

727 preamplifier
User manual

#### Dear client

We are proud that you have chosen a soulution preamplifier. In doing so, you have acquired an audio component of outstanding quality with exceptional sonic performance which we are sure you will enjoy for many years to come.

It is important that you study this user manual carefully, step by step, before you install the 727 preamplifier in your audio system. The manual contains information on how the 727 preamplifier works, relevant safety instructions and recommendations for optimizing your entire audio system.

If you have any questions regarding the installation, setup or operation of your 727 preamplifier, please do not hesitate to contact your dealer.

Enjoy!

soulution Team

1



#### **CE-Declaration of Conformity**

Spemot AG declares that this product conforms to the following directives and standards:

Low Voltage Directive 2014/35/EU

Electromagnetic Compatibility 2014/30/EU

#### **FCC-Notice**

Note: This equipment has been tested and found to comply with the limits for a Class B 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 is found to cause unwanted or harmful interference to radio or television reception when switching on or off, the user is encouraged to take one or more of the following measures:

- adjust or relocate the receiving antenna of the affected appliance
- increase the separation between the equipment and the receiver
- connect the equipment into a mains outlet on a circuit different from that to which the receiver is connected
- consult your dealer or an experienced radio/TV technician for help

#### Disposal

According to Directive 2012/19/EU of the European Parliament, consumer electro-technical appliances must display the following symbol and must be disposed of separately. In the event of this component requiring disposal please do so in conformity with all locally applicable legal and environmental regulations.



# Table of contents

1	Highlights	4
2	Safety advice:	6
3	Unpacking	7
4	Scope of delivery	8
5	Setup	8
6	Rear and front view	9
7	Connections	. 10
8	Operation	. 14
9	Configuration	. 17
10	Remote control	. 22
11	Firmware Update	. 23
12	Troubleshooting	. 24
13	Service	. 24
14	Specifications	. 25
15	Dimension sheet	26

3



# 1 Highlights

## 1.1 Layout

The 727 preamplifier (including the power supplies and optional phono amplifier) was designed to be entirely dual-mono in its layout. The left and right channels each have their own PCB and are thus completely separated from each other. This results in much better channel separation (> 130 dB) than with previous models. The sensitive analog circuits of the 727 preamplifier are also physically separated from the mains and digital sections of the preamplifier. A massive aluminum shield separates the two sections for minimal interference.

#### 1.2 Input stage

The innovative input stage of the 727 preamplifier enables exceptional common mode rejection without compromising the input stage by introducing noise. This is achieved with parallelized instrumentation amplifiers designed for wide bandwidth (20MHz), lowest noise (noise density < -160dBV/ $\sqrt{\rm Hz}$ ) and optimal common mode rejection (CMMR >105dB). This ensures that even the faintest musical signals can be properly received by the 727 preamplifier.

#### 1.3 Volume control

Relay-switched high precision metal foil resistors form an 80 step (1 dB) volume control. Each channel has its own volume control resistor network. The volume control also allows balance adjustment.

To avoid unpleasant clicking noises or harmful voltage peaks during volume adjustments, the 727 preamplifier is provided with a second volume control path which is active only during volume adjustments. This secondary, IC based volume control alters the volume without any click or pops. Once the new volume is set, the 727 will revert to the sonically superior path with its high-precision metal foil resistors.

#### 1.4 Phono-preamplifier (optional)

Small and fine output signals, especially from MC cartridges, are received by an instrumentation amplifier optimised for lowest noise and highest common mode rejection. With its adjustable gain (+40 dB to +80 dB @ 1kHz) and termination impedance (20 $\Omega$  to 1k $\Omega$ , 47k $\Omega$ , 0pF to 70pF) the phono input can be adapted very precisely to your pickup system. The use of very fast amplifier stages (-3dB @ 2MHz) ensures highly accurate reproduction of the RIAA equalization curve (frequency and phase response).

#### 1.5 Output stage

The Class-A output stage has been optimised for speed, precision and high peak currents. Thanks to its low output resistance the output stage can drive even long cables without difficulty. With a frequency bandwidth of 20 MHz (-3 dB) and the accompanying minimal phase shift in the audio band, all details of the music are reproduced true to life. The result is a three-dimensional spatial sound experience full of musicality and natural timbres. The sheer power of the output stage guarantees that the rich detail of the music reaches your power amplifier.

