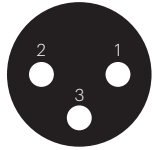


Balanced XLR Inputs

Balanced XLR inputs provide the highest quality analogue signal over long cable runs exceeding 10m. When connecting to the XLR inputs, ensure that the standard wiring configuration for a plug is followed:

Female connector

Male connector



1 - Chassis ground

2 - Positive polarity (Hot)

3 - Negative polarity (Cold)

When only short runs are required, RCA inputs can be used. If using longer cable runs or greater noise rejection is required, then XLR connections would be better.

RCA Analogue Inputs

The Caspian Power Amplifier has 2 x pairs of RCA analogue inputs for connecting your sources. The A2 input also supports Music Sense, which can be configured using MaestroUnite to wake your amplifier when an audio signal is detected. If the Power Amp is part of a Caspian System, the Power Amp will power on and off with the Central Unit, so Music Sense is not required. RCA Outputs are not affected by the unit being set to Mono (Bridge) Mode.

Wired IR Remote Control Input

If the product is in a different room or cabinet, IR commands can be sent to the unit via the rear panel jack socket labelled IR Input. Wired IR Input is compatible with many home automation installations including Logitech Harmony, early Crestron and Control 4 installations. The Wired IR jack socket is an input only and does not provide power, therefore, unsuitable for some remote IR-eye connections that are not self-powered.

12 V Trigger

These 3.5 mm jack connections can be used to remotely turn the amplifiers on and off by supplying a 12v signal to them. The output link will only work if there is an input to the product.

Either socket can be used for the input with its partner being used as the linked output, as a convenience to allow a single 12v trigger output from a partnering system to be distributed (to a sub-woofer perhaps) with a second cable.

Power

The moulded IEC plug of the supplied mains lead should be plugged into the socket on the rear of the unit first and then plugged into the mains supply. The appliance must have a safety earth connection.

The mains fuse is located here in the small drawer attached to the mains input socket. The fuse is a T6.3AL type.

RCA Analogue Outputs - Line 1 & 2

There are 2 pairs of RCA outputs on amplifier. Both are a mirror of the loudspeaker outputs with no filtering or customisation available.

Wiring Your Loudspeakers

Connect the loudspeakers to the terminals on the amplifier. Banana plugs can be used, but the red and black plastic caps need to be removed first. Once removed, insert the banana plug directly in to the terminal. Alternatively bare wire can also be used by unscrewing the terminal and placing the cable through the through hole in the terminal and clamping it firmly in place.

Carefully observe polarity ensuring that the red (+) speaker terminal/ cable is connected to the red (+) amplifier terminal and the black (-) speaker terminal/ cable to the black (-) amplifier terminal.

When both left and right loudspeaker outputs are connected to their respective loudspeakers the amplifier is ready for use.



IMPORTANT: Please ensure the unit is disconnected from the mains power supply before connecting the loudspeaker cables.



