

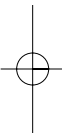
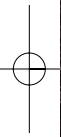
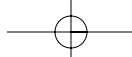
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The »perfect preamplifier«:
Solution 720





Having outed myself in issue 1/2006 as a junky who has totally fallen for the addictive Soulution 710, I had, as a precaution, reported absent for further amplifier reviews. But I had promised to report back again as soon as the Soulution 720 preamp could be delivered – provided it plays in the same league as the power amp.

And this is what has happened in the meantime: the amp models 710 and 720 have both received the renowned Red Dot Award 2006 of the Design Zentrum Nordrhein-Westfalen in the audio category and are currently nominated for another highly respected prize, i.e. the Design Award of the Federal Republic of Germany. Above all the Red Dot jury had appreciated the fact that, owing to their straightforward design, the Soulution twins fit in harmonically into various home styles – something which is rarely associated with highend devices, notably in the weight division of the 710 power amp. A marvellous, well-deserved success for the Swiss makers of these amplifiers.

And something else has happened which is especially important to me from a purely egocentric point of view: in July 2006, I finally got the Soulution 720 preamp for a review and since then it has demonstrated every day that it's not only one, but the perfect match for the 710 power amp on whose drip I am still hanging. Before I bestow my personal sound award upon the 720, we should busy ourselves a bit more thoroughly with this preamp. Good thing that it weighs »only« 30 kilograms. True, there are others who build full-grown power amps of this weight, but everything in the world is relative. And in relation to the Soulution 710 which requires lifting tremendous 80 kilograms in its latest version, the weight of the 720

Review: Soulution 720 preamplifier

Another addictive amplifier from Switzerland:

The Soulution 720 preamp celebrates music on the very highest level.

is »adequate«. Prior to making the crash test you should definitely check if your rack can handle the Soulutions' combined combat load of 110 kilograms. Irrespective of any weight problems which may arise, the Soulution ensemble 710 and 720 presents a harmonic entity owing to its clear-cut design language even if the two amps are stacked directly.

Like every full-fledged preamp the 720 also controls a whole regiment of sources, preparing their partly delicate signals for the subsequent power amp and controlling their levels. In its administrative function the Soulution takes care of two balanced stereo signals, three unbalanced stereo line signals plus one stereo MC signal. Optionally the preamp is available as Soulution 721 with an additional unbalanced line input instead of the MC section. Independent of the source you're listening to, via Tape Out any of the connected sources can be tapped for recording. The preamp's output signal is fed to both a balanced and unbalanced pair of sockets. Thus, if required, a subwoofer can be hooked up easily without an adapter.

Via bus cable the preamp communicates with other Soulution components, hence so far only with the power amp which needn't be turned on and off separately then. Volume and input sources are selected with the two large rotary knobs on the almost naked front panel or alternatively via the remote control. Although not made of metal (as preferred by high end fans) but of banal plastic, it's a true hand charmer and at least ergonomically one of the best I've ever seen.

Mains, mute and program buttons are likewise located on the front panel and the remote. What can be programmed at all on the analogue Soulution 720? Everything which makes the use of a preamp comfortable and adequate. Thus you can determine which input shall be active after turn-on, which

Hard Drug



input shall be recorded from, the initial volume level, the amount of level reduction by the mute function, the maximum output level, the balance between the stereo channels, the names of the connected sources, the operating bandwidth of the 720, the individual level settings for each input, the gain factor of the phono stage, the display brightness and finally if the sub low cut is needed.