#### 1.6 Distributed Local Power Supply:

The basis for the dual mono power supply of the 727 preamplifier is a switched mode power supply (SMPS) which converts mains voltage into an intermediate DC voltage. Highly efficient DC-DC converters and extremely low-noise and fast linear regulators generate the supply voltages needed to operate the 727 preamplifier. Local linear regulators are placed next to each current sink (OpAmp, transistor, etc.). This ensures lowest noise levels on the analog supplies and shortest signal paths. Large filter capacitors, as typically used for linear power supplies with transformers and rectifiers, are no longer required.



# 2 Safety advice:

**User manual** ⇒ Follow the safety advice

⇒ Keep this user manual

**Mains supply** 3 phase power cords with a ground conductor are mandatory.

Unplug the 727 from the mains:

⇒ before you adjust or manipulate mains cables

⇒ before cleaning the unit⇒ during thunderstorms

⇒ when leaving the unit unused for longer periods

Cabling Unplug the 727 from the mains while connecting or disconnect-

ing interconnect cables. Incorrect cabling may cause damage to your 727, amplifier or loudspeakers. Excessive volume due to

inappropriate handling may cause hearing damage.

**Transport** Use only the cart, stand, tripod, bracket or table specified by

the manufacturer or sold with the apparatus. When a cart is used, take care when moving cart/apparatus combination to

avoid injury or tipping over.

Packing To avoid the formation of water condensation within the 727,

allow it to reach room temperature before unpacking it. Keep the original packing safely for future transport requirements.

**Operation** Never run your preamplifier 727

⇒ whilst the casing is open⇒ with obstructed cooling slots

⇒ in high ambient temperatures (>40°C)

⇒ in proximity to heat sources like radiators, etc.

 $\Rightarrow$  in areas of extreme humidity (for example in a humid cellar)

⇒ close to water (sink, bathtub, taps or similar facilities)

Cleaning Use a soft and dry towel. We suggest using a nonabrasive mi-

crofiber towel. Please do not use any solvents or liquids.

Service Service by a qualified person will be required if

⇒ the mains cable or the mains connectors are damaged ⇒ foreign substances or liquids have entered the 727

⇒ if the 727 has been rained on

⇒ the 727 exhibits any form of malfunction

⇒ the 727 has been dropped⇒ if the casing is damaged

6

# 3 Unpacking





Before opening, let the crate warm up to room temperature to prevent water condensation forming inside the unit.





Remove all screws (3-5 screws per side) and keep them.





Lift off the top cover by using the metal handles on the sides of the crate.





The 727 can now be easily accessed. Take care; the unit is heavy!



Please keep the original packing for future transport requirements. Always ship the 727 preamplifier in its original packing.

7



# 4 Scope of delivery

- ⇒ 727 preamplifier
- ⇒ IR remote control
- ⇒ Spare fuses
- ⇒ Set of feet washers

Please check the scope of delivery. If anything is missing or you notice any damage while unpacking, please contact your authorised dealer.

# 5 Setup

Remove the 727 preamplifier carefully from the base of the wooden crate and position it on a stable surface in an appropriate location ensuring cooling air can circulate and escape unhindered. Do not cover the surface of the 727 preamplifier with a cloth or any other object as the complete chassis acts as a heat sink.

The feet of the 727 preamplifier feature a constrained layer damping system which will mitigate vibrations away from the unit. The damping system is designed to work on any surface material. The feet washers have two purposes; a) they are part of the feet's damping system and b) they prevent the feet from generating scratches on soft surfaces.

For best results we suggest using a dedicated audio rack system for all of your audio components.

# 6 Rear and front view



Rear view of the 727 preamplifier

- A) AC mains input
- B) Balanced inputs IN 1 ... IN 3
- C) Unbalanced inputs IN 4, IN 5
- D) Phono input IN 6 (optional)
- E) Outputs

- F) LINK in, LINK out
- G) LINK Series 3
- H) RS232 interface
- I) Firmware
- J) Type label



Front view of 727 preamplifier

- K) power button
- L) mute button
- M) prog button

- N) Rotary knob
- O) Display and IR eye



# 7 Connections

# 7.1 Mains supply (A)

Connect the 727 preamplifier to the mains supply. Please use a high-quality power cable for optimal sonic results. The 727preamplifier has no power switch. The device will enter standby mode as soon as it is connected to the mains supply.

