

Series 7



Stereoamplifier 711

User manual



Dear client

We are proud that you decided yourself for a solution amplifier. You have acquired an amplifier with outstanding sonic performance which you will enjoy for many years.

We understand your eagerness to get started but even though please study this manual step by step before you integrate the stereoamplifier 711 in your High Fidelity system. This manual contains also useful tips for the optimization of your overall HiFi-system.

If there are any questions regarding the start-up or operation of your stereoamplifier 711 please do not hesitate to contact your dealer.

Have fun!

A handwritten signature in black ink, appearing to read 'Gallen', written in a cursive style.

Your solution - team



CE-Declaration of Conformity

Spemot AG declares that this product is in conformance with the following directives and standards:

Low Voltage Directive 2006/95/EG (EN/IEC 60065:2002)

Electromagnetic 2004/108/EG (EN 55013:2001, EN 55020:2002, EN 61000-3-2:2006, EN 61000-3-3:1995)

FCC-Notice

Note: This equipment has been tested and found to comply with the limits for a Class A 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, the user is encouraged to try to correct the interference by one or more of the following measures:

- adjust or relocate the receiving antenna
- increase the separation between the equipment and the receiver
- connect the equipment into 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

Disposal

According to the Directive 2002/96/EG of the European Parliament used consumer-electro technical appliances have to be disposed separately and have to be indicated with the following symbol.



In the case of disposal of this component please do so in conformity with legal and environmental regulations.



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1 Quick start

Unpacking	<ul style="list-style-type: none"> ⇒ Unpack the stereoamplifier 711 ⇒ Store the packing for future transportations. ▲ Treat the high quality surface with care
Positioning	<ul style="list-style-type: none"> ⇒ Position the stereoamplifier 711 on a stable base ▲ Cooling air must be able to escape unrestrictedly.
Cabling	<ul style="list-style-type: none"> ⇒ Disconnect all components of your system from the mains ⇒ Connect the 711 with your preamplifier ⇒ Connect the 711 with your speakers ⇒ Connect all components with the mains. ▲ While manipulating with cables the stereoamplifier 711 has to remain disconnected from the mains.
Settings	Define the brightness of the display, the start-input, and the start-mode,
Switch-On	<ul style="list-style-type: none"> ⇒ Switch-on your source components and the preamplifier ⇒ Turn down the preamplifier to low volume ⇒ Switch on the stereoamplifier 711 ▲ Check the cabling before switching on the 711.



2 Technical highlights

2.1 Philosophy

The ideal amplifier is perfectly load stable, 100% level and phase accurate, and has no long signal paths. It should not use tricks like over amplification and very high negative feedback to achieve good results in the lab but poor sonic performance in the listening room. The stereoamplifier 711 combines extreme speed with an ultra wide bandwidth (1MHz/-3dB) and a high current capability far beyond that of valves and output transformers. A unique and sophisticated circuit design opens up sonic qualities once considered incompatible: precision, velocity, stability and power.

2.2 Layout

Throughout, the stereoamplifier 711 is designed as a consistent dual-mono layout. Both left and right channels feature identical audio amplifiers, each with its own high efficiency power supply. The layout is optimized towards shortest signal paths. For minimal losses the stereoamplifier 711 has massive copper rails for all high current signal paths.

2.3 Amplification

From the input the stereoamplifier 711 first buffers the music signal. A high performance correction amplifier is then used to capture and correct any deviations in the signal, very quickly and very precisely. Ultra wideband amplification using no feedback loops follows, a less than 10 nanosecond transit time and level accuracy to within 0.1dB ensuring signal purity. The whole is housed within a sealed module, maintaining a common temperature across all stages to further guarantee precision. The output stage comprises 14 power transistors per channel, all mounted onto a massive copper rail which is temperature controlled for a constant quiescent current. The 711's impressive low level signal handling is reflected in its raw power delivery. Current levels of 60A and more are readily attainable.

