

Series 5



soulution
nature of sound

Highend Audio Equipment
made in Switzerland





To preserve the natural purity of sound in its entirety – this is the challenge that first class high fidelity components must achieve. During the development of the soulution Series 5 components, we never let this goal out of our sight. High end components should not adulterate the music by their own sound, our team is firmly convinced that the acoustical beauty of music does not need artificial enhancement, and that the music signal should pass through every component as purely as possible.

The development of the Series 5 was inspired by the reference components of our Series 7. However, the Series 5 is not just a downsized Series 7. And while ideas and concepts from our reference series found their way into the Series 5, we also took the opportunity to develop new technologies – like the extremely stable switched-mode power supply at the heart of the Series 5 power amplifiers.

At soulution we believe that true high fidelity means nothing added, nothing taken away. State-of-the-art technology is a prerequisite, but not an end unto itself. Sonically, the Series 5 is much closer to the Series 7 than you might expect. It more than meets our development goals. It is one hundred percent soulution – one hundred percent the »nature of sound«.



Cyrill Hammer
Head of Business Unit





The quality of the recording and that of the signal supplier are of fundamental importance in high fidelity. For what is lost at the source, cannot be made good by any amplifier or loudspeaker, be it ever so eminent. Therefore the task of a reference CD player reads as follows: read out all musical information and transfer them with no digital artefacts into the analogue domain.

CD/SACD
player

With the Series 7 745 CD/SACD player, soulution redefined digital music reproduction and set a new benchmark. It is a synthesis of the perfect drive with perfect data read out, a high-precision master clock generator that eliminates jitter right from the start, intelligent Anagram oversampling technology, and preamp grade analogue output stages.

Our goal in designing the 540 was to transfer as much as possible from the exceptional Series 7 player. The 540 therefore uses the same precision, no-compromise drive made by Teac/Esoteric. Controlled by an ultra-precise soulution clock generator, the drive delivers totally accurate data readout. Even with today's best measurement equipment there is virtually no detectable jitter.

For D/A conversion the 540 translates all information into 24 bit format with a sampling rate of 384 kHz. Here we employ the same polynomial algorithm by Anagram Technologies that provides such high-precision results in the 745. SACD signals are converted into the PCM format which we believe to be technically superior. D/A conversion is provided by PCM 1792 Burr Brown 24 bit converters.

solution 540

The solid aluminium chassis of the 540 is packed with top-class technology. It has two separate power supplies: one for analogue signal processing and another for the digital sections. It features AES/EBU balanced, SPDIF-RCA, and TOS-Link inputs and outputs, each up to 24 bit/192 kHz. In addition the 540 has a USB connection which handles signals from a computer up to 24 bit/96 kHz.

Sonically, the relationship between the 540 and the 745 is unmistakable. Like the 745, the 540 enables digital media to deliver its very best, breathing new life into CDs with simply phenomenal micro dynamics, and showcasing the richness of acoustic colours a good SACD recording is able to provide.

Combining precision, neutrality and utmost resolution, the solution 540 is damned close to the pick of the bunch, the 745, and unrivalled in its class.





The tasks of a preamplifier have changed considerably over time. Analogue turntables with MC cartridges require a »pre-amplification« of 60 decibels (amplification by factor 1000) while CD-players provide output levels that can drive power amplifiers directly. Theoretically, digital signal sources would not require any »pre-amplification«.

Pre
amplifier

At soulution we remain convinced that the preamplifier is the heart of an audio system. We do not share the view that it is no longer required due to the capabilities of digital control. Practical experience shows time and time again that a top-class preamplifier is what it takes for a system is to deliver true sonic excellence.

But designing the ideal preamplifier still poses a real challenge. It must be stable, regardless of load, provide constant amplification and zero phase-shift across all frequencies, and be capable of driving even long, high capacitive interconnects to power amplifiers without any losses. The soulution 720 has set the benchmark for what is possible, with virtually no distortion, hum or noise while delivering maximum channel separation and widest bandwidth.