**A** unplug mains

Unplug the 727 preamplifier from the mains supply when

⇒ left unused for longer periods

⇒ adjusting the wiring of your audio system

⇒ during thunderstorms

 $\Rightarrow$  Set the 727 to standby before unplugging it from the mains.

## 7.2 Balanced inputs IN 1 ... IN 3 (B)

Connect your source devices to the 727 preamplifier with high-quality interconnect cables. For long cable runs, we recommend balanced cables. Thanks to the very high common mode rejection of the 727 preamplifier, any noise picked up by long cable runs is effectively suppressed. For best results, we recommend keeping interconnect and power cables well separated from each other.

The maximum input level for the 727 preamplifier is 9Vpp (peak-peak). Higher input signals will overload the input stage resulting in very high distortion regardless of the volume level selected. Ensure your source device does not exceed the maximum input level of the 727 preamplifier.

XLR-pin-out: pin1 = ground

pin2 = non-inverting input pin3 = inverting input

A Clipping

Make sure that the maximum output voltage of your source devices does not exceed the maximum input voltage of the 727 preamplifier. For best results, the output voltage of your source devices should match the maximum input voltage of your power amplifier. The MAX-VOLUME function allows you to protect your audio system from excessive volume and your power amplifiers

from clipping.

A Hot plugging

Before you adjust the cabling of the 727 preamplifier always put the unit into standby and disconnect it from the mains.

#### 7.3 Unbalanced inputs IN 4, IN 5 (C)

Connect your source devices with unbalanced interconnect cables to the 727 preamplifier. For longer cable runs we suggest using the balanced inputs.

The balanced input stage of the 727 preamplifier can be configured as a differential or an unbalanced input stage. The configuration functions IN 4: INPUT-TYPE and IN 5: INPUT-TYPE allow you to select the desired mode of operation.

A Clipping

Make sure that the maximum output voltage of your source devices does not exceed the maximum input voltage of the 727 preamplifier. For best results, the output voltage of your source devices should match the maximum input voltage of your power amplifier. The MAX-VOLUME function allows you to protect your audio system from excessive volume and your power amplifiers from clipping.

A Hot plugging

Before you adjust the cabling of the 727 preamplifier always put the unit into standby and disconnect it from the mains.

#### 7.4 Phono-input IN 6 (optional) (D)

Connect your turntable (MM or MC cartridge) to the unbalanced input IN 6. The termination impedance can be optimally adjusted to your cartridge via the configuration functions. The termination impedance for MC systems ranges from  $20\Omega$  to  $1k\Omega$ . In addition to the standard resistive termination of  $47k\Omega$  for MM systems, you can optimize the frequency response by adjusting the capacitance from 0pF to 70pF.

For best sonic results we recommend setting the gain (+40dB to +80dB @ 1 kHz in 10dB steps) as low as possible

The high-pass filter according to RIAA-IEC (-3dB @ 20Hz) can be activated with the configuration function PHONO: HIGH PASS. A high-grade ground terminal at the rear panel of the 727 ensures optimal ground connection to your turntable if required.

A Line level:

Never connect a line-level source component to the phono input IN 6. Excessive input levels will cause clipping and overheating of the phono preamplifier.

A Hot plugging

Before you adjust the cabling of the 727 preamplifier always put the unit into standby and disconnect it from the mains.



## 7.5 Output (E)

The 727 preamplifier features two balanced and one unbalanced outputs. The excellent load stability of the output stage allows even long cables runs to power amplifiers without any degradation of the music signal. For long cable runs to your power amplifiers we recommend using balanced cables.

Gain (@ Volume 80)	IN 1 IN 5	IN 6 Phono
XLR-output	+4dB	+44dB + 84dB
RCA-output	-2dB	+38dB + 78dB

The IN x: GND-LIFT function determines whether the ground pin of the XLR outputs is (dis)connected to the ground while the respective input is selected. This can be used to interrupt ground loops. The negative pin of the RCA output is not affected by this setting and always remains connected to the ground of the 727 preamplifier.