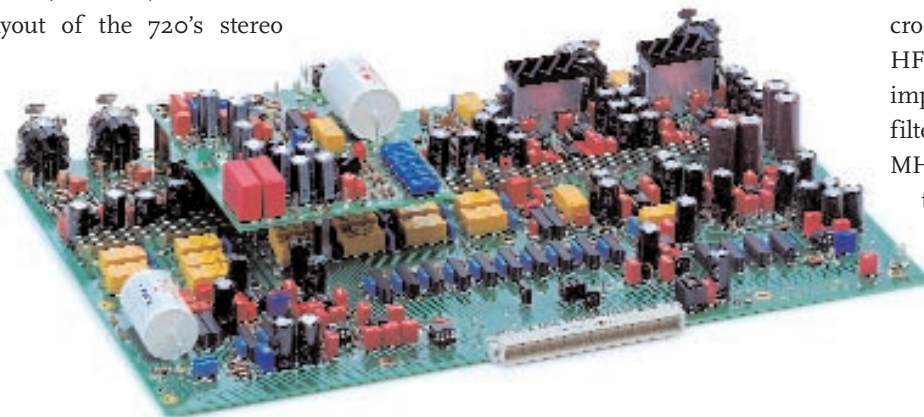
While audiophile circles tend to rate amplifiers with balanced circuit designs superior to unbalanced ones, they often overlook the fact that such a balanced layout inevitably requires twice as many components. The Soulution designers love to have as few components as possible in the signal path and therefore prefer sending the signals on a single-lane path through the circuit. Indeed very useful, however, is the consistent mono layout of the 720's stereo

channels based on separate circuit boards, as this produces a better S/N ratio and hence a better sound. But contrary to the pure theory of a consistent dual-mono layout, these are fed from a common mains section – of course, the digital control of the 720 has a mains supply of its own. And this for a good reason: while conventional mains supplies have a considerable output resistance that becomes evident in load-induced voltage fluctuations (so it's a good idea to use separate power supplies for each channel in order to gain technical and acoustic benefits from an amplifier's mono design), the Soulution has only a single power supply which shows virtually no output resistance irrespective of any loads. Such a mains section is immune to load and hence ideally suited as a combined current source for both

amplifier paths – perfect preconditions for a clean and unrestrained signal flow.

Imagine we are a signal bound to set off on a journey through the Soulution 720. The first thing we'll meet is a high-quality relay which presents no resistance worth mentioning. Signals from other connected sources will not bother us either, because their relays will block the hot conductor as well as the cold or ground conductor. Next we enter a buffer stage which ensures that the source we came from will not be loaded by the amplifier circuit we are just passing through. Before us lies an amplifying stage for the basic level settings so that we will not be louder or softer than other source signals. We will leave this stage either unaltered or boosted by 3, 6 or 9 decibels.

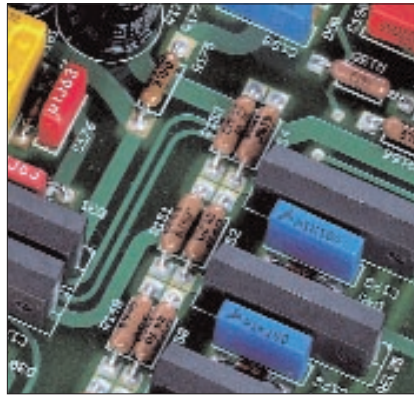
There is one more optional hurdle to cross: a bandwidth filter for cutting out HF interference, for example from impure digital sources. We will pass this filter either with the full bandwidth of 1 MHz or get cut down to 200 kHz or, in the worst case, to a mere 20 kHz. Something which has gone unnoticed so far, but which is not inessential for the operating safety of the Soulution 720: spurious DC



components we may carry along will be detected and neutralized by a quick hook-up of a high-grade Mundorf capacitor.