The 520 has inherited much from the 720 – like the flawless volume control which combines all the advantages of both potentiometers and switched resistor networks. In the 520 it is done in two stages with high precision Vishay-Dale resistors combined by highest quality relays. This advanced volume control is micro adjustable in 1dB steps without any audible clicks – a perfect solution.

solution 520

Internally, the 520 uses a single circuit board to reduce cabling and to enable the shortest signal path to be achieved in pursuit of true sonic purity.

The 520's power supply uses the same toroidal transformer as the 720, but features an otherwise completely new design with discrete voltage regulators for maximum stability, and massive copper busbars to ensure the best connectivity to the load.

Balanced and unbalanced line level inputs give maximum flexibility and for vinyl fans we have equipped the 520 with a high-class moving coil phono stage with an input impedance precisely adjustable between 20 ohms and 1 kilohm. The line amplification stage of the 520 is an unbalanced design, reducing the number of components in the signal path to an absolute minimum.

The 520 delivers neutrality without tonal colorations. It provides control with precision while at the same time preserving the organic and near three dimensional nature of stereo recordings. Whoever listens to the 520 will immediately understand why we at solution believe that a preamplifier of this stature is the irreplaceable beating heart of any audio system.





For decades vacuum tube amplifiers have been able to stack up against the transistorised competition – despite inferior measurement results. How is this possible? Our fundamental research has shown that transistor amps are generally neither superior nor inferior to tube circuits. solution amplifiers combine the advantages of both types.

Power amplifier

The mono power amplifier is undeniably the pinnacle of amplifier design. Using a dedicated amplifier for each stereo channel means no mutual interference and perfect channel separation. In addition mono amplifiers can be placed next to the loudspeakers, reducing the length of connecting cables – there is no better option.

Of the Series 7 components the power amplifiers have impressed critics the most. For all their muscle and control, both amplifiers remain sonically transparent. This remarkable feat is possible because they follow the solution philosophy of not allowing errors to occur. Without errors, less corrective but musically damaging negative feedback is required.

The 501 follows the same fundamental design principle, using ultra-fast (80 MHz) voltage amplification supported by a perfectly stable power supply. The technique is so effective that the 501 mono amplifiers use a vanishingly low level of global negative feedback – less than 1 dB.

The 501's power supplies are another reason for its sonic accuracy. A total of six power supplies feed each 501 mono amplifier, including two ultra stable switched-mode units each



delivering 1,200W. Teamed with sophisticated soulution filter technology they easily outperform any conventional transformer-based design.

Current amplification in the 501 is achieved in three stages with high class A operation backed by 47,000 μF of storage capacitance to deliver a nearly infinite impulse response. Precision idle current management ensures optimal operating conditions right from switch-on.

Despite its compact physical dimensions, the 501 has the stability to control even the most demanding speaker loads while delivering perfect sonic transparency.

Precision, velocity and power unified on the highest level. soulution 501 – no compromise.

soulution 501





Integrated amplifiers are regarded by many audiophiles as a compromise. The 530 is without such limitations, we incorporated no less than the best soulution technology. A full preamplifier 520 combined with the power amplifier 501 in a single chassis – that's the soulution 530.

Integrated amplifier

From a technical standpoint, modern integrated amplifiers are often no more than power amplifiers with an added potentiometer acting as a passive volume control. Such a budget solution was obviously out of the question when we designed the 530. The first integrated amplifier from soulution, the 530 combines a high-class preamp with a power amp section able to deliver up to 45 Amps – all built into a timelessly elegant aluminium housing. The entire signal path has been designed in a dual-mono layout for ultimate channel separation.

The power amp section of the 530 is based on the soulution 501 and uses the same new broadband soulution voltage-amplifier – the heart of every soulution power amp. This is followed by three-stage, extremely linear current amplification.

The preamplifier section of the 530 is identical to the 520 preamplifier. Single resistors switched by relays produce 80 steps of 1dB, with an additional stage that allows volume to be changed without audible clicks. In addition to four line inputs – two balanced, two unbalanced – the 530 includes the 520's phono moving coil stage for vinyl playback that convinces even most demanding vinyl connoisseurs.

solution 530

The power house of the 530 is a new switched-mode power supply that ends forever any doubts over this technology for high end audio. Noise is close to non existent and far outside the audio band while stability is unprecedented. Heavy bass impulses can cause conventional systems to audibly sag. The 530 is able to deliver startlingly fast life-like transients even under pressure.