The 727 is a non-inverting amplifier. However, the phase of the output signal can be inverted by using the configuration functions IN x: POLARITY.

XLR-pin-out: pin1 = ground

pin2 = non-inverting input pin3 = inverting input

**A** Ground loop If no other measures are able to eliminate hum noise in your

system, use the configuration functions IN x: GND-LIFT. For optimal sonic performance, pin 1 of the XLR outputs should be

CONNECTED to the ground of the 727 preamplifier.

A Hot plugging Before you adjust the cabling of the 727 preamplifier always

put the unit into standby and disconnect it from the mains.

# 7.6 LINK in, LINK out (F)

The LINK connection (RJ45- CAT 5 cable) allows all connected soulution devices to be switched on and off centrally. Do not connect the LINK in or LINK out to your network (LAN). The 727 preamplifier does not feature any LAN connectivity.

# 7.7 LINK Series 3 (G)

Connect the LINK Series 3 socket to the Link-Com socket on your Series 3 unit. Series 3 units connected to the 727 preamplifier via this interface can be centrally switched on and off. Use cables with 3.5mm audio jacks. The LINK Series 3 connection does not convey any audio signal.

# 7.8 RS232 - interface (H)

The RS232 interface allows home automation systems to control all functions of the 727 preamplifier and to read relevant information about the unit's operating status.

# 7.9 Firmware (J)

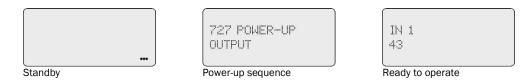
The USB input is provided for firmware updates only. For detailed instructions please refer to section 11 Firmware Update.



# 8 Operation

## 8.1 power (K)

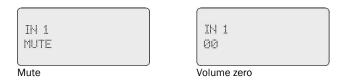
The power (K) button turns on the 727 preamplifier. The start up sequence takes a short while as the power supplies for the different sections of the circuit are initiated. Progress will be reported in the display (O). Once the unit is ready to operate it will show the active input and volume level in the display (O).



If the 727 preamplifier is on, the power (K) button will put the unit back into standby (power consumption <1W).

## 8.2 mute (L)

The mute (L) button disconnects or reconnects all inputs and outputs from the analog circuits of 727 preamplifier. While the unit is muted, the volume level cannot be altered and the DIM-Function is unavailable.4



If the volume level is turned down to zero, there will be no output signal just as though the unit is muted. However, the volume and DIM functions remain active.

## 8.3 prog (M)

The 727 preamplifier can be configured to suit the individual requirements of your audio system. Pressing the prog (M) button (de)activates the configuration functions.

# 8.4 Rotary knob (N)

The multi-purpose rotary knob is used to control the volume, select the input, dim the volume, and to select the configuration functions of the 727 preamplifier.

## Operation-Mode

short	<b>Pressing</b> the rotary knob for less than 1 second (de)activates the
short	Volume-Dim function.

>>>> long	<b>Pressing</b> the rotary knob for more than 1 second activates the In-
	put select mode.

<b>Turning</b> the rotary knob while the unit is in input select mode will
in/decrement the input.

# **Configuration mode**

<b>Turning</b> the rotary knob (N) selects the desired configuration
function.

<b>&gt;&gt;&gt;</b>	<b>Pressing</b> the rotary knob (N) confirms the selected configuration
	function and activates the value range (3 LEDs lit).

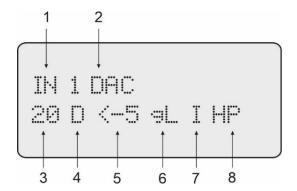
<b>Iurning</b> the rotary knob (N) selects the desired val		<b>Turning</b> the rotary knob (N) selects the desired value
--	--	--

**Pressing** the rotary knob (N) confirms the new value.



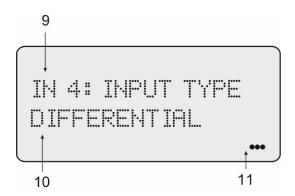
# 8.5 Display (0)

