

Digital-Player 540

User manual



soulution
nature of sound



Dear client

We are proud that you decided yourself for a solution product. You have acquired a product 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 Digital-Player 540 in your High Fidelity system. This manual contains also useful tips for the optimisation of your overall HiFi-system.

If there are any questions regarding the start-up or operation of your Digital-Player 540 please do not hesitate to contact your dealer.

Have fun!



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 Compatibility 2004/108/EG (EN 55013:2001, EN 55020:2002, EN 61000-3-2:2006, EN61000-3-3:1995)

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 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 a mains 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	<p>Unpack the Digital-Player 540 and store the packing for future transportations.</p> <p><u>Security advice:</u> Your Digital-Player 540 has a top class surface. Please take care during installation.</p>
Positioning	<p>Position the Digital-Player 540 on a stable base.</p> <p><u>Security advice:</u> Cooling air must be able to circulate and escape unrestricted.</p>
Cabling	<p>Disconnect all electrical appliances of your HiFi-system from the mains supply. Connect your Digital-Player 540 with your (pre)amplifier (according to user manual). Use the respective signal cables and the cable for the LINK-system. Reconnect the Digital-Player 540 and all other components of your HiFi-system with mains supply. Please use the enclosed high class mains cable for your Digital-Player 540.</p> <p><u>Security advice:</u> While manipulating with cables the Digital-Player 540 has to remain disconnected from the mains supply.</p>
Programming	<p>Default values for all functions are programmed. No additional programming is required for the start-up of your Digital-Player.</p>
Switch on	<p>Switch-on your (pre) amplifier and turn down the volume of your (pre)amplifier. Switch on your Digital-Player 540</p> <p><u>Security advice:</u> Before you switch on the Digital-Player 540 check whether the cabling is done correctly. Check the volume setting in case you connected the Digital-Player 540 directly to an amplifier.</p>



Important security advices:

User manual:

Read this user manual carefully before you start-up the Digital-Player 540 and follow all installation and security advices.

Please keep this user manual.

Mains supply:

Exclusively use 3 phase power cords with ground conductor. They may not be crushed by objects.

Unplug your Digital-Player 540 from the mains connection in the following cases:

- before you manipulate with cables
- before cleaning
- during thunder storms or
- before you leave for longer periods

Cabling:

While manipulating with cables the Digital-Player 540 has to remain disconnected from the mains. Before you disconnect the mains the Digital-Player 540 has to be in operating condition OFF. Wrong cabling may cause damages to your Digital-Player 540, your (pre)amplifier or to your loudspeakers. Excessive volumes due to inappropriate handling may cause hearing damages.

Transport:

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.



Packing:

Please keep the original packing for future transports. The original packing is optimal protection against potential damages.

Operation:

Never run your Digital-Player 540

- with opened housing
- with closed cooling-slots
- with high ambient temperatures ($>40^{\circ}\text{C}$)
- close to heat sources like radiators, heatings, ovens or similar appliances dissipating heat
- with extremely high humidity for example in humid cellars or rooms similar humidity
- close to water (Sink, bathtub, or similar equipment)

Cleaning:

Use a soft and dry towel. We suggest using a non abrasive micro fibre towel. Please do not use any solvents or liquidities.

Service:

Do not try to repair your Digital-Player 540 by yourself. It needs a service check by a qualified person in the following cases:

- the mains-cable or the mains connectors are damaged
- foreign substances or liquidity has entered the Digital-Player 540
- the Digital-Player 540 has seen rain
- the Digital-Player 540 seems to malfunction
- the Digital-Player 540 has fallen to the floor or the housing is damaged

Serial-Nr.: **540 -** _____

Please note the serial-number of your Digital-Player 540 above.



3 Technical Highlights

3.1 Layout

The power supply units, the CD/SACD mechanism as well as the digital circuits are strictly separated. The analog output section is realized in dual mono layout.

3.2 Drive

The Digital-Player 540 uses a top class mechanism of the Esoteric model range. It allows for optimal data read-out of the CD as well as the SACD data.

3.3 DSP (Digitaler Signal Processor)

A powerful DSP performs the calculations for the upsampling to 24Bit, 384kHz. The DSD data of a SACD is converted into PCM format during the upsampling process. The converted data is extrapolated by a 3rd order polynomial algorithm. Additionally this DSP performs computations for the volume control and the balance settings. Thanks to the 32Bit floating comma architecture of the DSP these calculations without the usually increase of the quantification noise.

3.4 Digital/Analog-Converter

The Digital-Player 540 has one DAC board per audio channel (left/right). We use the Burr-Brown 1792 DAC which guarantees excellent performance. Only the top quality converter section which runs up to 384 kHz of the chip is used. The internal up sampling section is bypassed!

Two extremely fast (3MHz) I-V converters per DAC transform the output currents of the DAC chips in voltages before they get filtered in the following stage. This ensures optimal conditions in the filter stage as well as for the I-V converters.



3.5 Clock and PLL (Phase Lock Loop)

Utmost precision of the clock signal is a must have for a top class D/A-Conversion. For the synchronisation to external digital data the clock/PLL must adapt itself very fast to eventual changes of the external data. This is done by a special digital clock circuit that allows synchronising its clock signal very fast and at the same time extremely precise to the incoming signal.