2.4 Power supply

The supply of the amplifier section is based on modern switched mode power supplies. Four modules with 600VA each optimized for audio application combined with audiophile capacitors (>1'000'000 microFarad) provide enough power reserves even for the most demanding music signals. Circuitry that does not process audio signals should not be able to influence them. That's why we use no less than 5 dedicated power supplies for the ancillary stages.



3 Safety advice: 

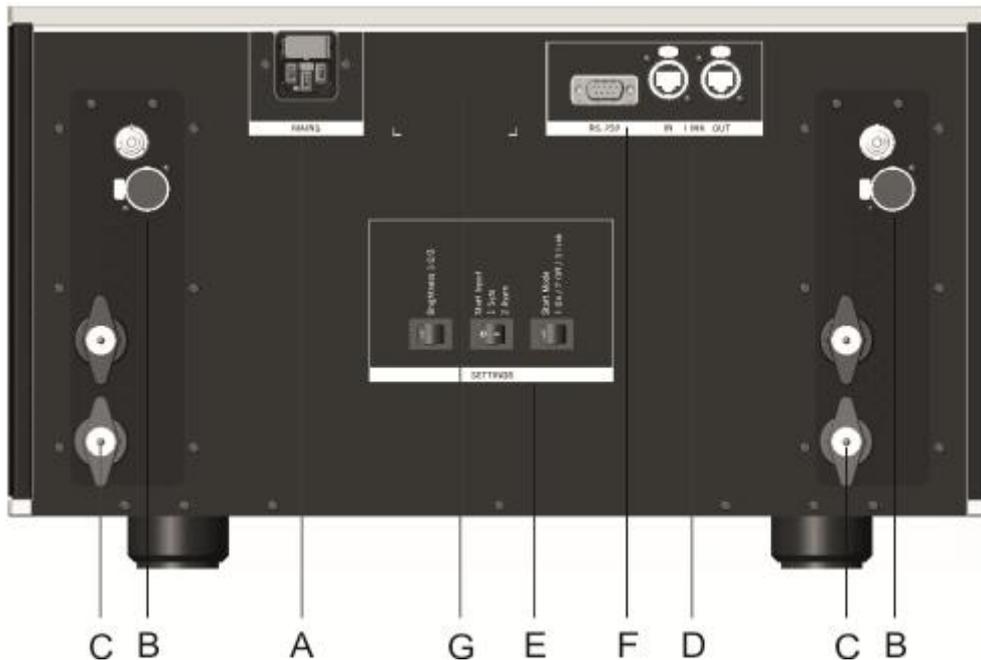
User manual	<ul style="list-style-type: none"> ⇒ Follow the safety advices ⇒ Keep this user manual.
Mains supply	<p>Exclusively use 3 phase power cords with ground conductor. Unplug the 711 from the mains in the following cases:</p> <ul style="list-style-type: none"> ⇒ before you manipulate with cables ⇒ before cleaning ⇒ during thunder storms ⇒ before you leave for longer periods
Cabling	<p>While manipulating with cables the 711 has to remain disconnected from the mains. Wrong cabling may cause damages to your 711, amplifier and loudspeakers. Excessive volumes due to inappropriate handling may cause hearing damages.</p>
Transport	<p>Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving cart/apparatus combination to avoid injury or tip over.</p>
Packing	<p>In order to omit condensation of water inside your stereoamplifier 711, let it warm up within the packing. Please keep the original packing for future transports.</p>
Operation	<p>Never run your stereoamplifier 711</p> <ul style="list-style-type: none"> ⇒ with opened housing ⇒ with closed cooling-slots ⇒ with high ambient temperatures (>40°C) ⇒ close to heat sources like radiators, etc. ⇒ with extremely high humidity for example in humid cellars ⇒ close to water (Sink, bathtub, or similar equipment)
Cleaning	<p>Use a soft and dry towel. We suggest using a nonabrasive microfiber towel. Please do not use any solvents or liquidities</p>
Service	<p>Service by a qualified person required if</p> <ul style="list-style-type: none"> ⇒ the mains-cable or the mains connectors are damaged ⇒ foreign substances or liquidity have entered the 711 ⇒ the 711 has seen rain ⇒ the 711 seems to malfunction ⇒ the 711 has fallen to the floor or the housing is damaged