## Normal mode



- 1) Selected input: IN 1 to IN 6
- 2) Name of the selected input: INx: NAME
- 3) Current volume level
- 4) Volume mode: D = DIM, M = MAX, S = SURROUND
- 5) Balance setting
- 6) Ground lift setting
- 7) Polarity setting
- 8) High-pass filter (IEC) phono

# Configuration mode



- 9) Configuration function
- 10) Value of function
- 11) LEDs are lit whilst values are changeable

# 9 Configuration

Function	Values	Remarks
START-INPUT IN 2	IN 1, IN 2, IN 3, IN 4, IN 5, IN 6	Defines which input is to be activated when the unit is switched on.
START-VOLUME 40	1 <b>30</b> 50	Defines the start volume level.
DIM-VOLUME 20	1 <b>20</b> 40	Defines the volume for the DIM function.
MAX-VOLUME 75	50 <b>80</b>	Defines the maximum volume.
IN 1: STATE ENABLED	<b>ENABLED</b> , DIASBLED	Input IN 1 can be (de)activated. Deactivated inputs can no longer be selected.
IN 1: NAME DAC	OFF, CD, DAC, PHONO, SACD, TAPE, etc.	Input IN 1 can be individually named.
IN 1: BALANCE <- 4	<-909 ->	The balance for input IN 1 can be adjusted in 1dB steps.
IN 1: POLARITY IN PHASE	IN PHASE INVERTED	This determines whether the output signal for input IN 1 is in phase or inverted.
IN 1: GND-LIFT CONNECTED	CONNECTED DISCONNECTED	Determines whether pin 1 of the XLR outputs become ground or remain floating when input IN1 is selected.



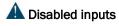
Function	Value	Remarks
IN 2: STATE ENABLED	<b>ENABLED</b> , DIASBLED	Input IN 2 can be (de)activated. Deactivated inputs can no longer be selected.
IN 2: NAME SACD	OFF, CD, DAC, PHONO, SACD, TAPE, etc.	Input IN 2 can be individually named.
IN 2: BALANCE <- 4	<- 909 ->	The balance for input IN 2 can be adjusted in 1dB steps.
IN 2: POLARITY INVERTED	IN PHASE INVERTED	This determines whether the output signal for input IN 2 is in phase or inverted.
IN 2: GND-LIFT CONNECTED	CONNECTED DISCONNECTED	Determines whether pin 1 of the XLR outputs become ground or remain floating when input IN2 is selected.
IN 3: STATE ENABLED	<b>ENABLED</b> , DIASBLED	Input IN 3 can be (de)activated. Deactivated inputs can no longer be selected.
IN 3: NAME AUX	OFF, CD, DAC, PHONO, SACD, TAPE, etc.	Input IN 3 can be individually named.
IN 3: BALANCE <- 4	<-909 ->	The balance for input IN 3 can be adjusted in 1dB steps.
IN 3: POLARITY IN PHASE	IN PHASE INVERTED	This determines whether the output signal for input IN 3 is in phase or inverted.

Function	Value	Remarks
IN 3: GND-LIFT CONNECTED	CONNECTED DISCONNECTED	Determines whether pin 1 of the XLR outputs become ground or remain floating when input IN3 is selected.
IN 4: STATE ENABLED	<b>ENABLED</b> , DIASBLED	Input IN 4 can be (de)activated. Deactivated inputs can no longer be selected.
IN 4: NAME TUNER	OFF, CD, DAC, PHONO, SACD, TAPE, etc.	Input IN 4 can be individually named.
IN 4: BALANCE <- 4	<- 9 <b>0</b> 9 ->	The balance for input IN 4 can be adjusted in 1dB steps.
IN 4: POLARITY IN PHASE	IN PHASE INVERTED	This determines whether the output signal for input IN 4 is in phase or inverted.
IN 4: GND-LIFT CONNECTED	CONNECTED DISCONNECTED	Determines whether pin 1 of the XLR outputs become ground or remain floating when input IN4 is selected.
IN 4: INPUT TYPE DIFFERENTIAL	<b>DIFFERENTIAL</b> , UNBALANCED	Input IN 4 can be defined as differential or unbalanced input.
IN 5: STATE ENABLED	<b>ENABLED</b> , DIASBLED	Input IN 5 can be (de)activated. Deactivated inputs can no longer be selected.
IN 5: NAME TAPE	<b>OFF,</b> CD, DAC, PHONO, SACD, TAPE, etc.	Input IN 5 can be individually named.