3.6 Output stage

The output stage is optimised for velocity, precision and impulse current rating. Thanks to its low output impedance of 10Ω and Class-A operation the output stage is stable on every load (also long cables are driven without problems). The output stage is a completely symmetrical design.

3.7 Power Supply

The Digital-Player 540 has two strictly separated power supply units which are combined with a multistage filtering network for lowest mutual interferences.

The supply voltages for the analog section are stabilised in several stages for minimal deviations.



4 Start of operation and handling of the Digital-Player 540

Please take care while installing the Digital-Player 540. Follow all security advices!

4.1 Scope of delivery and packing

Please check the scope of delivery:

- Digital-Player 540
- Remote Control
- Mains cable
- User manual

Please store the packing of the Digital-Player 540 for future transports. Check your Digital-Player 540 for transport damages. In the case of damage, please contact your soulution dealer.

Security advice: If the Digital-Player 540 is still very cold from the transport please let it warm up within the packing, in order to omit condensation of water inside the unit.

4.2 Optimal positioning of your Digital-Player 540

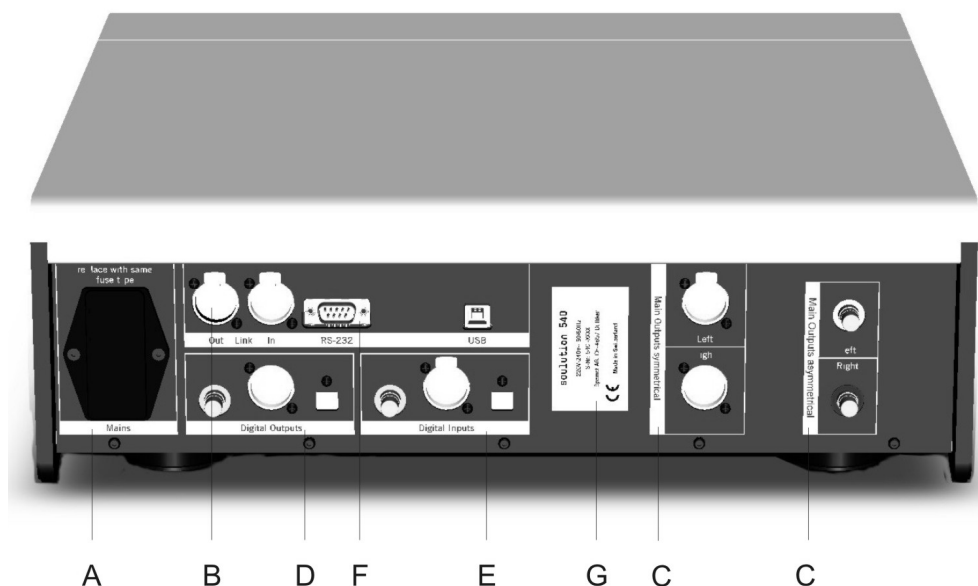
There are no limitations on where to position your Digital-Player 540. We suggest positioning the Digital-Player 540 so that the connecting cables to the preamplifier remain short.

Security advice: Please follow the security advices on page 6!

The Digital-Player 540 has a high quality surface. Please be careful while transporting so that the surface does not get scratched. Never position your Digital-Player 540 on the front panel. The display glass could get scratched or even burst



4.3 Rear panel of the Digital-Player 540



Rear panel of the Digital-Players 540

4.3.1 Mains (A)

Connect the Digital-Player 540 with the mains. The enclosed power cord is optimised for this application.

After switch-on of the Digital-Player 540 the standby power supply gets started. The display shows "WAIT". Once constant conditions are reached, the Digital-Player 540 changes to operating condition OFF (red LEDs in display, power consumption < 0.5W).



Display in operating condition OFF

Security advice:

Please follow the security advices on page 6!

Only switch-off the mains connection if your Digital-Player 540 is in operating condition OFF.



4.3.2 Link (B)

The LINK-connection allows to control the switch-on of other soulution products or to allow other soulution products to switch-on the Digital-Player 540. Connect the LINK-IN of the Digital-Player 540 for instance with the LINK-OUT of the Integrated amplifier 530. Each soulution product has a LINK-OUT (Next Slave). This provides the possibility of connecting all your soulution products. With the program-function Start-Mode (see page 21) you can define the behaviour of the Digital-Player 540 after switch-on of the unit.

4.3.3 Main-Out (C)

The Digital-Player 540 has balanced and unbalanced connectors for the main output signal. Connect the output terminals with your (pre)amplifier. Due to the extraordinary load-stability of the output-stage there are no restrictions regarding the selection of the connecting cables. We recommend using balanced cables. For short cable lengths also unbalanced cables represent a high quality connection, top quality cable and optimal layout prerequisite.

Security advice: Please follow the security advices on page 6!

Wrong cabling could damage your Digital-Player 540, your preamplifier, your amplifier or your loudspeakers. Excessive volumes due to inappropriate handling may cause hearing damages.