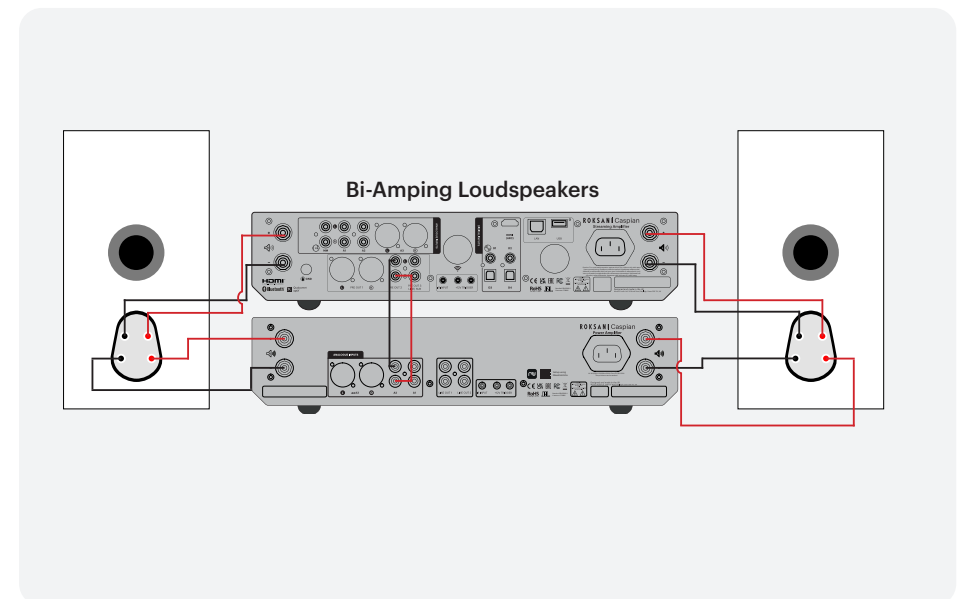
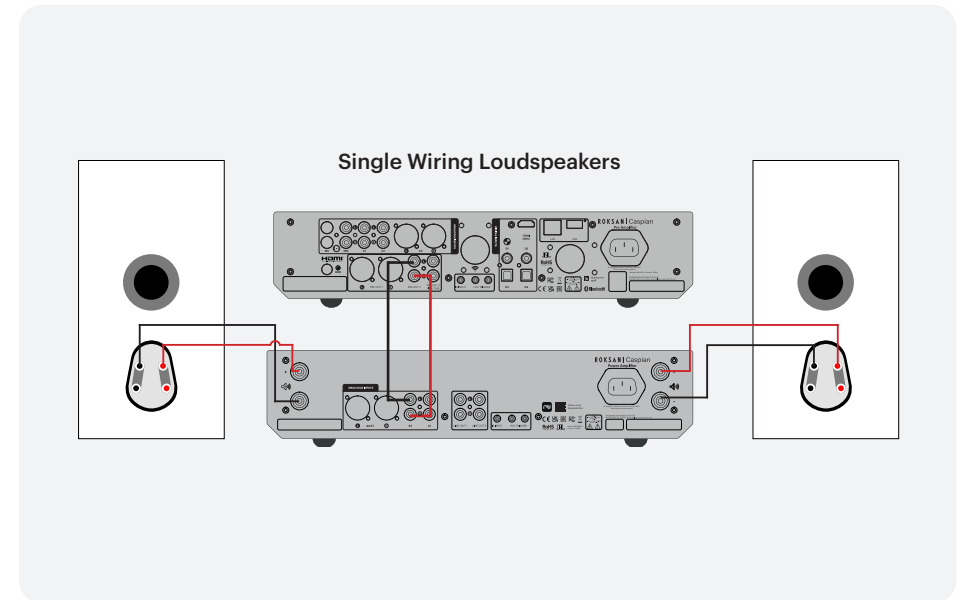
NOTE: Litz-wound loudspeaker cables or those with a complex plaited construction can present a highly capacitive load to an amplifier and may cause damage to the amplifier and/ or degrade the sound of your system. Choose a cable of simple construction, manufactured from high-quality materials. Your Roksan retailer will be able to advise.



NOTE: If using bare wire, DO NOT use speaker cable with conductor size less than 16 AWG (1.6 mm diameter) or greater than 12 AWG (2.05 mm diameter).



NOTE: We strongly recommend that you use professionally terminated speaker cables using 4 mm plugs. Any attempt to connect cables which are not terminated may result in damage to the amplifier if not done correctly.



Bridging the Output of the Caspian Power Amplifier

By bridging the Caspian Power Amplifier, you will be combining the left and right amplifier channels into a single channel to provide more than 3 times the power compared to when not bridging the outputs.

The outputs would normally be bridged when running two Power Amplifiers (one for each loudspeaker) into high power loudspeakers.

NOTE: Only LEFT channel of whatever input you use is taken through and amplified, regardless of if there's something coming in on the Right channel. Therefore take the LEFT output from the Pre Amplifier and plug it into the LEFT input on one Power Amplifier and the RIGHT output from the Pre-Amplifier to the LEFT input on the second Power Amplifier.

NOTE: Enabling Mono Mode (Bridge Mode) on the amplifiers has to be done through MaestroUnite. There is no other way to activate it.

NOTE: Ensure nothing is playing whilst configuring Bridged Mode and turn the volume down on the pre amplifier as well.