Function	Values	Remarks
IN 5: BALANCE <- 4	<- 9 <b>0</b> 9 ->	The balance for input IN 5 can be adjusted in 1dB steps.
IN 5: POLARITY IN PHASE	IN PHASE INVERTED	This determines whether the output signal for input IN 5 is in phase or inverted.
IN 5: GND-LIFT CONNECTED	CONNECTED DISCONNECTED	Determines whether pin 1 of the XLR outputs become ground or remain floating when input IN5 is selected.
IN 5: INPUT TYPE DIFFERENTIAL	<b>DIFFERENTIAL</b> , UNBALANCED	Input IN 5 can be defined as differential or unbalanced input.
PHONO: STATE ENABLED	<b>ENABLED</b> , DIASBLED	The phono input IN 6 can be (de)activated. Deactivated inputs can no longer be selected.
PHONO: GAIN 50dB	<b>40</b> 80	Defines the gain of the phono preamplifier @ 1kHz.
PHONO: HIGH PASS ON	ON, OFF	(De)activates the high-pass filter (IEC: - 3dB @ 20Hz).
PHONO: IMP-Res 300ohm	20 <b>100</b> 1260, 47k	Sets the resistive termination impedance of the 727s phono input.
PHONO: IMP-Cap 10pF	070	Defines the capacitive termination impedance of the 727s phono input.

Function	Values	Remarks
SURROUND-INPUT IN 4	<b>OFF</b> , IN 1, In 2, IN3, IN 5,	Defines the surround input. The volume and balance settings are ignored for the surround input.
SURROUND-VOLUME 65	<b>40</b> 80	Define the surround volume level.
BRIGHTNESS HIGH	DISPLAY OFF, LOW, MEDIUM, HIGH	The brightness can be adjusted in three levels. When set to display off, the display switches off about 15 seconds.
REMOTE-ID Pre1	<b>Pre1</b> , Pre2	The remote ID of the 727 is defined. The remote ID of the IR remote control must match (see page 22).
LOAD-DEFAULT NO		Activates the default values (shown in bold) for all the functions.
FIRMWARE VERSION FW-1.42		Displays the firmware version of the unit.



Disabled inputs cannot be selected. When scrolling for a new input, disabled inputs will be skipped and their configuration functions unavailable.

All inputs disabled If all inputs are disabled the 727 will not function. The following error messages will appear:

> MO IMPUT EMABLED press PROG

select IMx:STATE to enable IMPUTS



# 10 Remote control

Butto	n	Pre-Modus	CD-Modus	
(1)	IR-transmitter	Operation up to 5m distance and at an angle of ±45°.		
(2,3)	<b>▲ ▼</b>	Volume +/-		
(4)	DIM / ▶ II	Volume-Dim Play/Pause		
(5/6)	<b>4 &gt;</b>	Select +/-	Next / Previous track	
(7)	4	Enter Function for Program-Mode		
(8)	Р	(De)activates Program-Mode		
(9)	<b>■</b> ×	Mute -		
(10)	ტ	ON / OFF		
(11)	<b>_</b>	-	Open/Close	
(12)	PRE	-	Activates PRE-Mode	
(13)	CD	Activates CD-Mode	-	

# Change of Remote Ctrl ID:

Press the respective three buttons simultaneously for approximately 5 seconds:

⇒ Preamplifier ID 1:  $\blacktriangleleft$  (6),  $\blacktriangleright$  (5),  $\blacklozenge$  (10) ⇒ Preamplifier ID 2:  $\blacktriangleleft$  (6),  $\blacktriangleright$  (5),  $\blacktriangleleft$  (9) ⇒ Phono  $\blacktriangleleft$  (6),  $\blacktriangleright$  (5),  $\hookleftarrow$  (7) ⇒ DAC  $\blacktriangleleft$  (6),  $\blacktriangleright$  (5),  $\blacktriangleright$  (8)



## Replacing the batteries (2 x AAA):

- $\Rightarrow$  Open the battery tray on the rear of the handset.
- $\, \Rightarrow \,$  Insert the batteries into the tray as indicated.
- ⇒ Ensure correct polarity of the batteries.
- ⇒ Close the tray with corresponding screw.
- ⇒ Dispose of the exhausted batteries.