4.3.4 Digital-Output (D)

The Digital-Player 540 has 3 digital output connectors. (SPDIF (RCA), AES/EBU, Toslink). Connect your favourite digital output with the digital input of your external D/A-Converter. With the program-function

Digital-Out (chapter 5.2.9) the digital outputs can be (de)activated.

In Source-Mode CD the data from the mechanism are available at the outputs (no signal for SCAD).

In Source-Mode DAC the digital data of the active digital input are transmitted to the digital outputs. The data remains unchanged.

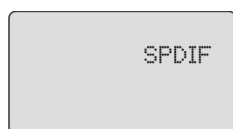
Security advice:

Please follow the security advices on page 6!

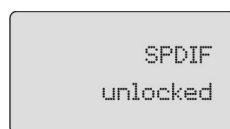
Wrong cabling could damage your Digital-Player 540, your preamplifier, your amplifier or your loudspeakers. Excessive volumes due to inappropriate handling may cause hearing damages.

4.3.5 Digital-Input (E)

The Digital-Player 540 can receive external digital data from other digital sources. The top class D/A-converter section and output-stage can thus be used for these sources alike. It has four digital input connectors (SPDIF, AES/EBU, Toslink and USB). The USB input can receive digital data up to 24Bit, 96kHz. The other inputs receive digital data up until 24Bit, 192kHz.



Display für digitales Eingangssignal an SPDIF



Display bei Unterbruch des digitalen Datenstroms

Security advice:

Please follow the security advices on page 6!

Wrong cabling could damage your Digital-Player 540, your preamplifier, your amplifier or your loudspeakers. Excessive volumes due to inappropriate handling may cause hearing damages.

4.3.6 RS232 Interface (F)

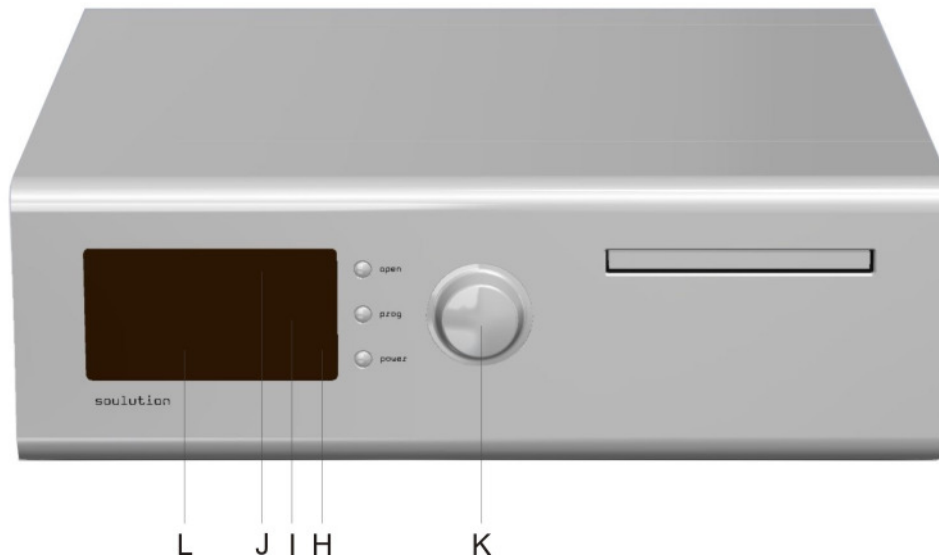
The Digital-Player 540 can be remote controlled through the RS232 interface. All functions can be controlled and relevant information is provided to the control unit.

4.3.7 Type label (G)

Please note the serial number of your Digital-Player 540 on page 7 of this user manual. This allows you to have the specific data at hand without removing your units from the HiFi rack.



4.4 Front panel of the Digital-Player 540



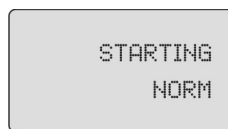
Front panel of the Digital-Player 540

4.4.1 Power (H)

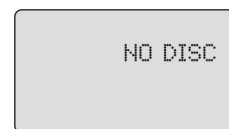
With the Power button you define the operating condition ON or OFF (red LEDs). In operating condition OFF the audio circuits are completely disconnected from the output terminal (Main-Out), the mechanism and the digital sections remain deactivated. The Main-Out terminals are only activated if the Digital-Player 540 is ready for operation and if no errors are present.



Display in operating condition OFF



Display while starting the Digital-Player 540, Start-Mode NORM.



Display in operating condition ON, no disc in mechanism.

We suggest switching the Digital-Player 540 to operating condition OFF (power consumption in < 0.5W) while not listening to music. Your Digital-Player 540 can easily be activated with the remote control.



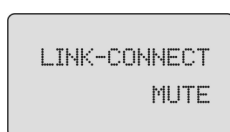
LINK-System:

In case the Digital-Player 540 switches on other solution products with the LINK-System it remains in MUTE until all connected components are switched on (Display LINK Connect).

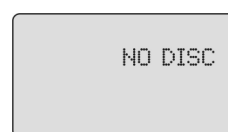
If no errors have occurred while switching-on the other components the Digital-Player 540 changes into operating condition ON.