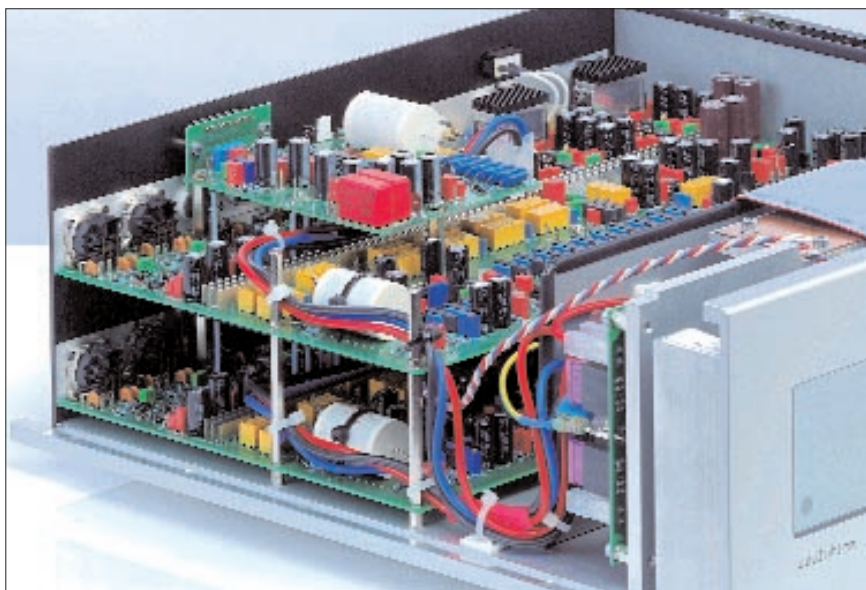
Now the volume control lies before us in the form of an attenuation network. This bottleneck keeps up to 80 ultra-precise Vishay resistors on the go. When rotating the volume knob, no clicks are audible because the gaps in the signal flow caused by switching between the Vishays are artfully filled by an integrated conventional level control. Hence the signal finds a continuous path through the volume control without having to jump over deep ravines. And here we have already reached the output stage with its current capability of up to 3A and an extremely high upper bandwidth of 40 MHz: this will give us the necessary momentum to run even through the most rebellious power amp connection cable with no losses. Sure enough, being the signal we saw quite some circuitry power flashing by left and right of our way through the Souolution 720; yet in comparison we have passed a signal highway

Each channel of the Souolution 720 has its own impressive circuit board (opposite left; the phono MC board is mounted on top). The dual-mono design (below) ensures optimum channel separation. Above right: noble Vishay resistors provide the volume control.



at top speed – especially in the final spurt to the output stage on broad copper rails – with no stop worth mentioning. One can only wonder if the 720 is equally transparent for a listener in the opposite direction, i.e. towards the source.

Why, yes! Maybe it was because our test specimen had already been burnt in, I don't know – but it became obvious within the first few minutes (and while the Souolution 720 was still rather cool) where our journey would lead us: straight to audiophile paradise, department of ultimate hifi. What strikes the ear right away: escorted by the 710 power amp and the Revel F52s, one can virtually hear through the 720 preamp back to the source, be it digital like the dCS combination of Verdi / Purcell / Delius or analogue such as the Schröder-guided Clearaudio Goldfinger. Fine, finer, the finest.



souolution

nature of sound

Highend Audio Equipment



präzise	um die feinsten Details abzubilden.
schnell	um allen Klängen mit Ruhe zu folgen.
stabil	um die Harmonie der Musik zu bewahren.
stark	um musikalische Ereignisse in ihrer Grösse darzustellen.

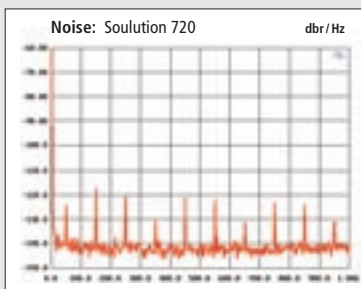
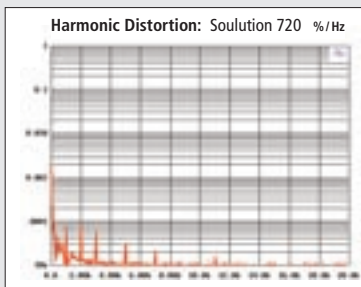
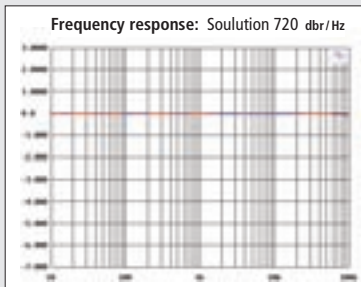
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AMPLIFIERS