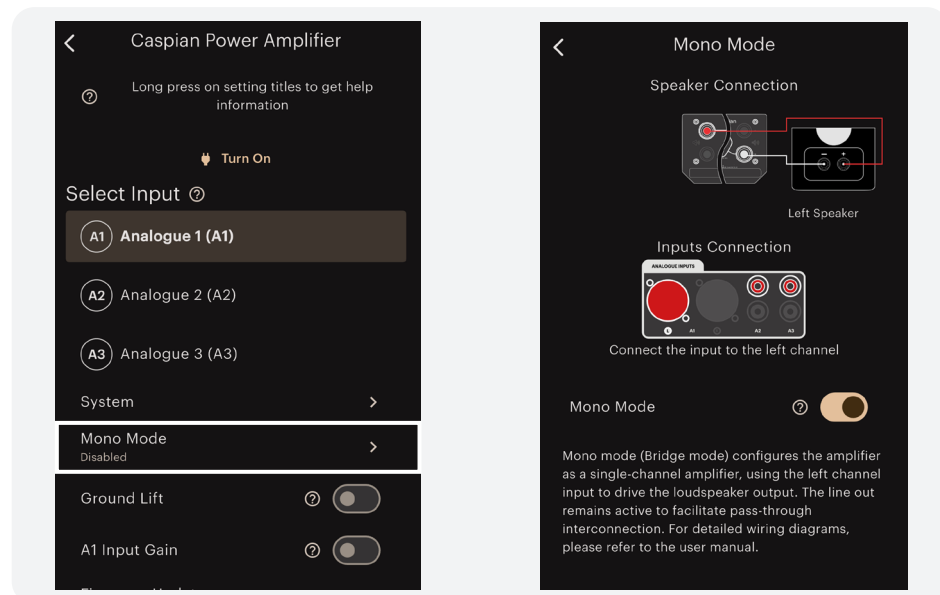
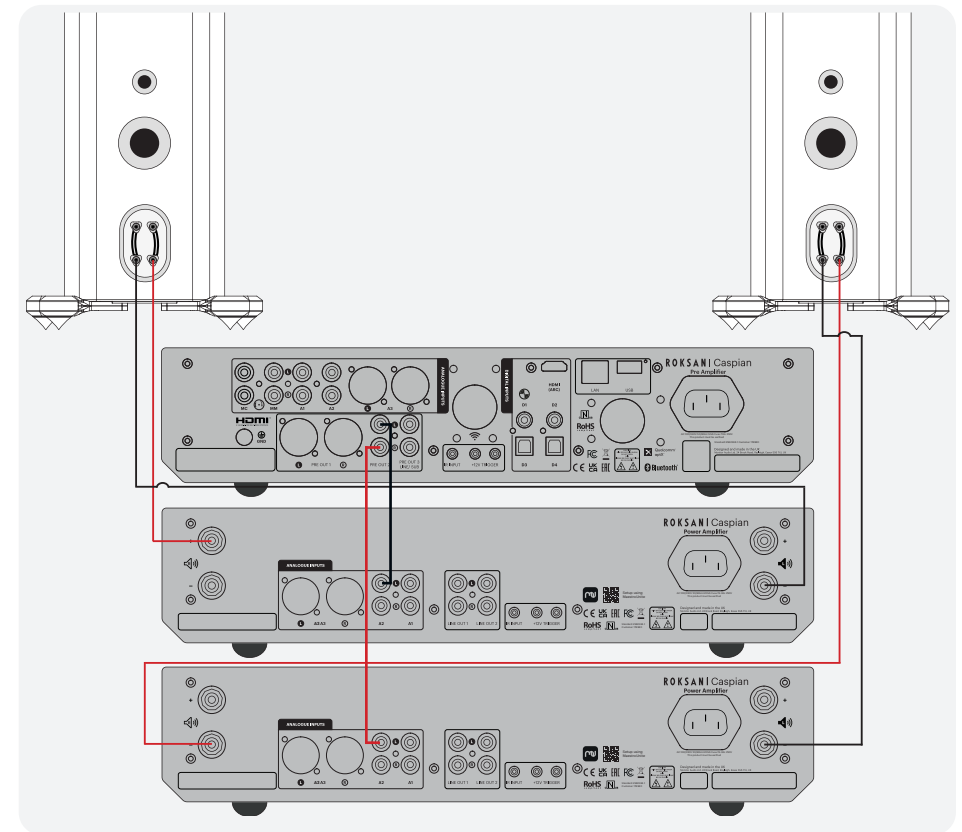
To wire up the speaker cables for Mono Mode (Bridge Mode), use the following loudspeaker outputs:

Connect your (+) speaker cable to the RIGHT Red (+) speaker output.