Display in operating condition OFF (Standby)

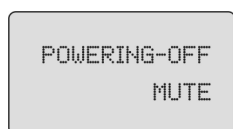


Display during switch-on of connected units

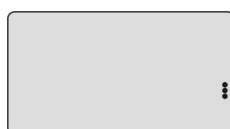


Display in operating condition ON

When the Digital-Player 540 is switched off all connected LINK components are switched off simultaneously (operating condition OFF).

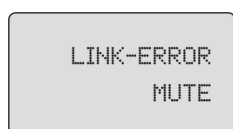


Display during switch-off of connected units



Display in operating condition OFF

If an error occurs within a LINK-component while operating the display shows LINK ERROR.



Display if an error occurs with one of the connected units

Security advice:

Please follow the security advices on page 6!

Wrong cabling could damage your Digital-Player 540, your preamplifier, your amplifier or your loudspeakers. Excessive volumes due to inappropriate handling may cause hearing damages.

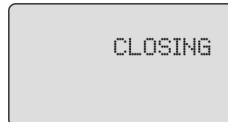


4.4.2 Open (I)

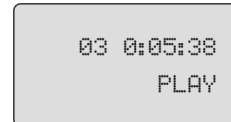
The Open button opens or closes the drawer of the Digital-Player 540. If a CD/SACD is playing the first push on the Open button will stop the mechanism, the second push will open the drawer. In Source-Mode DAC the mechanism can not be opened.



Display while opening the mechanism.



Display while closing the drawer of the mechanism.



Display while playing a CD/SACD.

Security advice:

Never close the drawer by hand.

4.4.3 Prog (J)

The Prog button switches the Digital-Player 540 between operating-mode and programming-mode. In the programming-mode you may adjust the Digital-Player 540 to your individual requirements.

4.4.4 Select (K)

The Select knob controls the functions Track select, Volume Control, Play/Pause, Input-Select and is used for the Programming. The behaviour of the Select knob changes depending on the activated Source-Mode.



Source Mode: CD/SACD



Volume-Mode „ON“

Track select
(4.4.4.1)

Play/Pause
(4.4.4.3)

Change to Volume-
Control-Mode

Volume-Control
(4.4.4.4)

Volume-Mode „OFF“

Track select
(4.4.4.1)

Play/Pause
(4.4.4.3)

no function

no function

Source-Mode: DAC



Volume-Mode „ON“

Input-Select
(4.4.4.2)

Change to Volume-
Control-Mode

Volume-Control
(4.4.4.4)

Volume-Mode „OFF“

Input-Select
(4.4.4.2)

no function

no function

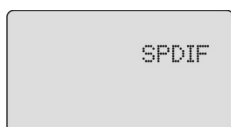


4.4.4.1 Track select

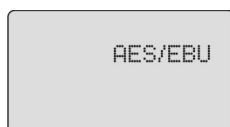
Rotating the Select knob allows selecting a new track. Rotating to the right will increase the track number, rotating to the left will decrease the track number. After 3 seconds the newly selected track will be played.

4.4.4.2 Input-Select

Rotating the Select knob allows selecting the digital input.



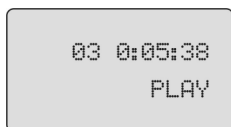
Display in D/A-Converter-
Mode for Input SPDIF



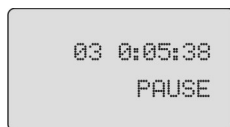
Display in DA-Converter
Mode for Input AES/EBU

4.4.4.3 Play/Pause

In Source-Mode CD/SACD pressing the Select knob for less than 0.5 seconds will switch the Digital-Player 540 between Play and Pause. If the drawer is open while pressing the Select knob for less than 0.5 seconds the drawer will be closed and the Digital-Player 540 starts to play track 1 of the inserted CD/SACD.



Display while playing a
CD/SACD



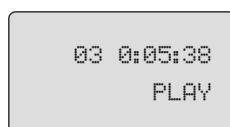
Display for Pause

4.4.4.4 Volume Control

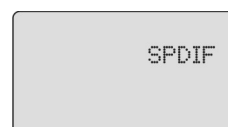
If the Volume-Mode has been activated, a long push on the select knob will bring the Digital-Player 540 in Volume-Control-Mode. Rotating the select knob will change the volume. After a timeout of approx. 3 seconds the Volume-Control-Mode is deactivated. This ensures that the volume is changed only by purpose.



Display in Volume-Control-Mode



Display after deactivating the Volume-Control-Mode in SACD/CD-Player Mode



Display after deactivating the Volume-Control-Mode in D/A-Converter Mode

The volume as well as the balance setting is only displayed in the Volume-Control-Mode.

4.4.4.5 Programming:

In programming-mode the Select knob is used for the selection of the program-functions and the function values.

4.4.5 Display / IR-Receiver (L)

The display shows all relevant information for operating your Digital-Player 540.

Security advice: The IR-receiver for the remote control is located in the lower left corner behind the display glass. For best reception do not place any objects in front of the display.

Never place your Digital-Player 540 on the front panel. The display glass could get scratched or even burst.