Like all of the Series 5 range the 530 is fully compliant with current energy saving regulations, consuming less than half a Watt in standby mode. It can be left in standby with a clear conscience and brought instantly to life via the remote control.

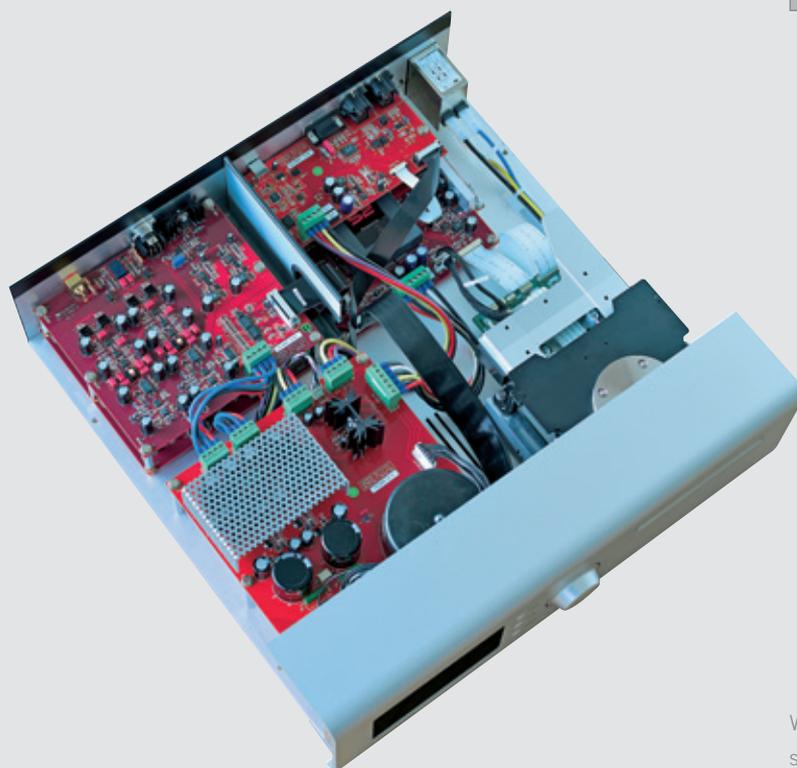
The 530 marks the entry level into the world of soulution, but sonically it is a fully fledged family member with no compromises – a synthesis of purity and power.

solution 530 – the integrated amplifier redefined.

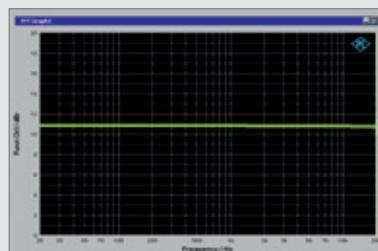


Specifications

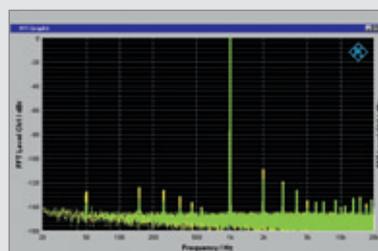
CD/SACD player	solution 540
Frequency response	0 - 100 kHz (24 bit/192 kHz)
THD + N	<0.0007% (20 Hz to 20 kHz)
Signal-to-noise ratio	> 130 dB
Channel separation	> 120 dB
Jitter	below measuring threshold
Analogue outputs	balanced XLR, unbalanced RCA
Output impedance	10 ohms balanced and unbalanced
Digital inputs	AES/EBU balanced, SPDIF-RCA, TOS-Link, USB
Digital outputs	AES/EBU balanced, SPDIF-RCA, TOS-Link
Power consumption	50 watts / <0.5 watts stand-by
Dimensions	442 mm * 143 mm * 448 mm (W * H * D)
Weight	18 kg
Cabinet	Aluminium, black / natural
Remote turn-on	12 volts link signal



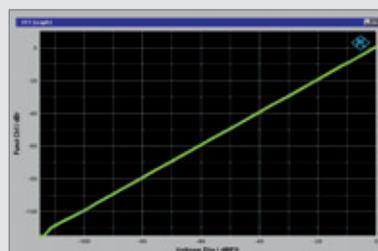
Frequency response



THD + N



DAC linearity



We reserve the right to alter technical specifications without prior notice.