Connect your (-) speaker wire to the LEFT Black (-) speaker output.

To turn on Mono Mode, open MaestroUnite and select the Caspian Power Amplifier from your devices.

Tap on the Mono Mode slider.





The MaestroUnite app will allow you to enjoy your Caspian Power Amplifier to its fullest potential. The app allows for Wi-Fi setup, input/output configuration, audio adjustments, firmware updates and system creation with additional Roksan or Monitor Audio products.

Download MaestroUnite app

Visit roksan.com/maestrounite



Once installed, follow these steps to configure the Wi-Fi and join the Caspian Power Amplifier to the Pre/ Integrated amplifier system.

When in a system together the products will talk to each other, with the amplifier being the Central controller sending commands to the other products within the system.

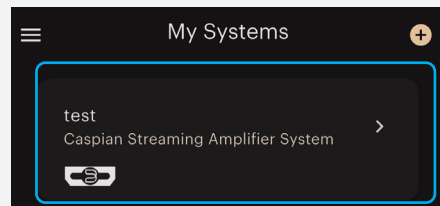


NOTE - When creating a system with a Pre/ Integrated/ Streaming Amplifier and a Power amplifier, always set the Pre/ Integrated/ Streaming Amplifier up before the Power Amplifier.

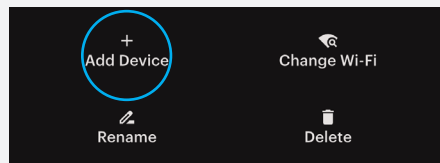
If the Power Amplifier is set up first, you will not be able to add the Pre Amplifier. The Pre Amplifier needs to be the primary product in the system.

To add the power amplifier from an existing system to a new system, either delete the previous system or remove the Power Amplifier from it if the system contains multiple devices.

Tap on the system containing the Pre/ Integrated amplifier.



Tap on the + icon to add another product to the system.



If adding the Power Amplifier to a system with another Caspian Amplifier, MaestroUnite will automatically connect to the Power Amplifier.

If partnering the Caspian Power Amplifier with another amplifier, then you will need to press the power button on the front of the product to confirm connection.

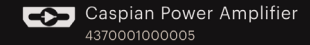
Select the Wi-Fi network from the list of available networks and enter the password.

NOTE: Only 2.4GHz networks are supported by MaestroUnite and the Caspian Amplifier.

Follow the on-screen instructions to carry out an Auto Firmware Update.

Once the firmware update has completed, tap on the "Home" screen or continue to setup BluOS if you have a Streaming Amplifier.

Please select the device you want to add.



Connect your system to Wi-Fi

Please choose a Wi-Fi network from the list

Ensure the Wi-Fi is 2.4GHz compatible

+ Manual Setup

Studio

Firmware Update in progress



Downloading 40%

If your device is new or has been factory reset it may require setup with BluOS.

If this is the case, please open the BluOS app and turn the device on

Configure BluOS

Next Steps

Waking from standby

When first connecting the mains power to your amplifier, it will go through the boot up process, then enter standby mode.

To wake the amplifier from standby, there are a number of options.

- Pressing the power button
- Receiving a signal from the 12v Trigger
- Using the MaestroUnite app
- Playing audio from your source

For the amplifier to wake from an audio signal, you have the source connected to A2 and Music Sense enabled.

If the Power Amp is part of a Caspian System, the Power Amp will power on and off with the Central Unit, so Music Sense is not required.

Cleaning your product

After disconnecting the product from the mains supply, the casing and front panel may be cleaned with a lint-free cloth. Avoid using abrasive substances or solvents.

Keeping your Caspian Power Amplifier up-to-date

For the best continued performance and latest features, please ensure that your Caspian Amplifier is up-to-date with the latest firmware.