4 Scope of delivery

- Stereoamplifier 711
- Mains power cord
- User manual

5 Rear panel



5.1 Mains (A)

The stereoamplifier 711 does not have a mains switch. As soon as connected with the mains it will be in operation mode OFF (<0.5W consumption)

5.2 Input (B)

Please use top grade audio cables. For longer connecting cables we suggest using the balanced inputs.



5.3 Speaker (C)

Please use top grade audio cables. Check the connectors for tight fit. Check the cables for eventual damages. Short circuits provoked by thin threads from loudspeaker cables may end in a fire.

5.4 LINK (D)

Connect the LINK-In of the 711 with the LINK-Out of your solution preamplifier. LINK-Out allows including further components in the LINK-network.

5.5 Settings (E)

The new setting gets activated after the 711 has been unplugged from the mains.

Start-Mode	OFF: The 711 remains in operation mode OFF
	ON: The 711 switches ON automatically
	LINK: The LINK-System defines the operation mode
Start-Input	Start-Input defines the active input after switch on.
Brightness	Defines the brightness of the display (1=low / 2=medium / 3=high).

5.6 RS232 – Interface (F)

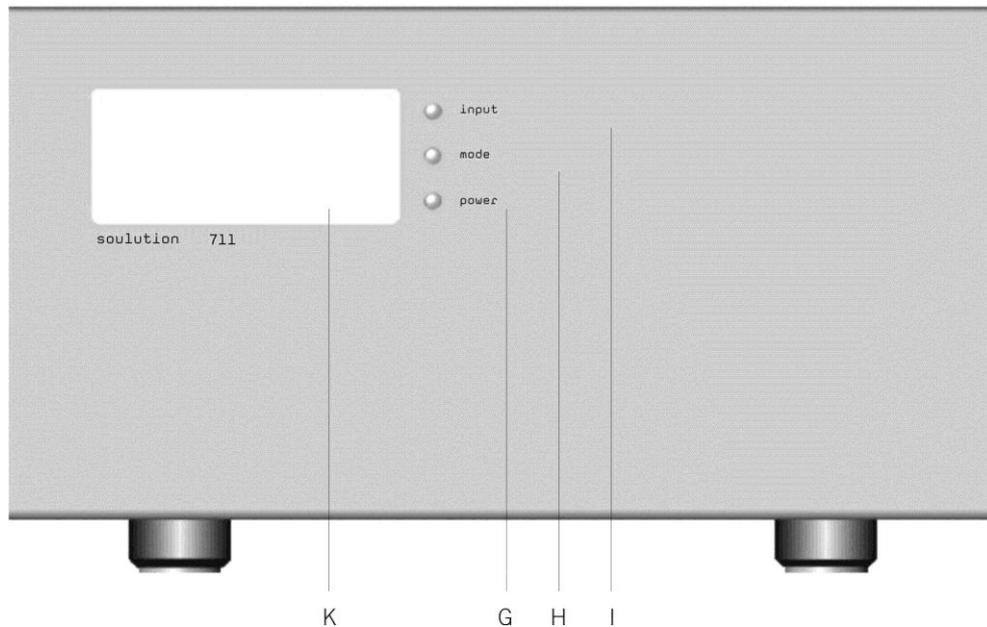
The stereoamplifier 711 can be remote controlled through the RS232 interface. All functions can be controlled and relevant information is provided to the control unit.

5.7 Type label (G)

The type label shows the serial number and the nominal power rating.



6 Front panel



6.1 Power (H)

The power button defines the operating condition ON or OFF (red LEDs). In operating condition OFF the loudspeaker terminals are muted.