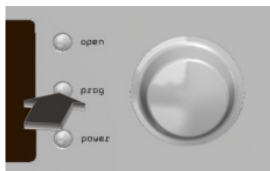


5 Programming of the Digital-Players 540

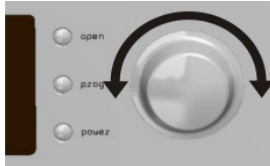
5.1 Overview

The available Program-functions allow adjusting the Digital-Player 540 to your individual set-up. The Digital-Player 540 is already programmed with default settings. Further programming is not mandatory.

Function



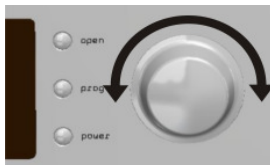
Push on the Prog button switches the Digital-Player 540 between operating-mode and programming-mode. Time-out after 10 seconds.



Rotating of the Select knob allows selecting the desired Program-function



Push on the Select knob for approval of the selected function. Now the value domain of the selected function is active. (red LEDs in display).



Rotating of the Select knob allows adjusting the desired value.



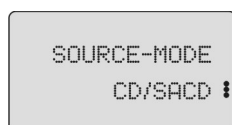
Push on the Select knob for approval of the respective value.



5.2 Program-Functions

5.2.1 Source-Mode

The Program-Function Source-Mode defines if the Digital-Player 540 works as CD/SACD-Player or as DA-Converter.



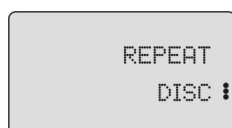
Display for function
Source-Mode

Values: CD/SACD, DAC

Default-Value: CD/SACD

5.2.2 Repeat

The Program-Function Repeat defines the repeat mode.

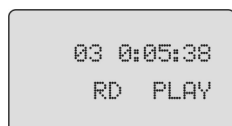


Display for function Repeat

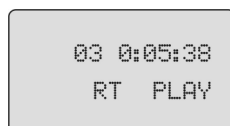
Values: Track, Disc, Random, OFF

Default-Value: OFF

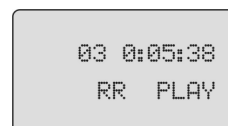
The selected repeat mode will be shown in the display as follows.



Display for Repeat Disc



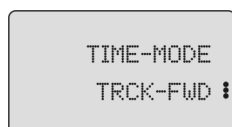
Display for Repeat Track



Display for Random

5.2.3 Time-Mode

The Program-Function Time-Mode defines the time format shown in the display.



Display for function
Time-Mode

Values: TRCK-FWD = Track time forward
TRCK-BWD = Track time backward
DISC-FWD = Disc time forward
DISC-BWD = Disc time backward

Default-Value: TRCK-FWD



5.2.4 Polarity

In some cases CD/SACDs have been recorded with inverted phase. You can correct this error with the Program-Function Phase-Polarity. Phase Polarity 180° will invert the phase of both channels (phase shift of 180°).

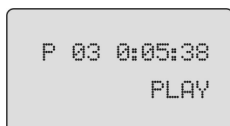


Display for function
Phase-Polarity

Values: 180° = left & right inverted
0° = no inversion

Default-Value: 0°

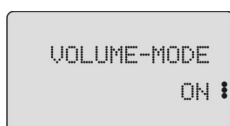
Activated Phase-Polarity is shown in the display as follows



Display for activated
Phase-Polarity

5.2.5 Volume-Mode

The Digital-Player 540 has a digital volume control that can be (de)activated by the function Volume-Mode.



Display for function
Volume-Mode

Values: OFF, ON

Default-Value: OFF

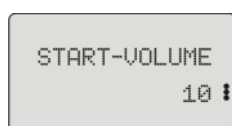
Security advice: Make sure that the Digital-Player 540 is not connected directly to an amplifier before you switch to Volume-Mode OFF. In Volume-Mode OFF the maximal volume will be available at the main out terminals. Wrong handling could damage your loudspeakers, preamplifier or amplifier.

Excessive volumes due to inappropriate handling may cause hearing damages.



5.2.6 Start-Volume

The Program-Function Start-Volume is only available in Volume-Mode ON. It defines the volume the Digital-Player 540 play with after switch-on or the activation of the Volume Mode. After selecting the function Start-Volume the display shows the value domain (red LEDs active) and you may define the desired volume level.



Display for function
Start-Volume

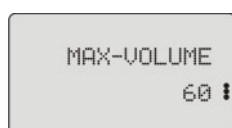
Values: 10 - 40

Default-Value: 10

While switching to the value domain of the Program-Function Start-Volume Digital-Player 540 changes the current volume to the value defined in Start-Volume. Now you are able to judge whether the Start-Volume level is appropriate. As soon as the value domain is left the Digital-Player 540 switches back to the former volume level.

5.2.7 Max-Volume

The Program-Function Max-Volume is only available in Volume-Mode ON. You may limit the maximal volume level in order to avoid dangerous volume levels through malicious handling. Especially for high efficiency loudspeakers this security function should be used.