To receive "over the air" (OTA) updates, your product needs to be connected to the Wi-Fi using the MaestroUnite app. For details please see page 14.

In the unlikely event that there is a defect with this product, it is covered by the Roksan manufacturer's warranty, provided that the product was supplied by an authorised Roksan retail specialist.

For the period of cover please refer to the product page on our website at roksan.com/warranty.

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Specifications

Connectivity Summary		Power Amplifier	
Analogue Inputs	2x RCA Stereo (A2, A3) 1x Balanced XLR (A1)		
Analogue Outputs	2x RCA Stereo (Line 1,2)		
Amplifier Output	1x Pair of Speaker binding posts (L&R)		
Other Inputs / Outputs	Wi-Fi 4, BLE, 12V Trigger, Wired IR		
Power	IEC C14, Fused 6.3AT - 250V		
User Interface			
Primary Interface (on unit)	Power Button - on/standby		
Remote Control	Maestro Unite App		
Power Amplifier Section			
Power Amplifier Technology	Dual Mono Euphoria Amplifier		
Amplifier Class	AB		
Output Power, 8 Ohms (235 VAC @ 1% THD, both channels driven)	105 W		
Output Power, 4 Ohms (235 VAC @ 1% THD both channels driven)	200 W		
THD+N (1 W @ 1 kHz Both Channels driven)	<0.00 7%		
Gain	29 dB		
Signal to Noise (1 W/8 R 2 VRMS A1, both channels driven)	>85 dB		
Output Power, 8 Ohms (235VAC @ 1% THD) - Mono-Bridged	420W		
Output Power, 4 Ohms (235VAC @ 1% THD) - Mono-Bridged	630W		
Gain Matching	<0.5 dB		
Frequency Linearity (20 Hz - 20 kHz)	+0.25 dB		
Power Supply	600 VA / 36,400 uF per Rail		
Pre-Amplifier Section (Amp, Pre1, Pre2)			
Supported Features	2 x RCA Line-Level Out		
Analogue Inputs			
Maximum Input Level	1.1Vrms RCA, 2.2Vrms XLR - Stereo		2.2Vrms RCA, 4.2Vrms XLR - Mono
Music Sense	A2 Input		
AV Mode	-		
MaestroUnite			
MaestroUnite Supported	Yes		
Network Connectivity	Bluetooth LE Wi-Fi 4 (Only connects for Over-the-Air Updates)		
Mobile Application	iOS, Android		
Over-the-Air Updates	Firmware Updates are available via the MaestroUnite configured Wi-Fi connection. This can be setup to connect & update on user request or during periods of inactivity.		

Other		Power Amplifier	
Wi-Fi Protocol	Only supports 2.4GHz networks		
Wired IR Input	5 - 14 V, Mono 3.5 mm jack plug, any polarity		
12 V Trigger Input	5 - 14 V, 3.5 mm jack dual polarity (On / Standby)		
12 V Trigger Pass-through	3.5mm jack Pass through from input only		
Nominal Mains Voltage	Auto-Selecting Power Supply 100 - 120 VAC & 220 - 240 VAC		
Power Consumption	Max 610 VA Standby 0.5 W Network Standby 2 W (Standby Plus, allows fast boot)		
Mechanical			
Available Finishes	Silver Black		
Construction	Extruded and machined Aluminium front & top cover with extruded Aluminium heatsinks.		
External Dimensions with all Accessories Fitted (H x W x D)	93 x 432 x 378 mm (3 ⁷ / ₈ x 17 x 14 ⁷ / ₈ " See downloads for CAD drawings		
Weight (Product, Each)	14.9 kg (32 lb 14 oz)		
Sold As	Single		

Directives

 Monitor Audio Group declares that the apparatus "Caspian Power Amplifier". in conformity with the essential requirements and other relevant provisions of Directive 2014/53/EU".

 NOTE: This product must be earthed. Please ensure that other equipment connected to it is earthed according to the manufacturer's instructions.

Monitor Audio Group declare in own responsibility, that the Monitor Audio products described in this manual is in compliance with the following Standards and is in conformity with the essential requirements of the Radio Equipment Regulations 2017.

Listen Again.

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