Pre amplifier

solution 520

Gain +14.5 dB balanced and unbalanced
 +20.5 dB unbalanced in – balanced out
 + 8.5 dB balanced in – unbalanced out
 +74.5 dB Phono MC – balanced out
 +68.5 dB Phono MC – unbalanced out

Frequency response 0 - 500 kHz

THD + N <0.001% (20 Hz to 20 kHz)

Signal-to-noise ratio > 120 dB

Channel separation > 120 dB

Input impedance 3 kΩ balanced and unbalanced
 20 ohms – 1 kΩ Phono MC (adjustable)

Output voltage max. 14 Vrms (100 ohms) balanced
 max. 7 Vrms (100 ohms) unbalanced

Output impedance 10 ohms balanced and unbalanced

Inputs 2 balanced, 2 unbalanced, Phono MC

Outputs 1 balanced XLR, 1 unbalanced RCA

Power consumption 39 watts / stand-by <0,5 watts

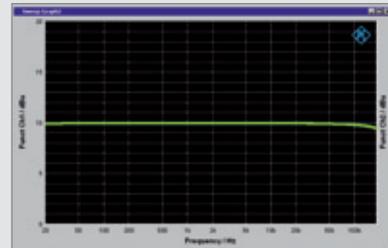
Dimensions 442 mm * 143 mm * 448 mm (W * H * D)

Weight 18.5 kg

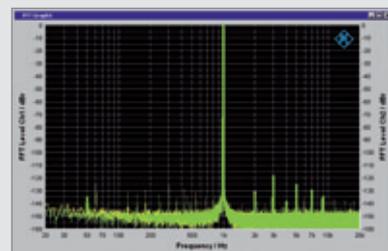
Cabinet Aluminium, black / natural

Remote turn-on 12 volts link signal (master)

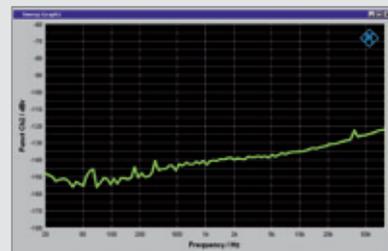
Frequency response



THD + N



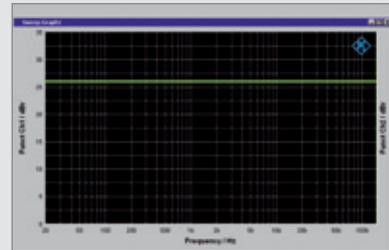
Channel separation



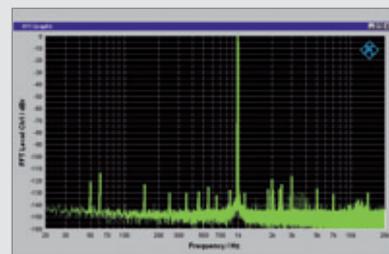
Specifications

Power amplifier	solution 501 Mono
Power output	2 x 125 watts at 8 ohms 2 x 250 watts at 4 ohms
Frequency response	0 - 800 kHz
Damping factor	> 10,000
THD + N	< 0.001%
Signal-to-noise ratio	> 120 dB
Input impedance	10 k Ω balanced
Inputs	1 balanced XLR
Outputs	1 pair of CU terminals, goldplated 1 balanced (line through)
Power consumption	150 watts / <0.5 watts stand-by
Dimensions	442 mm * 448 mm * 143 mm (W * H * D)
Weight	22 kg
Chassis	Aluminium, black/silver anodised
Remote turn-on	12 volts link signal