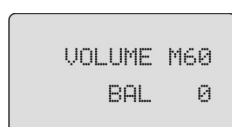


Display for function
Max-Volume

Values: 20 – 80

Default-Value: 80

While switching to the value domain of the Program-Function Max-Volume the Digital-Player 540 will not adjust the volume level for security reasons! If you limit the volume the control range is reduced accordingly. When you reach the maximal volume level the display shows "M" (for example M 60)

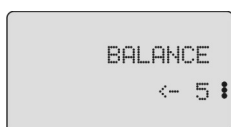


Display for maximal
volume 60



5.2.8 Balance

The function Balance defines the level difference between left and right channel. You can adjust the Balance in 1 dB steps. After selecting the Program-Function Balance the display shows the value domain (red LEDs active) and you may define the desired volume level.



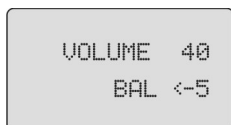
Display for function
Balance

Values: -<- 9...0...9 ->

Default-Value: 0

While switching to the value domain of the function Balance the Digital-Player 540 changes the current volume of left or right channel according to the setting of the Balance. Now you are able to judge whether the Balance is appropriate.

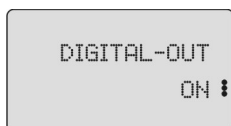
The Balance setting is only visible in the Volume-Control-Mode while changing the volume of the Digital-Player 540.



Display in Volume-Control-
Mode Balance setting to
the left

5.2.9 Digital-Out

The Program-Function Digital-Out (de)activates the digital outputs



Display for function
Digital-Out

Values: ON, OFF

Default-Value: OFF

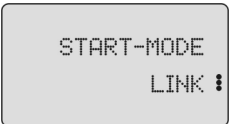
In Source-Mode CD/SACD the data from the mechanism are available at the outputs (no signal for SCAD).

In Source-Mode DAC the digital data of the active digital input are transmitted to the digital outputs. The data remains unchanged.



5.2.10 Start-Mode

The function Start-Mode defines the behaviour of the Digital-Player 540 after switch-on.



Display for Function
Start-Mode

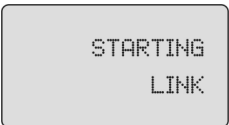
Values: NORM => OFF (Standby)
 LINK => depending on Link System
 AUTO => ON

Default-Value: Norm

Behaviour of the Digital-Players 540:

		LINK- Master	LINK- Slave
NORM	After switch-on of the mains the Digital-Player 540 goes to operating condition OFF (Standby).	<input checked="" type="checkbox"/>	-
LINK	After switch-on of the mains the Digital-Player 540 reacts on the incoming signal of the LINK-System.	-	<input checked="" type="checkbox"/>
AUTO	After switch-on of the mains the Digital-Player 540 starts up automatically to ON.	<input checked="" type="checkbox"/>	-

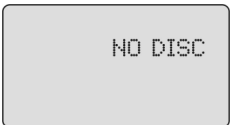
The Power button remains active independent of the start-mode. The Digital-Player 540 can always be switched-off via the power button on the front panel.



Display for start-up of the
Digital-Player 540
Start-Mode LINK



Display for start-up of the
Digital-Player 540
Start-Mode AUTO



Display for operating
condition ON, no disc
available



5.2.11 Brightness

The intensity of the display can be adjusted in three steps.



Display for function
Brightness,

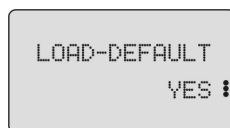
Values: 1 = low
 2 = medium
 3 = high

Default-Value: 3

The intensity is adjusted immediately.

5.2.12 Load-Default

In the case you want to overwrite all your individual settings by the factory default values you select the Program-Function Load-Default and you confirm with YES. The following values will be loaded.



Display for function
Load-Default,

Source-Mode:	CD/SACD	Max-Volume	60
Repeat:	OFF	Balance:	0
Time Mode:	TRCK-FWD	Digital-Output:	OFF
Polarity:	OFF	Start-Mode:	NORM
Volume-Mode	OFF	Brightness:	3
Start-Volume	10		

Security advice: Please note your personal settings on page 36

5.2.13 Software-Info

This function shows the version of software installed on your Digital-Player 540.



6 Remote control



The remote control controls all functions of the soulution preamplifiers, integrated amplifiers and CD/SACD-Players. You can also access the Program-Functions of these products.

The Volume +/- buttons of the remote control will always control the volume of the soulution preamplifier or integrated amplifier. This is also the case when changing the remote control to CD-mode.

6.1 Start of operation and maintenance

The remote control requires 2 AAA batteries (enclosed in the scope of delivery). We recommend using only top quality products.

Exchange of batteries:

- Open the battery tray on the rear side.
- Insert the batteries into the tray as indicated.
Ensure correct polarity of the batteries.
- Close the tray with corresponding screw.
- Dispose the exhausted batteries

6.2 Handling

6.2.1 IR-Transmitter (1)

Ensure that the IR-Transmitter is not covered and that the IR-Receiver is not hided by any objects. The remote control works up until a distance of 5m and a maximal angel of incident of $\pm 45^\circ$.



6.2.2 Input \pm / Next Track, (5/6)

PRE-mode: The Input \pm buttons switch between the different inputs. With the Enter-button you change to the Record-select-mode. In this mode the Input \pm buttons allow to select the Record-IN.

CD-modus: The Next Track buttons skip the tracks forward or backward.