6.2 Mode (I)

The mode button (de)activates the LINK function. The stereoamplifier 711 can always be switched on/off via the front panel.

6.3 Input (J)

The input button defines the active input. The inactive input gets muted.

6.4 Display (K)

The display shows all relevant information.



7 Protection functions

Comprehensive protection functions ensure safe operation and a long lifetime. The stereoamplifier 711 has the following protection functions:

Level limitation:

For too high levels at the input of the stereoamplifier 711 the soft clip circuit is activated. The activated soft clip circuit will distort the output signal significantly, the sonic performance is reduced. Please ensure that the input levels are within the limit of 1.8 V_{rms}.

Overcurrent:

If the output current to the loudspeakers exceeds 80 A the stereoamplifier 711 is switched off automatically. This represents a maximal impulse power rating of ca. 4'000 W (50 V @ 0.6Ω)

Overtemperature:

The temperature of the power transistors is permanently monitored. If the maximal operating temperature is exceeded despite of active cooling system the stereoamplifier 711 is switched off automatically.

Fuse

The mains connection has a fuse which protects your stereoamplifier 711 against too high power consumption. Please replace with the same fuse type. The fuse is located within the mains switch on the rear side of the stereoamplifier 711.

Model 220 - 240 V, 50-60Hz	10A/T 250V micro fuse 5x20mm
Model 220 V, 60Hz	10A/T 250V micro fuse 5x20mm
Model 100 - 120 V, 50-60Hz	15A/T 250V micro fuse 5x20mm



8 Trouble shooting

Error	Measure
No display	Check the cabling to the mains supply. Eventually replace the fuse of your stereoamplifier 711.
No music	Check the cabling, whether the correct input (SYM/ASYM) is activated, whether the preamplifier is switched on and if the right source has been selected, whether the source component is switched on and does output signal (Mute, Pause, etc.).
PS-A FAIL	The switched-mode power supply A has failed. Switch-off the 711 and try again after approx. 30 sec.
PS-B FAIL	The switched-mode power supply B has failed. Switch-off the 711 and try again after approx. 30 sec.
PS60 FAIL	The auxiliary 60V power supply has failed
AMP1 FAIL	The left amplifier channel has a malfunction
AMP2 FAIL	The right amplifier channel has a malfunction
DATA -CON	The communication to the audio channels is broken

8.1 Actions after the appearance of an error

If you can not identify the error please disconnect the mains supply (before you disconnect the stereoamplifier 711 has to be in operating condition OFF) and contact your soulution dealer.



9 Warranty

All solution products are guaranteed against defects in material and workmanship for five years from date of purchase. The warranty is not transferable.

The warranty is void if the stereoamplifier 711 has been subject to misuse, or negligence or has been modified, repaired or opened by a non authorised person without written authorisation of Spemot AG.

For the return transport to our premises please use exclusively the original packaging. Transport damages are not subject to this guarantee, repairs will be charged. We recommend effecting a transport insurance. If you do not possess the original packaging no more please contact your solution dealer.

Basic repairs may be completed by your solution dealer. Please clarify whether he is able to do the work before you send the stereoamplifier 711 back to us.

10 Service

If your stereoamplifier 711 needs service please contact your solution dealer. For further information see www.solution-audio.com