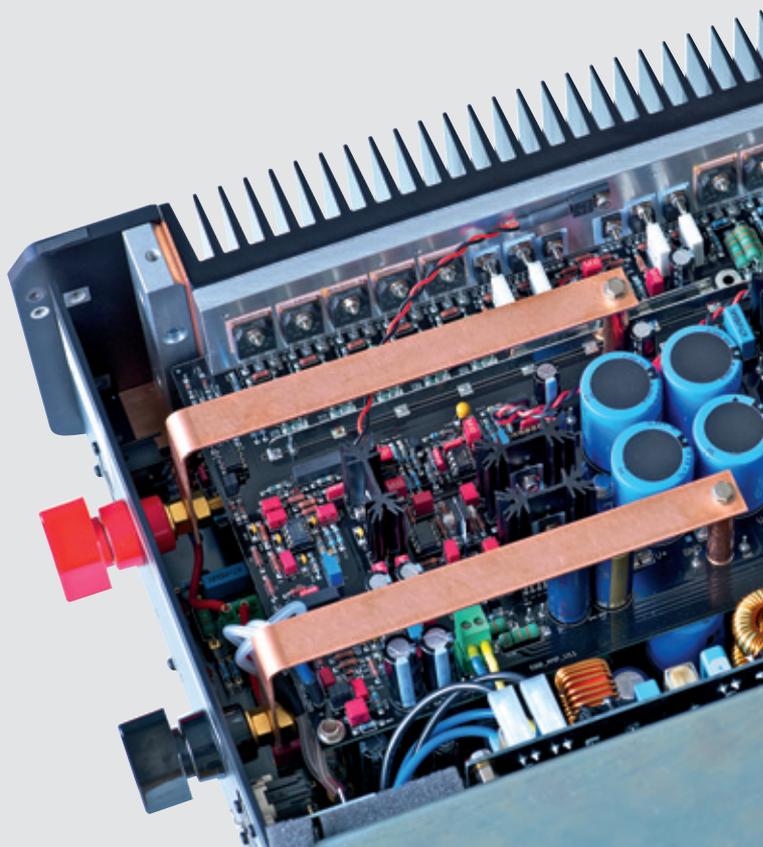
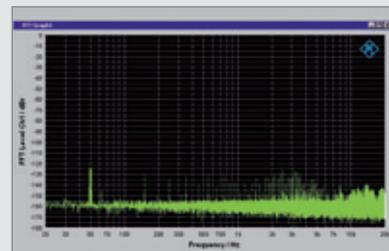
Frequency response



THD + N

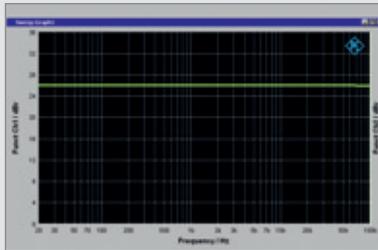


Noise floor



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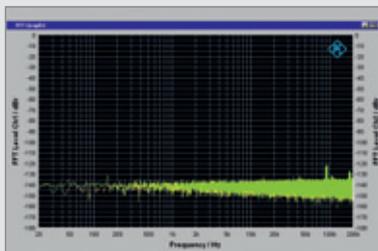
Frequency response



THD + N



Noisefloor



Integrated amplifier **solution 530**

Power output	2 x 125 watts at 8 ohms 2 x 250 watts at 4 ohms
Frequency response	0 - 800 kHz
Damping factor	> 10,000
THD + N	< 0.001%
Crosstalk	> 110 dB
Signal-to-noise ratio	> 120 dB
Input impedance	10 kΩ balanced 47 kΩ unbalanced 1 kΩ Phono MC (adjustable)
Inputs	2 balanced, 2 unbalanced, Phono-MC
Outputs	2 pairs of CU terminals, goldplated Preout balanced and unbalanced
Power consumption	300 watts / <0.5 watts stand-by
Dimensions	442 mm * 350 mm * 448 mm (W * H * D)
Weight	40 kg
Chassis	Aluminium, black/silver anodised
Remote turn-on	12 volts link signal



USB converter **solution 590**

USB input	up to 24 bit / 192 kHz
AES/EBU output (110 ohms, XLR)	up to 24 bit / 192 kHz
Output voltage	5 volts p-p
SPDIF output (75 ohms, RCA)	up to 24 bit / 192 kHz
Output voltage	0,5 volts p-p
Wordclock output (75 ohms, BNC)	22,5 - 24,5 MHz
Output voltage	5 volts p-p



solution

nature of sound

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