# 11 Firmware Update

#### **USB-Stick:**

The firmware of all soulution products can be updated via the USB port on the back panel. To update firmware, please prepare a USB stick (FAT32 formatted, UBS2.0) containing the required firmware data.

You can find the latest firmware for your 727 preamplifier on our website www.soulution-audio.com. Unzip the downloaded .zip file and copy the firmware files to the root directory of the USB stick. Make sure there are no other files or folders on the USB drive.

#### **Update-process:**

- ⇒ Prepare the USB stick with the firmware files (no other files should be present).
- □ Unplug the unit from the mains supply.
- ⇒ Insert the USB stick into the USB interface "Firmware".
- ⇒ Connect the unit to the mains supply.
- ⇒ Follow any instructions in the display.
- ⇒ Once the new firmware has been loaded, the 727 will be in standby mode.
- ⇒ Power up the 727 preamplifier.
- ⇒ Press the prog button.
- $\Rightarrow$  Select configuration function LOAD-DEFAULT and confirm with YES.
- ⇒ Configure the 727 preamplifier to suit your requirements.



# 12 Troubleshooting

No Display 

⇒ check the mains connection

⇒ check the fuse of your house installation⇒ check the fuse of the preamplifier 727

 $\Rightarrow$  check the BRIGHTNESS setting (DISPLAY-OFF)

**No music** ⇒ check the cabling of your audio system

⇒ check whether the correct input is selected
 ⇒ check whether the source component is muted
 ⇒ check whether the power amplifier is switched on
 ⇒ check whether the power amplifier is muted

**OVERCURRENT** If a current > 0.5 A is detected at the output of the 727, it

switches off and the display shows OVERCURRENT

⇒ disconnect the 727 from the mains supply

⇒ check the wiring to your power amplifier (short cut)⇒ check the input stage of your power amplifier (short cut)

**PSU FAIL...** The 727 monitors all necessary supply voltages. If a supply

voltage fails, the 727 will switch itself to MUTE with the corre-

sponding error code shown in the display.

⇒ note the error code

⇒ disconnect the 727 from the mains supply

# 13 Service

If you cannot identify or rectify a fault by following the troubleshooting measures, please disconnect the 727 preamplifier from the mains supply and contact your authorised soulution dealer.

# 14 Specifications

General				
Nominal voltage		100 - 240 V, 50-60 Hz		
Power rating		120 W		
Consumption	Standby	<1 W		
	ON regular operation	60 W		
Line-inputs:	IN 1IN 5			
Gain		+4 dB		
Input voltage		max. 9 Vpp		
Frequency response		DC-20 MHz		
Phase response	@ 20kHz	< 0.2 °		
CMRR		> 105 dB		
THD+N		< -120 dB		
Signal to noise ratio	20Hz - 20kHz @ 1Vrms	> 120 dB		
	20Hz - 20kHz @ 6.5Vrms	> 140 dB		
Noise density	Input related	< -160 dBV/√Hz		
Channel separation		> 130 dB		
Input impedance		4.4 MΩ		
Phono-input	IN 6 (optional)			
Gain		+40+80 dB		
Frequency response		DC - 2 MHz		
THD+N		< -120 dB		
Noise density	Input related	< -170 dBV/√Hz		
Input impedance	Resistive	$20~\Omega$ - $47~\text{k}\Omega$		
	Capacitive	0 - 70 pF		
Outputs				
Output voltage	Balanced	max. 14 Vpp		
	Unbalanced	max. 7 Vpp		
Output current		max. 0.5 A		
O. d	Balanced	0.8 Ω		
Output impedance	Dalaticeu	0.0 32		
Output impedance	Unbalanced	0.4 Ω		
LINK-Out				
		0.4 Ω		

Technical specifications are subject to change without prior notification.



# 15 Dimension sheet







Spemot AG
Industriestrasse 70
CH-4657 Dulliken

www.soulution-audio.com info@soulution-audio.com

