

STEREO

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Swiss Peaks

The superb machines from Soudution got STEREO into the right mood for the High End fair. And with their new Maxx 3, Wilson Audio had exactly the right loudspeaker ready to join in. A truly outstanding experience. One can hardly get any higher.

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Jungfrau, Matterhorn, Brocken“, this is how we whirled the Swiss mountains in the review of the stereo power amplifier from the confederate manufacturer Soulution in October 2005 – wrong in geographical terms, but factually correct. Okay, so the Brocken belongs to the Harz Mountains like the Cologne Cathedral to Cologne. But with this bulky 75 kilo amp the Swiss also had a “Brocken“ [i.e. a wodge] of their own.

Except for one failure, which unfortunately also affected the 720 preamp unnoticed at first (see box), the bulky amp has proven to be an excellent sounding and stable (and hence in the best Swiss sense a neutral) partner in countless listening checks – and shall also remain so.

But hifi seems to bear an analogy to alpine climbing: as soon as you have reached one summit, the next and even higher peak is already alluring. Here we all are lowly Reinhold Messners. And in

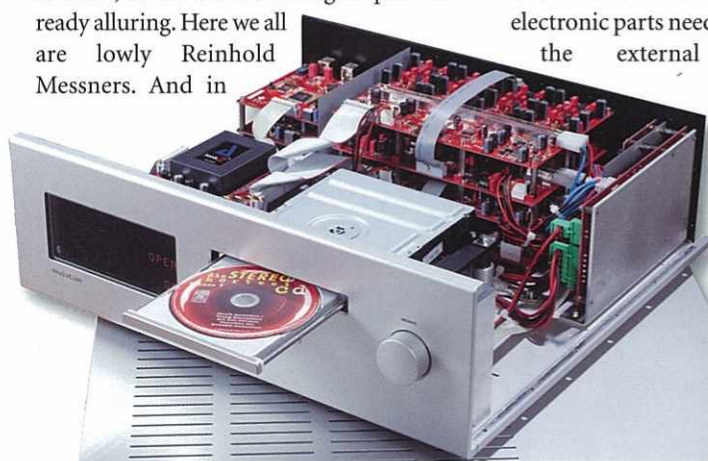
labor distribution and even got involved with the development and production of that essentially German hifi brand, yet could not prevent it from going bankrupt. From the Audiolabor venture Jürgen Schürmann was the only survivor for whom the dream of every designer came true: to develop the ultimate highend chain with virtually no regard to the costs. And with the outwardly plain, but technically extremely sophisticated chain standing in our listening room he has created his own memorial already in his living years.

For instance, never before did we have such a two-piece CD player with an overall fighting weight of 47 kilogrammes in our rack. And under the lids made of thick, perfectly crafted aluminium plates there is little room left as the units are crammed with the technical creme de la creme. From the electronic parts needed for the external

power supply, which makes contact through two special cables, and the four stacked PCBs for signal-processing and the ultra-potent, low-impedance output stages, other people would build an entire fleet of devices. To eliminate even the smallest phase errors, the output stage was designed with a bandwidth of 40 megahertz – for the paltry 21 kilohertz coming at most from the CD. Incredible!

Ultimate technical ambition

Still far more impressive is the 700 amp block. It houses two complete mono channels which is why you can either use it in bi-amping mode or, bridged, as a single power amplifier. In that case the loudspeakers are connected between the positive clamps. This is how we did it because Wilson's Maxx 3 has



Despite its outsourced power supply there is barely any room left in the player. Especially the four stacked PCBs – two per channel – consumes much space

this case, even the Himalayas lie in Switzerland, namely in the shape of Soulution's truly colossal 700 mono power amps – compared against a pair of those, the 710 shrinks down to a “mini-wodge“ – and the two-piece 740 CD player.

Highend startup for idealism

The Soulution brand is a fan project started in 2000 by the Spemot AG located between Basel and Zurich which produces mainly electric motors for the automotive and tooling industry, but also for other branches like e.g. professional catering. The company which is based in Dulliken near Aarau has about 60 employees and as such is a typical mid-sized business.

But this is not quite true, for the Spemot principals Cyrill Hammer and Roland Manz are dedicated highenders. In the late nineties the two of them took over the Swiss Audio-



No less than five regulated power supplies – four of them for digital and control circuits – are housed in the player's external supply unit.

a single-wire terminal.

True, the bisymmetric 700 is based on the 710 stereo amp, but has an even more sumptuous layout which is why its outer dimensions grew considerably. And its weight to boot: 96 kilogrammes – apiece. The two 1000W transformers which take care of two complete channels in the 710, each provide energy for only one half-wave of the signal in the 700. It's evident that one can draw on unlimited resources here all the more. The lab specs (see data box) give already a foretaste of the sound experience.

Indeed not only this whole article, but many more pages could be filled with remarks on the technical brilliance and consistency throughout the non-compromising Soulution project. No doubt captivating, yet a lot of that can be read on the homepage of the Swiss and we do want to listen to music after all instead of pondering over circuits.