In Programming-Mode (Prog-button) the Input \pm buttons allow to select the desired function and the Enter-button confirms the selection. If the value domain of a function is activated the Input \pm buttons allow setting the new value and Enter-button confirms the new setting.

6.2.3 Volume-Dim / Play-Pause (4)

PRE-mode: Pressing the Volume-Dim button (de)activates the Volume Dim function of the preamplifier or the integrated amplifier.

CD-mode: The Play-Pause button controls the Play/Pause function of the CD/SACD-Players

6.2.4 Volume \pm (2, 3)

The Volume \pm buttons control always the volume of the preamplifier, integrated amplifier irrespective of the PRE-/CD-mode of the remote control.

6.2.5 Mute (9)

PRE-mode: The Mute-button controls always the mute function of the preamplifier, integrated amplifier. The mute function disconnects the Main-Out and the Record-Out connectors.

CD-mode: no function



6.2.6 Open/Close (11)

PRE-Mode: no function.

CD-mode: The Open/Close button controls the drawer of the player.

6.2.7 Prog-button (8)

PRE-mode: The Prog-button switches the preamplifier, integrated amplifier between Operating-Mode and Programming-Mode.

CD-mode: The Prog-button switches the CD/SACD-Player between Operating-Mode and Programming-Mode.

6.2.8 PRE-button (12)

Pressing the PRE-button switches the remote control to PRE-mode for the control of the preamplifiers or integrated amplifiers. While pressing the buttons of the remote control the red LED (14) will light up.

6.2.9 CD-button (13)

Pressing the CD-button switches the remote control to CD-mode for the control of the CD/SACD-Players. While pressing the buttons of the remote control the blue Leds under the Play/Pause button (4) will light up.



6.2.10 Power (10)

PRE-mode: The Power-button defines the operating condition ON or OFF of the preamplifier, integrated amplifier.

CD-mode: The Power-button defines the operating condition ON or OFF of the CD/SACD-Player.

6.2.11 Remote Ctrl ID

PRE-mode: Change the transmitter Remote Ctrl ID of the remote control as follows:

ID 1: Input+ button (6), Input- button (5) and Power (10)

ID 2: Input+ button (6), Input- button (5) and Mute (9)

Press the respective buttons for approximately 5 seconds. The remote control confirms the new ID via red LED on its front.

The Remote Control ID of the preamplifier, integrated amplifier has to be changed as well by selecting the Program-Function Remote Control ID, otherwise the preamplifier, integrated amplifier will not react to the remote control no more.

CD-mode: The Remote Ctrl ID can not be changed.



7 Protection functions of the Digital-Player 540

Comprehensive protection functions ensure a secure operation and long durability. The Digital-Player 540 disposes over the following functions:

Overcurrent:

For currents > 0.2 Ampere at the Main-Out the preamplifier shuts down automatically.

Fuse:

The mains connection has a fuse which protects your Digital-Player 540 against too high power consumption.

Model 220-240 V, 50-60Hz	2A/T 250V micro fuse 5x20mm
Model 100-120 V, 50-60Hz	4A/T 250V micro fuse 5x20mm

8 Care and maintenance

8.1 Burn-in

The Digital-Player 540 will play on top level immediately after the first placing into operation. However during the first 20-50 hours of operation you will notice a further improvement of its sonic qualities.

8.2 Cleaning

Please use a soft towel for the cleaning of your Digital-Player 540. We recommend the use of a nonabrasive micro fibre towel. Please do not employ any solvents.

Security advice: Liquidity is not allowed to enter the Digital-Player 540. The electronic may be damaged seriously.



9 Trouble shooting

Error	Action
No display	Check the cabling to the mains supply. Eventually replace the fuse of the Digital-Player 540.
No music	Check the cabling to your (pre)amplifier, eventually from the preamplifier to the amplifier and from the amplifier to the loudspeakers, whether the preamplifier is switched on and you have selected the correct input, whether the power amplifier is switched on.
POWER FAIL	If the power supply to the audio channels is interrupted or an error in the power supply unit has occurred the Digital-Player 540 is shut down automatically. The display shows POWER FAIL.
OVERCURRENT	If the current at the Main-Out exceeds 0.2 ampere the Digital-Player 540 is shut down automatically. The display shows OVERCURRENT.

9.1 Actions after the appearance of an error

If you can not identify the error please disconnect the mains supply (before you disconnect the Digital-Player 540 has to be in operating condition OFF) and contact your soulution dealer.



10 Service

If your solution Digital-Player 540 needs service please contact your solution dealer. For further information see www.soulution-audio.com

11 Warranty

All soulution products are guaranteed against defects in material and workmanship for five years from date of purchase.

The guarantee is void if the Digital-Player 540 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 transport insurance.

If you do not possess the original packaging no more please contact your solution dealer.