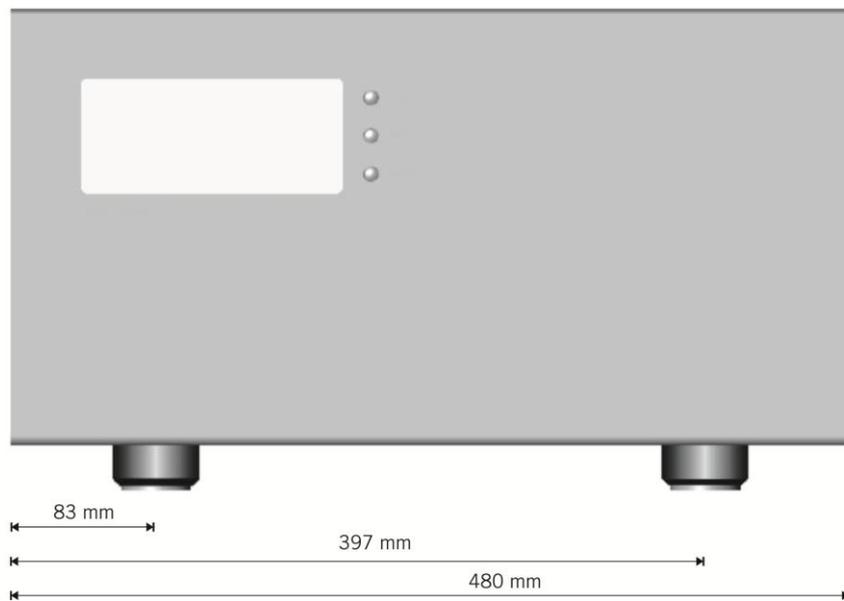
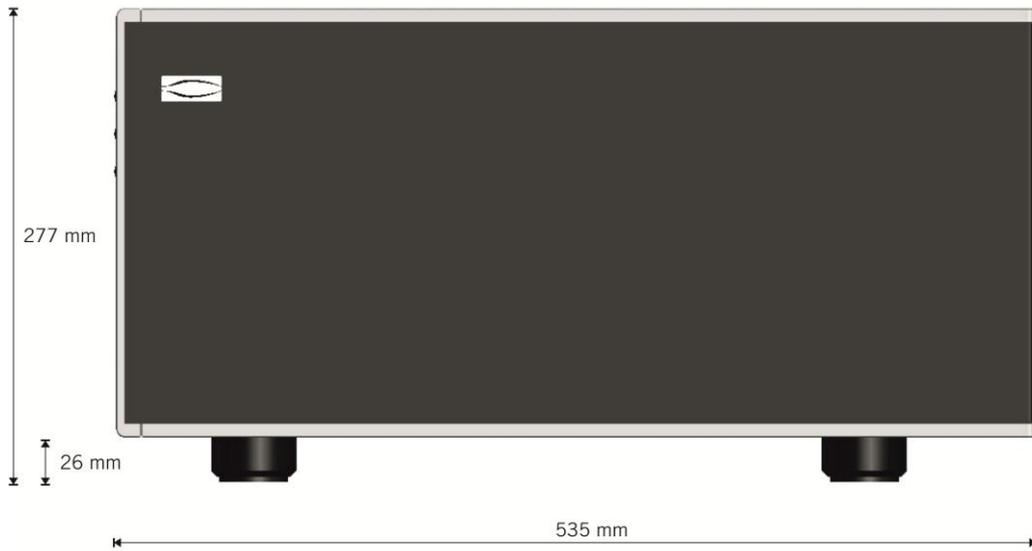
11 Specification

		Data	
Power rating			
Nominal rating 120V		1'800	W
Nominal rating 230V		2'300	W
Audio power rating	@ 8Ω	2 x 150	W
	@ 4Ω	2 x 300	W
	@ 2Ω	2 x 600	W
General data			
Standby / OFF		<0.5	W
Idle		ca. 200	W
Input			
Impedance	XLR	4.8	kΩ
	cinch	10	kΩ
Sensitivity		1.55	Vrms
Output			
Impedance		0.001	Ω
Output voltage max.		35	Vrms
Output current max.		120	A
Impulse rating		> 6'000	W
Performance			
Voltage amplification		+26	dB
Frequency response		DC-1	MHz
Slew rate		400	ns
THD+N		<0.001	%
Signal to noise ratio		107	dB
Crosstalk	@ 1kHz	< -120	dB
Damping factor	@ 100Hz	> 10'000	
Weight		ca. 65	kg

Technical specifications are subject to change without prior notification.



12 Dimensions



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