ESSENTIAL SPECIFICATIONS

CD-PLAYER 740	
S/N ratio (quantisation)	98 dB
THD	0,18 %
Aliasing distortion	0,012 %
Converter non-linearity up to -90 dB	0,06 dB
Power consumption	
off Standby Idle	0 1,5 82 W
PREAMPLIFIER 720	
THD at 0,03 0,3 volts	0,0001 0,001 %
Intermodulation at 0,03 0,3 volts	0,009 0,0025 %
Channel separation	117 dB
Output impedance	2,2 ohms
Power consumption	
off Standby Idle	0 10 54 Watt
MONO-POWER AMPLIFIER 700	
RMS output power at 8 4 ohms	439 753 W
Peak output power at 4 ohms	836 W
THD at 50 mW 5 watts	0,003 0,0003 %
Power consumption	
off Standby Idle	0 12,5 137 W

And so we are adjourning with some CDs to STEREO's large listening room at a later hour where the dream set has already done its warmup. The lights are low and there are no more phone calls or other nuisances. The power grid is now less burdened than at day-time. The aural sense is opening up in joyful anticipation.

And then we experience the paradox that it obviously takes a whole lot of electronics to make us forget about them. The sound image is floating freely from the head-high Wilson loudspeakers, it is so subtle and finely resolved right down into the tiniest ramifications, delicate, exhilarated and undisguised. And it exudes that rare, almost holy aura which only top chains can deliver. With every note this set imparts its credo: that it does not only reproduce

any music perfectly at any volume levels, but well-nigh celebrates a hifi mass. While in former times the watt giants among the power amps were often reputed – and not unjustifiably so – to be “too strong to walk”, get their act together only with high levels and by contrast sound sluggish and dull at soft volume, this does not hold true for the 710 and 700 which even in pianissimo preserve an airy nonchalance and exquisite sensitivity. Whereas the Soultion power amps bear a strong similarity in terms of sound and dynamics, the monos still offer an even higher degree of serene tranquility and unwavering authority than their stereo counterpart. Time and again it is fascinating how far they stretch the spacious reproduction, how steadfastly they master the most complex passages hands down and how deeply the whole chain dives into the nuances of both the sonic and musical structures without ever getting lost in them.

For instance, the tracks on Christy Baron's album “Take This Journey” are pulsating between the Wilsons like a twitching plasma in a high-voltage field. Their timbre is soft and mellow, yet the reproduction is sophisticated down to the last detail, three-dimensional and not one bit clou-

Wilson Audio's brandnew Maxx 3 was a congenial match for the mighty Soultion chain which was able to showcase its full potential accordingly.



COMMENT



Whereas Soultion's preamp and stereo power amp just sit at the top level of common

spheres, the CD player and the monos drift way above all summits. With regard to the sound as well as the price. They rank beyond usual high-end worlds, escaping the comparison. Sound percentage and price/performance stars don't matter any more in these realms.. *mb*

dy. Only few recordings offer so much light, air and life – and this superb chain conveys every nuance of that breathing atmosphere sparkling with facets.

Visitors to the World of HiFi in Bremen in late October 2008 had the pleasure to experience its potential in one of the presentation rooms, because there it was joined by the Maxx 3s on the occasion of their international premiere. Well, the Congress Centrum of the Hanseatic city

has a surprisingly good acoustics, but of course it's not a patch on our listening room that has been optimised in every way. Besides, this top chain is not a PA system to fill a hall with sound, but a precision instrument for rooms above 40 square metres.

Magic moments guaranteed

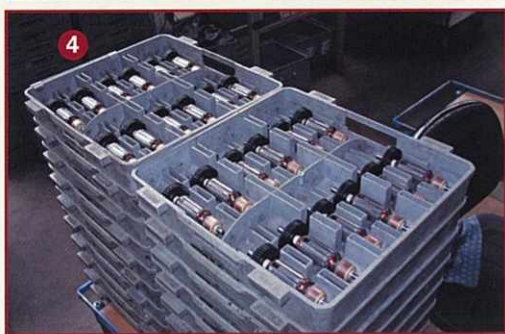
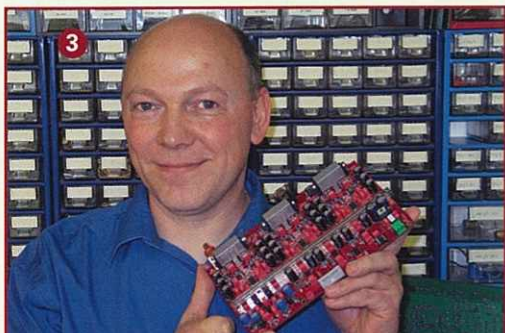
Used in this way and under these conditions, the wall behind the set simply seemed to topple over with the “Zapateado” on the reissue of Pepe Romero's “Flamenco” Collection which was mastered using the elaborate “K2 HD” process. While Romero's guitar appears stunningly life-like in the foreground, one can hear a couple dancing a fair way behind it. Under the stamping feet on the wooden floor, the air is virtually trembling and a dark reverberation creates the impression of physical presence. Enjoyed over the Soultion chain in the pallidly lit listening room, magic moments occurred where the boundaries between original and canned version, between dream and reality and also between then – the recording dates from 1987 – and now were blurring. Can you think of a bigger compliment for such a set?