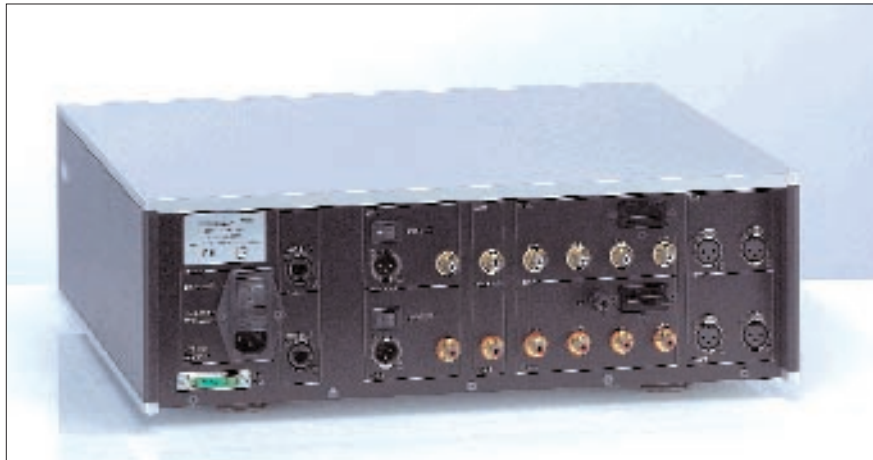
Lab-Report



Preamplifier Soulution 720

Gain factor	3,46 dB
Max. output voltage	9,5V
Input impedance (1kHz)	96 kΩ
Output impedance (1kHz)	< 5 Ω
Distortion (THD+N)	0,00045 %
IM distortion (SMPTE)	0,0019 %
IM distortion (CCIF)	0,00042 %
S/N ratio (unweighted)	-92,5 dB
S/N ratio (A-weighted)	-108,7 dB
Channel deviation	0,01 dB
DC output offset	< 0,2 mV

Congratulations, one can only marvel at the Soulution 720's specifications which are at the bounds of possibility throughout. Extremely low distortion and excellent S/N ratios; the distortion spectrum doesn't even show a continuous noise floor and the first two low-level harmonics are largely due to the »Audio Precision« measuring equipment. Lab mark: A+! ■



Just like the 710, the 720 will also leave you dumbfounded with amazement.

But the Soulution team has always got a shocking ace or two up their sleeves. Like in this case. Honestly, I would never have thought that a solid-state phono pre-amp stage could keep up easily with my tube-driven Silwaweld and even surpass it in terms of bass reproduction and lack of colourations. Wow. How nice that Soulution is going to launch a separate phono preamp which will be hosting no less than three pickup systems. Hopefully, unrestrained phono enjoyment à la Soulution, provided by my new Raven turntable with its four tonearms, will soon become a reality.

Now let me get back once more to the incredible clarity of the Soulution pre-amp. Since the 720 lets even the smallest information pass unharmed and remains unimpressed by input and output loads, it's the perfect tool for revealing cable sound including sound through mains cables. I have known such a com-

Mission possible: the Soulution 720 accepts both balanced and unbalanced partnering equipment.

parable transparency only from the Mark Levinson No. 326 S. Both the Soulution and the Mark Levinson are preamps of an exemplary neutral character, but when compared directly over the 710 power amp, they can be identified at once by their individual fingerprints. The 720 counters the sensitive sculpturing quality of the 326 S with an almost physically perceptible bodiness which inevitably draws you right into the acoustic events. Both preamps will make the listener happy in their own unmistakable way. If I had to make up my mind, the Soulution 720 would be my favourite. To own both of them in separate setups – well, this would be optimal, but no doubt extremely presumptuous.

Soulution
720

WxHxD	48 x 17 x 45 cm
Warranty	5 Jahre
	13.900 Euro
Distributor	Spemot AG
	Industriestraße 70
	CH-4657 Dulliken
Phone	0041 62 - 2 85 30-40

Résumé

Like the 710 power amp, the Soulution 720 preamp is actually much too good for an ordinary test. It is far better suited for enjoying music on the ultimate level. Here the preamp will inevitably cause the same state of addiction as the 710 – and this cannot be cured. Note: If you do consume hard drugs, please take them from Switzerland. From Soulution.

Reinhold Martin ■