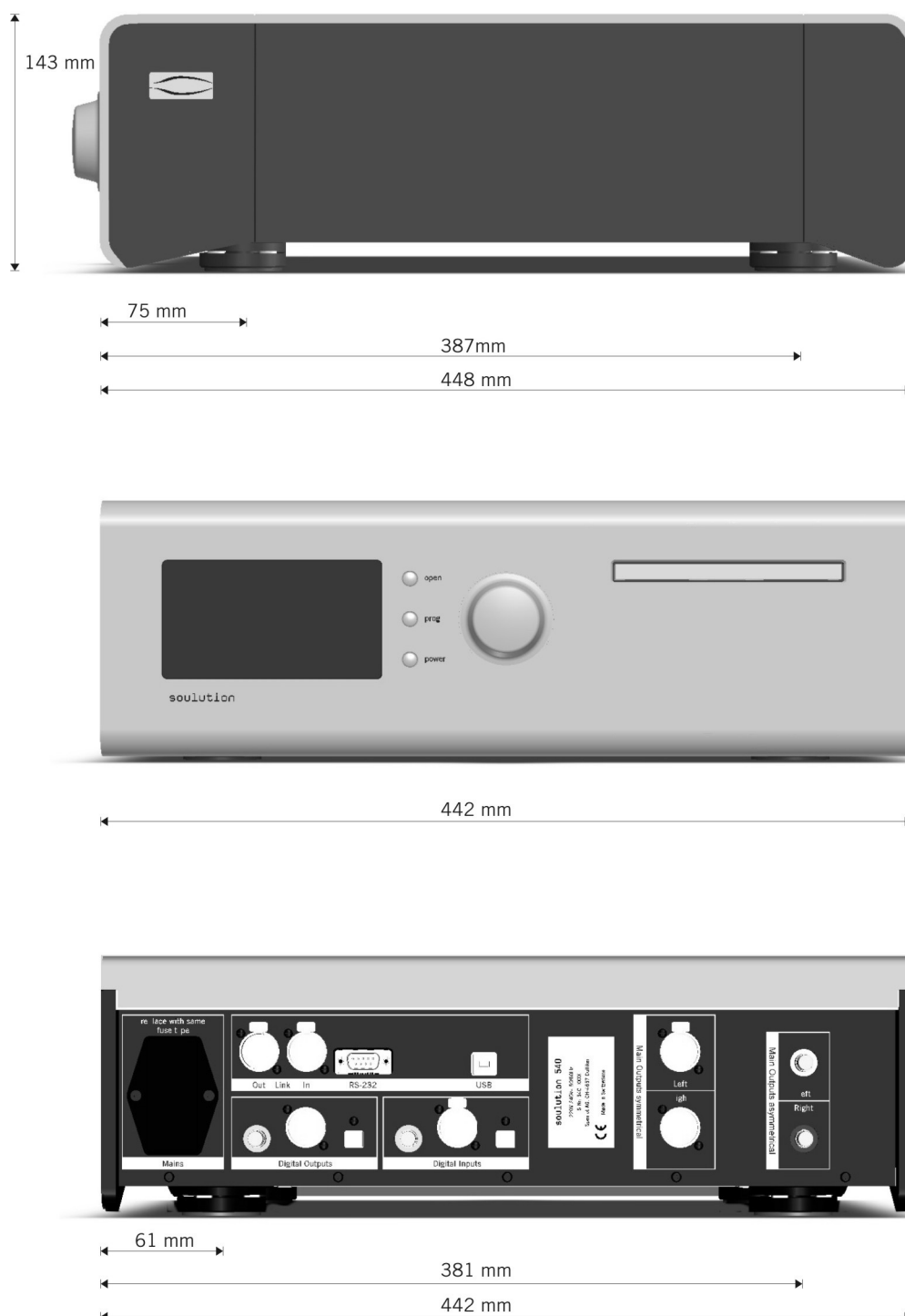
Basic repairs may be completed by your solution dealer. Please clarify whether he is able to do the work before you send the Digital-Player 540 back to us.



Specifications		Data
Nominal voltage		
Model 220 – 240 V / 50 – 60 Hz		220 – 240 V
Model 100 – 120 V / 50 - 60 Hz		100 – 120 V
Power consumption		
OFF (standby)		<0.5 W
ON		50 W
Main-Out		
Output voltage	balanced	4 Vrms
	unbalanced	2 Vrms
Peak Output Current		1 A
Impedance	Main-Out symmetrical	10 Ω
	Main-Out asymmetrical	10 Ω
Frequency response	(depending on data format)	DC-100 kHz
Distortion (THD)		<0.0002 %
Signal to Noise Ratio		140 dB
Volume range		0...-80 dB
Balance range		<- 9...0...9 -> dB
Digital-Out		
Output-Voltage	S/PDIF	500 mV p-p
	AES EBU	5 V p-p
Output-Impedance	S/PDIF	75 Ω
	AES EBU	110 Ω
Digital-In		
Sensitivity		0.3 - 5 V p-p
Input-Impedance	S/PDIF	75 Ω
	AES EBU	110 Ω
PLL – control range		+/- 100 ppm
LINK-System		+12 V



13 Dimensions





14 Individual settings

Function	Setting	Default-Value
Source-Mode		CD/SACD
Repeat		OFF
Time-Mode		TRCK FWD
Polarity		0°
Volume-Mode		OFF
Start-Volume		10
Max-Volume		60
Balance		0
Digital-Out		OFF
Start-Mode		NORM
Brightness		3

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