With the recording of the musical comedy “Noye's Fludde” by Benjamin Britten from 1961, where the animals that walk onto Noah's ark singing “Kyrie Eleison” are performed by groups of children, we dove even deeper into the well of the past. Softly they are approaching from far away, then move in closer raising their voices and finally enter the stage from both sides.



The huge 700 mono power amp is filled to the brim with electronics. Every stage was tuned to perfection, which explains the technical complexity.

A VISIT AT THE SOUL BROTHERS



At the factory we learned on site how much "soul", I mean highend soul, the Soultion devices have. Designer Christoph Schürmann and Spemot managing director Cyrill Hammer (r.) had to lend a strong hand to hold the massive aluminium profile with the two floating moulded 1000 watts transformers (1) of their power amps (2) into the camera. Currently five employees put the units together; about 50 complete sets are manufactured per year. Until recently the main consumers came from Japan, Hongkong and Korea, now the USA, France and England are in the lead. Schürmann – pictured with a mono output stage of the 740 CD player (3) – is busy with a small series. Spemot AG's main business are motors (4) for the automotive and tooling industry.

This was captured so real that it will simply take your breath away. The announced shelter seekers are becoming smaller and smaller until rats, mice and other little animals scuttle cheeping over the stage floor, producing just that muffled, dry grumble which theatre patrons know and which can be reproduced in such an authentic form only by the very best components. To this end, the Soultions go way down into the frequency cellar, demonstrating totally unshakable control and imparting a live-like tingling sensation in higher frequency ranges as well, a shudder as if you were staring from a safe position into an abyss. The whole situation is absolutely "real" and when the orchestra announces the great flood with tympani and trumpets, it stands tall and mighty behind the set like the Eiger northface, not wavering a bit despite a surging movement, but rather seems to be carved in granite. A spectacular performance of the Wilsons? Correct, but without the Soultion electronics in their "uber-format" which handles the situation in an enthralling as well as organised manner, nothing would be going. And the listener? Happy and slightly numb, he will struggle his way back from his time slip that spans almost fifty years. Yes indeed, in its ideal form highend can be that straight, evocative and also disturbing.

High level orgies are sheer enjoyment

Discussions about dynamics and velocity become unnecessary. The sound image is instantly "there". This and the utterly relaxed, natural high-frequency reproduction are the reward for Soultion's broadband design which has been implemented in all components. The faster the circuit, the calmer, the more transparent and homogeneous the performance, so we noted and which confirms once again the Swiss summit meeting. Upsampling the 16 bit / 44.1 kilohertz CD data stream into the 24 bit / 382 kHz format should also contribute to that flowing act so rich in dynamic, tonal and rhythmic shades against which the sound of smaller CD players seems flattened and coarse. Tweaked under musical aspects, this extrapolation uses a custom-designed algorithm in the grey "Sonic 2-module" by Anagram Technologies – another Swiss specialist.

Admittedly, by now we had reached pretty intense volume levels. It's just hard not to fall for the nonchalant way how the 700 monos release their energy, never becoming obtrusive or even overstrained. How long can you stick to the speed limit in a Ferrari on an



Our top reference stereo power amp Soultion 710 (above) is notably smaller and lighter than one of the huge 700 mono blocks alone.

SOULTION'S SUMMIT CHAIN

CD-Player	740	ca. 31 000 Euro
Preamplifier	720	ca. 22 000 Euro incl. Phono MC
Mono power amp	700	ca. 73 000 Euro per pair
Dimensions (WxHxD)	720 & 740 ohne Netzteil:	48x17x50 cm
	700	56x30x58,5 cm
Warranty	5 years	

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empty highway? Exactly! And when the dams have broken, there's somehow no stopping.

So it was a hilarious fun to have the pan-sized woofers of the Wilsons pump out the punchy, magnificently bouncing tympani beats on David Sylvian's pop gem "Taking the Veil". In doing so the Swiss power amp massifs are signaling: no stress – we've got still plenty of headroom. Yet the fixed resistors in the measuring lab were enduring stress, for although this is no test, we wanted to know, of course, how much juice a bridged 700 can squash out of its 28 power transistors (see lab specs). Its transient peak output power is 836 watts at 4 ohms. And this as often as you wish in a row, without any "noise" from the unit or any other symptoms of tension.

This is exactly how the entire Soultion chain sounds, which culminates in the elemental force of its Swiss-made power amp mountains. Ambition, result and unfortunately also the price are definitely top end. A steep experience!